

# The Cohomology of the Mod 2 Steenrod Algebra: A Computer Calculation

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ABSTRACT. The cohomology of the mod 2 Steenrod algebra for homological degree  $s < 40$  and internal degree  $t < 141$  has been calculated by the technique of minimal resolutions. The most extensive previous calculation is that of Tangora, and is contained in pp. 18-56. In addition, we have calculated chain maps induced by all the indecomposable elements in this range, and have used this to determine the complete product structure. Even in the range in which the vector space structure was known due to Tangora's work, some of the products, and more significantly, the knowledge that we now have all the products, is new. As we shall show in applications to the homotopy groups of spheres, this product structure has many consequences.

## 1. Introduction

While the algebraic topologist who simply wishes to determine the value of a homotopy group may not care about the details of the programming, the data can be trusted only if the algorithms and the programs implementing them are correct. Accordingly we will describe the main features of the programs which have produced these calculations. First, however, we describe how to read the tables.

## 2. Key to the Tables

The attached tables describe the cohomology of the Steenrod algebra in the range  $s < 40$ ,  $t < 141$ , with all products. This has been computed using the programs described in [1, 2]. The product structure has been calculated by computing chain maps for all the indecomposable elements found. The periodicity operator  $P(x) = \langle h_4, h_0^3, x \rangle$  was computed from the chain map induced by the indecomposable  $x$ , when  $x$  is indecomposable, and from a null-homotopy of  $h_0^3 h_4$  in other cases. The programs described in [1, 2] compute resolutions, that is Tor rather than Ext. Dualization, to produce Ext, and computation and sorting of products was done using MAGMA, which greatly speeded the processing of an overwhelming amount of data and eliminated the errors which would otherwise certainly have crept in.

In the main chart, the product structure is complete, in that any product not listed is zero. A filter to remove redundant products would shorten the entries at the price of requiring multiple cross-references to check relations. Instead, we have

simply listed all nonzero monomials, sorted by their value in terms of the basis found by the machine. Thus, the entry in the 37 stem

$$\begin{array}{ll} 7 & (10) \quad h_1 t = h_2^2 n = c_1 f_0 \\ & (01) \quad h_0^2 x \\ & (11) \quad h_3 r \end{array}$$

means that  $h_3 r = h_1 t + h_0^2 x$ . Within each entry, the monomials are listed in lexicographic order, where the generators are ordered firstly by increasing filtration (cohomological degree), then by internal degree, then arbitrarily. This is the order in which the generators are listed in the table of generators. There, we give the names of the 464 generators which appear in this range, their filtration and total degree ('stem'), and their value in terms of the basis found by the machine. For example, in filtration 4, stem 18, we have the element  $f_0$ , with value (10). This means that  $\text{Ext}^{4,22}$  is two dimensional and that  $f_0$  is the first basis vector in the machine's internal representation. By contrast,  $f_1$  has value (11). We made the latter choice because we are able to compute  $Sq^0$  in this case, and want  $f_1 = Sq^0(f_0)$ . In general, we have tried to choose generators in  $Sq^0$ -families. Unfortunately, it is a difficult problem to compute  $Sq^0$  mechanically at present. However, by using the connection with the root invariant we are able to identify a number of  $Sq^0$ 's [3]. In particular, we are certain that  $a_{i+1} = Sq^0(a_i)$  for  $a \in \{h, c, d, e, f, g, p, n, x, r, t, m, \}$ , except for  $m_1$  and  $t_1$ , for which indeterminacy in the root invariant leaves us with two possible choices for each. Otherwise unambiguous identification of the first member of the family results in unambiguous identification of the whole family. Further, many families start in bidegrees which are one dimensional, so their definition is clear. The irritating exception is  $f_0$ . The traditional definitions of  $f_0$  in terms of Massey products all have nonzero indeterminacy, but there is an unambiguous definition in terms of the Steenrod operations:  $f_0 = Sq^1(c_0)$ . Although computation of Steenrod operations by mechanical means is out of reach in general, it is possible that we could accomplish this one since it is in such a low dimension. We also suspect that  $Sq^0(D_3) = D_{31}$ ,  $Sq^0(D_1) = D_{11}$  and  $Sq^0(H_1) = H_{11}$ , but cannot prove these by currently available means, so have resisted naming the elements as if this were so. There is the further difficulty that past naming conventions are rather incoherent in stems above 50, so that we would have clashes. For example  $D_1$ ,  $D_2$ , and  $D_3$  are in filtrations 5, 6, and 4, respectively. Clearly it is time to resort to more systematic naming conventions. Finally, in the absence of any way to identify generators with elements already known in the cohomology of the Steenrod algebra, we have resorted to precise but ugly names like  $x_{12,50}$ , which means the 50<sup>th</sup> generator the machine found in filtration 12.

### 3. What Has Been Calculated

We have calculated a minimal resolution in the category of modules over the Steenrod algebra for the cohomology of the sphere  $S^0$ , the stunted projective spaces  $P_{-n}$  for  $-55 < -n < 0$ , and  $P_n$  for  $n = 1, 2, 3, ???$ , and for the cofibers  $C2, C\eta, C\nu, ???$ .

In addition we have computed the chain maps induced by the inclusion of the bottom cell  $S^{-n} \rightarrow P_{-n}$  and the  $-1$ -cell  $S^{-1} \rightarrow P_{-n}$ , as well as all 465 indecomposable elements of  $\text{Ext}_A(F_2, F_2)$ . That is, for a set of multiplicative generators  $x \in \text{Ext}_A^{s,t}(F_2, F_2)$  we have computed the chain map induced by the cocycle  $C_s \rightarrow \Sigma^t F_2$ .

What is found in the tables and charts.

#### 4. Algorithms and Data Structures

The resolutions and chain maps are organized in directories reflecting the categorical relationships between them. That is, each module has a directory, containing its definition ( $\dim_{F_2}$ , degrees of the generators, the action of  $A$  on the generators). The programs construct the minimal resolution of the module in this directory. Any chain maps to this resolution will produce temporary files in this directory containing cycles whose lifts are needed.

Each chain map has a subdirectory of its domain's directory which contains the definition of the chain map (its homological and internal degrees, its domain and codomain, and the cocycle). The program constructs the chain map in this directory.

Similarly, a null homotopy of  $fg$  lives in a subdirectory of the map  $g$ , and points to  $f$ .

The processing is divided into two main stages. One stage is the calculation of the resolutions and chain maps. This is done by a small package of C programs designed to handle the rather large data structures which arise as efficiently as possible. The other stage is the processing of this data to compute the groups  $\text{Ext}_A(M, F_2)$  and the homomorphisms  $\text{Ext}_A(M, F_2) \rightarrow \text{Ext}_A(N, F_2)$ . This is done by shell scripts which do simple text manipulation and by MAGMA programs which process the output of the shell scripts. The ability to write these programs in terms of data structures such as vector spaces and homomorphisms makes these programs shorter and clearer, but generally less efficient. It is clear that the calculations will gradually be rewritten in these higher level languages as the growth of computers compensates for the overhead associated with languages with sophisticated data types.

Data files defined by the user.

Data files generated by the programs.

(permanent and workfiles)

Format of elements and files.

##### Algorithms

addgen

genimker

genim

genker

liftmap

startmap

aug

consistency

check

convert

##### MAGMA programs

## 5. Generators

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$h_0$	1	0	(1)	
$h_1$	1	1	(1)	0
$h_2$	1	3	(1)	1
$h_3$	1	7	(1)	3
$h_4$	1	15	(1)	7
$h_5$	1	31	(1)	15
$h_6$	1	63	(1)	31
$h_7$	1	127	(1)	63
$c_0$	3	8	(1)	
$c_1$	3	19	(1)	8
$c_2$	3	41	(1)	19
$c_3$	3	85	(1)	41
$d_0$	4	14	(1)	5
$e_0$	4	17	(1)	
$f_0$	4	18	(10)	7
$g$	4	20	(1)	8
$d_1$	4	32	(1)	14
$p$	4	33	(1)	
$e_1$	4	38	(11)	17
$f_1$	4	40	(11)	18
$g_2$	4	44	(1)	20
$D_3$	4	61	(1)	
$d_2$	4	68	(1)	32
$p'$	4	69	(1)	
$p_1$	4	70	(11)	33
$e_2$	4	80	(11)	38
$f_2$	4	84	(10)	40
$g_3$	4	92	(1)	44
$D_{31}$	4	126	(10)	61

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$Ph_1$	5	9	(1)	2
$Ph_2$	5	11	(1)	3
$n$	5	31	(10)	13
$x$	5	37	(1)	16
$D_1$	5	52	(1)	
$H_1$	5	62	(100)	
$n_1$	5	67	(10)	31
$Q_3$	5	67	(01)	31
$x_1$	5	79	(1)	37
$D_{11}$	5	109	(1)	52
$x_{5,77}$	5	125	(1)	60
$x_{5,80}$	5	128	(1)	
$H_{11}$	5	129	(100)	62
$r$	6	30	(1)	12
$q$	6	32	(1)	13
$t$	6	36	(1)	15
$y$	6	38	(10)	16
$C$	6	50	(1)	22
$G$	6	54	(1)	24
$D_2$	6	58	(1)	26
$A'$	6	61	(11)	
$A$	6	61	(01)	
$A''$	6	64	(1)	29
$r_1$	6	66	(1)	30
$x_{6,47}$	6	71	(10)	
$x_{6,53}$	6	76	(1)	35
$t_1$	6	78	(110)	36
$x_{6,68}$	6	85	(10)	
$C_1$	6	106	(1)	50
$x_{6,89}$	6	108	(10)	51
$G_1$	6	114	(1)	54
$x_{6,94}$	6	124	(1)	59
$x_{6,97}$	6	126	(10)	60
$x_{6,99}$	6	127	(10)	
$x_{6,101}$	6	128	(1000)	61
$x_{6,102}$	6	128	(0100)	61
$x_{6,107}$	6	132	(010)	63
$x_{6,110}$	6	134	(1)	64

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$P_{c_0}$	7	16	(1)	
$i$	7	23	(1)	8
$j$	7	26	(1)	
$k$	7	29	(1)	11
$l$	7	32	(1)	
$m$	7	35	(1)	14
$B_1$	7	46	(1)	
$B_2$	7	48	(10)	
$Q_2$	7	57	(1)	25
$B_3$	7	60	(1)	
$x_{7,33}$	7	63	(100)	28
$x_{7,34}$	7	63	(010)	28
$x_{7,40}$	7	66	(10)	
$x_{7,53}$	7	75	(1)	34
$m_1$	7	77	(1010)	35
$x_{7,57}$	7	77	(0100)	35
$x_{7,74}$	7	87	(1)	40
$x_{7,79}$	7	95	(10)	44
$x_{7,81}$	7	97	(10)	45
$x_{7,83}$	7	99	(100)	46
$x_{7,84}$	7	99	(010)	46
$x_{7,88}$	7	101	(010)	47
$x_{7,90}$	7	103	(10)	48
$x_{7,92}$	7	105	(1)	49
$x_{7,93}$	7	107	(10)	50
$x_{7,97}$	7	112	(1)	
$x_{7,101}$	7	121	(10)	57
$x_{7,103}$	7	124	(100)	
$x_{7,109}$	7	127	(10000)	60
$x_{7,110}$	7	127	(01000)	60
$x_{7,118}$	7	130	(1)	
$x_{7,124}$	7	133	(100)	63

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$Pd_0$	8	22	(1)	7
$Pe_0$	8	25	(1)	
$N$	8	46	(1)	19
$x_{8,32}$	8	62	(100)	27
$x_{8,33}$	8	62	(010)	27
$G_{21}$	8	68	(10)	30
$PD_3$	8	69	(01)	
$x_{8,51}$	8	74	(10)	33
$x_{8,57}$	8	77	(100)	
$x_{8,75}$	8	91	(1)	
$x_{8,78}$	8	93	(10)	
$x_{8,80}$	8	94	(1)	43
$x_{8,83}$	8	96	(10)	44
$x_{8,93}$	8	101	(10)	
$x_{8,105}$	8	112	(100)	52
$x_{8,113}$	8	123	(1)	
$x_{8,114}$	8	124	(1)	58
$x_{8,115}$	8	125	(10)	
$x_{8,116}$	8	125	(01)	
$x_{8,117}$	8	126	(100000)	59
$x_{8,118}$	8	126	(010000)	59
$x_{8,119}$	8	126	(001000)	59
$x_{8,120}$	8	126	(000100)	59
$x_{8,124}$	8	127	(0100000)	
$x_{8,132}$	8	129	(01)	
$x_{8,133}$	8	130	(10)	61
$x_{8,136}$	8	131	(0100)	
$x_{8,139}$	8	132	(10000)	62
$x_{8,140}$	8	132	(01000)	62

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$P^2h_1$	9	17	(1)	4
$P^2h_2$	9	19	(1)	5
$u$	9	39	(1)	15
$v$	9	42	(1)	
$w$	9	45	(1)	18
$B_4$	9	60	(10)	
$X_1$	9	61	(1)	26
$x_{9,39}$	9	67	(10)	29
$x_{9,40}$	9	67	(01)	29
$x_{9,51}$	9	76	(10)	
$x_{9,55}$	9	78	(10)	
$x_{9,86}$	9	99	(10)	45
$x_{9,97}$	9	104	(10)	
$x_{9,99}$	9	105	(1)	48
$x_{9,102}$	9	107	(1)	49
$x_{9,107}$	9	111	(1000)	51
$x_{9,109}$	9	111	(0010)	51
$x_{9,111}$	9	113	(1)	52
$x_{9,112}$	9	114	(10)	
$x_{9,115}$	9	118	(10)	
$x_{9,116}$	9	118	(01)	
$x_{9,117}$	9	119	(1)	55
$x_{9,118}$	9	120	(1)	
$x_{9,119}$	9	121	(10)	56
$x_{9,121}$	9	123	(10)	57
$x_{9,123}$	9	124	(100)	
$x_{9,124}$	9	124	(010)	
$x_{9,126}$	9	125	(10000)	58
$x_{9,129}$	9	125	(00010)	58
$x_{9,131}$	9	126	(100000)	
$x_{9,145}$	9	129	(1000)	60
$x_{9,146}$	9	129	(0100)	60
$x_{9,154}$	9	131	(00100)	61



<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$z$	10	41	(1)	
$x'$	10	53	(1)	
$R_1$	10	54	(10)	22
$Q_1$	10	56	(01)	23
$B_{21}$	10	59	(1)	
$x_{10,27}$	10	62	(100)	26
$x_{10,28}$	10	62	(010)	26
$x_{10,32}$	10	64	(10)	27
$B_{23}$	10	65	(1)	
$B_5$	10	66	(10)	28
$PD_2$	10	66	(01)	28
$PA$	10	69	(1)	
$P^2h_5^2$	10	78	(11)	34
$Px_{6,53}$	10	84	(1)	37
$x_{10,60}$	10	87	(1)	
$x_{10,63}$	10	90	(1)	40
$x_{10,65}$	10	92	(10)	41
$x_{10,67}$	10	93	(100)	
$x_{10,70}$	10	94	(100)	42
$x_{10,73}$	10	95	(10)	
$x_{10,76}$	10	97	(10)	
$x_{10,82}$	10	100	(100)	45
$x_{10,100}$	10	109	(10)	
$x_{10,102}$	10	110	(100)	50
$x_{10,107}$	10	112	(10)	51
$x_{10,109}$	10	113	(1)	
$x_{10,113}$	10	117	(10)	
$x_{10,114}$	10	117	(01)	
$x_{10,116}$	10	118	(010)	54
$x_{10,118}$	10	119	(10)	
$x_{10,120}$	10	120	(100)	55
$x_{10,124}$	10	123	(100)	
$x_{10,127}$	10	124	(10000)	57
$x_{10,128}$	10	124	(01000)	57
$x_{10,132}$	10	125	(10000)	
$x_{10,133}$	10	125	(01000)	
$x_{10,137}$	10	126	(10000)	58
$x_{10,143}$	10	127	(010000)	
$x_{10,148}$	10	128	(1000)	59
$x_{10,149}$	10	128	(0100)	59
$x_{10,152}$	10	129	(100)	
$x_{10,155}$	10	130	(10000)	60

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$P^2c_0$	11	24	(1)	
$Pj$	11	34	(1)	
$x_{11,35}$	11	67	(10)	28
$x_{11,59}$	11	89	(1)	39
$x_{11,61}$	11	91	(10)	40
$x_{11,80}$	11	101	(010)	45
$x_{11,91}$	11	108	(10)	
$x_{11,101}$	11	115	(1)	52
$x_{11,103}$	11	117	(100)	53
$x_{11,106}$	11	118	(100)	
$x_{11,109}$	11	119	(1000)	54
$x_{11,113}$	11	120	(100)	
$x_{11,116}$	11	121	(1)	55
$x_{11,118}$	11	122	(01)	
$x_{11,119}$	11	123	(10000)	56
$x_{11,120}$	11	123	(01000)	56
$x_{11,124}$	11	124	(10000)	
$x_{11,125}$	11	124	(01000)	
$x_{11,126}$	11	124	(00100)	
$x_{11,134}$	11	126	(100000)	
$x_{11,147}$	11	129	(100000)	59
$x_{11,148}$	11	129	(010000)	59

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$P^2d_0$	12	30	(1)	9
$P^2e_0$	12	33	(1)	
$x_{12,37}$	12	71	(10)	
$P^2D_3$	12	77	(10)	
$x_{12,44}$	12	80	(1)	34
$x_{12,45}$	12	81	(1)	
$x_{12,48}$	12	86	(10)	37
$x_{12,51}$	12	88	(100)	38
$x_{12,55}$	12	90	(1)	39
$x_{12,58}$	12	92	(10)	40
$x_{12,60}$	12	93	(10)	
$x_{12,64}$	12	96	(10)	42
$x_{12,78}$	12	103	(10)	
$x_{12,80}$	12	104	(100)	46
$x_{12,85}$	12	107	(1)	
$x_{12,86}$	12	109	(10)	
$x_{12,93}$	12	114	(01)	51
$x_{12,96}$	12	117	(1000)	
$x_{12,100}$	12	118	(100)	53
$x_{12,106}$	12	120	(10000)	54
$x_{12,107}$	12	120	(01000)	54
$x_{12,116}$	12	123	(100)	
$x_{12,124}$	12	125	(10000)	
$x_{12,125}$	12	125	(01000)	
$x_{12,137}$	12	128	(10000)	58
$x_{12,140}$	12	128	(00010)	58

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$P^3h_1$	13	25	(1)	6
$P^3h_2$	13	27	(1)	7
$Q$	13	47	(10)	17
$Pu$	13	47	(01)	17
$Pv$	13	50	(1)	
$R_2$	13	65	(01)	26
$P^2D_1$	13	68	(10)	
$W_1$	13	69	(1)	28
$x_{13,34}$	13	71	(010)	29
$x_{13,35}$	13	71	(001)	29
$x_{13,42}$	13	79	(1)	33
$x_{13,46}$	13	85	(1)	36
$x_{13,73}$	13	100	(100)	
$x_{13,85}$	13	107	(1)	47
$x_{13,87}$	13	109	(1)	48
$x_{13,88}$	13	110	(10)	
$x_{13,91}$	13	112	(10)	
$x_{13,93}$	13	113	(10)	50
$Px_{9,99}$	13	113	(01)	50
$x_{13,95}$	13	115	(10)	51
$x_{13,97}$	13	116	(100)	
$x_{13,113}$	13	122	(100)	
$x_{13,116}$	13	123	(100)	55
$x_{13,117}$	13	123	(010)	55
$x_{13,132}$	13	127	(01000)	57

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$PQ_1$	14	64	(10)	25
$x_{14,42}$	14	80	(10)	33
$x_{14,46}$	14	84	(1)	35
$P^3h_5^2$	14	86	(10)	36
$x_{14,67}$	14	98	(100)	42
$x_{14,74}$	14	102	(10)	44
$x_{14,79}$	14	106	(10)	46
$x_{14,82}$	14	108	(1)	47
$y_{14,83}$	14	109	(11)	
$x_{14,84}$	14	109	(01)	
$x_{14,91}$	14	112	(01)	49
$x_{14,104}$	14	118	(1000)	52
$Px_{10,102}$	14	118	(1111)	52
$x_{14,108}$	14	119	(10)	
$x_{14,110}$	14	120	(10)	53
$Px_{10,109}$	14	121	(1)	
$x_{14,117}$	14	124	(10000)	55
$x_{14,118}$	14	124	(01000)	55
$Px_{10,113}$	14	125	(111)	
$x_{14,126}$	14	126	(0100)	56

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$P^3c_0$	15	32	(1)	
$P^2i$	15	39	(1)	12
$P^2j$	15	42	(1)	
$x_{15,41}$	15	83	(1)	34
$x_{15,42}$	15	84	(10)	
$x_{15,43}$	15	84	(01)	
$x_{15,47}$	15	87	(10)	36
$x_{15,56}$	15	94	(1)	
$x_{15,58}$	15	96	(10)	
$x_{15,65}$	15	102	(1)	
$x_{15,68}$	15	105	(10)	45
$x_{15,74}$	15	108	(01)	
$x_{15,78}$	15	110	(10)	
$x_{15,81}$	15	111	(0100)	48
$x_{15,82}$	15	111	(0010)	48
$x_{15,90}$	15	114	(10)	
$x_{15,96}$	15	116	(0010)	
$x_{15,97}$	15	116	(0001)	
$x_{15,98}$	15	117	(100)	51
$x_{15,103}$	15	119	(100)	52
$x_{15,108}$	15	122	(10)	
$x_{15,109}$	15	122	(01)	
$x_{15,110}$	15	123	(100)	54
$x_{15,113}$	15	124	(1000)	
$x_{15,114}$	15	124	(0100)	
$x_{15,117}$	15	125	(10000)	55
$x_{15,119}$	15	125	(00100)	55

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$P^3d_0$	16	38	(1)	11
$P^3e_0$	16	41	(1)	
$x_{16,32}$	16	76	(1)	30
$x_{16,33}$	16	77	(10)	
$x_{16,35}$	16	79	(1)	
$x_{16,37}$	16	80	(01)	32
$x_{16,38}$	16	82	(1)	33
$x_{16,42}$	16	85	(100)	
$x_{16,48}$	16	88	(1)	36
$x_{16,54}$	16	94	(1)	39
$Px_{12,60}$	16	101	(1)	
$x_{16,77}$	16	110	(1000)	47
$x_{16,78}$	16	110	(0100)	47
$Px_{12,80}$	16	112	(0100)	48
$Px_{12,85}$	16	115	(10)	
$x_{16,95}$	16	116	(1000)	50
$Px_{12,86}$	16	117	(00100)	
$x_{16,109}$	16	121	(010)	
$x_{16,112}$	16	122	(010)	53
$x_{16,117}$	16	124	(10000)	54
$P^4h_1$	17	33	(1)	8
$P^4h_2$	17	35	(1)	9
$P^2u$	17	55	(1)	19
$P^2v$	17	58	(1)	
$R_1$	17	70	(10)	
$PR_2$	17	73	(10)	28
$x_{17,50}$	17	87	(1)	35
$x_{17,52}$	17	90	(10)	
$x_{17,57}$	17	93	(1)	38
$x_{17,76}$	17	108	(100)	
$x_{17,79}$	17	109	(10)	46
$x_{17,80}$	17	109	(01)	46
$x_{17,93}$	17	115	(10)	49
$x_{17,94}$	17	115	(01)	49
$Px_{13,87}$	17	117	(1000)	50
$P^2x_{9,97}$	17	120	(100)	
$P^2x_{9,99}$	17	121	(0101)	52

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$x_{18,20}$	18	69	(10)	
$P^2Q_1$	18	72	(10)	27
$x_{18,50}$	18	89	(1)	
$x_{18,55}$	18	92	(1)	37
$x_{18,57}$	18	95	(1)	
$x_{18,60}$	18	98	(1)	40
$x_{18,63}$	18	101	(10)	
$x_{18,68}$	18	104	(010)	43
$x_{18,72}$	18	107	(10)	
$x_{18,77}$	18	110	(1000)	46
$x_{18,78}$	18	110	(0100)	46
$x_{18,83}$	18	112	(010)	47
$x_{18,85}$	18	113	(10)	
$P^2x_{10,76}$	18	113	(01)	
$x_{18,87}$	18	114	(100)	48
$Px_{14,79}$	18	114	(011)	48
$Px_{14,82}$	18	116	(1000)	49
$Px_{14,84}$	18	117	(01)	
$P^4c_0$	19	40	(1)	
$P^3j$	19	50	(1)	
$x_{19,49}$	19	94	(1)	
$x_{19,58}$	19	102	(10)	
$P^2x_{11,61}$	19	107	(101)	44
$Px_{15,65}$	19	110	(0100)	
$x_{19,86}$	19	115	(10)	48
$Px_{15,78}$	19	118	(1)	
$P^4d_0$	20	46	(1)	13
$P^4e_0$	20	49	(1)	
$Px_{16,35}$	20	87	(1)	
$x_{20,91}$	20	119	(1000)	
$P^2x_{12,80}$	20	120	(100)	50



<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor	stem
$P^5h_1$	21	41	(1)		10
$P^5h_2$	21	43	(1)		11
$P^3u$	21	63	(10)		21
$P^3v$	21	66	(1)		
$P^2R_2$	21	81	(10)		30
$x_{21,43}$	21	95	(10)		37
$Px_{17,50}$	21	95	(01)		37
$Px_{17,52}$	21	98	(1)		
$x_{21,84}$	21	117	(01)		48
$x_{21,87}$	21	119	(010)		49
$P^3Q_1$	22	80	(10)		29
$x_{22,39}$	22	94	(1)		36
$Px_{18,50}$	22	97	(1)		
$Px_{18,55}$	22	100	(1)		39
$Px_{18,68}$	22	112	(10)		45
$x_{22,71}$	22	113	(100)		
$x_{22,78}$	22	116	(010)		47
$P^5c_0$	23	48	(1)		
$P^4i$	23	55	(1)		16
$P^4j$	23	58	(1)		
$P^5d_0$	24	54	(1)		15
$P^5e_0$	24	57	(1)		
$P^2x_{16,32}$	24	92	(1)		34
$P^2x_{16,35}$	24	95	(11)		
$P^6h_1$	25	49	(1)		12
$P^6h_2$	25	51	(1)		13
$P^4u$	25	71	(1)		23
$P^4v$	25	74	(1)		
$x_{25,24}$	25	86	(10)		
$P^3R_2$	25	89	(11)		32
$P^2x_{17,50}$	25	103	(1)		39
$P^2x_{17,52}$	25	106	(10)		
$P^4x'$	26	85	(10)		
$P^4Q_1$	26	88	(11)		31
$P^2x_{18,50}$	26	105	(1)		

<i>Name</i>	<i>s</i>	<i>n</i>	<i>value</i>	precursor stem
$P^6 c_0$	27	56	(1)	
$P^5 j$	27	66	(1)	
$P^6 d_0$	28	62	(1)	17
$P^6 e_0$	28	65	(1)	
$P^3 x_{16,35}$	28	103	(1)	
$P^7 h_1$	29	57	(1)	14
$P^7 h_2$	29	59	(1)	15
$P^4 Q$	29	79	(11)	25
$P^5 u$	29	79	(01)	25
$P^5 v$	29	82	(1)	
$P^4 R_2$	29	97	(10)	34
$P^3 x_{17,50}$	29	111	(1)	41
$P^5 Q_1$	30	96	(11)	33
$P^7 c_0$	31	64	(1)	
$P^6 i$	31	71	(1)	20
$P^6 j$	31	74	(1)	
$P^7 d_0$	32	70	(1)	19
$P^7 e_0$	32	73	(1)	
$P^4 x_{16,32}$	32	108	(1)	38
$P^8 h_1$	33	65	(1)	16
$P^8 h_2$	33	67	(1)	17
$P^6 u$	33	87	(1)	27
$P^6 v$	33	90	(1)	
$P^4 R_1$	33	102	(11)	
$P^5 R_2$	33	105	(10)	36
$P^4 x_{18,20}$	34	101	(11)	
$P^6 Q_1$	34	104	(11)	35
$P^8 c_0$	35	72	(1)	
$P^7 j$	35	82	(1)	
$P^8 d_0$	36	78	(1)	21
$P^8 e_0$	36	81	(1)	
$P^9 h_1$	37	73	(1)	18
$P^9 h_2$	37	75	(1)	19
$P^7 u$	37	95	(10)	29
$P^7 v$	37	98	(1)	
$P^9 c_0$	39	80	(1)	
$P^8 i$	39	87	(1)	24
$P^8 j$	39	90	(1)	

## 6. The tables

Stem 1

1 (1)  $h_1$

Stem 2

2 (1)  $h_1^2$

Stem 3

- 1 (1)  $h_2$
- 2 (1)  $h_0 h_2$
- 3 (1)  $h_0^2 h_2 = h_1^3$

Stem 4Stem 5Stem 6

- 2 (1)  $h_2^2$

Stem 7

- 1 (1)  $h_3$
- 2 (1)  $h_0 h_3$
- 3 (1)  $h_0^2 h_3$
- 4 (1)  $h_0^3 h_3$

Stem 8

- 2 (1)  $h_1 h_3$
- 3 (1)  $c_0$

Stem 9

- 3 (1)  $h_1^2 h_3 = h_2^3$
- 4 (1)  $h_1 c_0$
- 5 (1)  $Ph_1$

Stem 10

- 6 (1)  $h_1 Ph_1$

Stem 11

- 5 (1)  $Ph_2$
- 6 (1)  $h_0 Ph_2$
- 7 (1)  $h_0^2 Ph_2 = h_1^2 Ph_1$

Stem 12Stem 13Stem 14

- 2 (1)  $h_3^2$
- 3 (1)  $h_0 h_3^2$
- 4 (1)  $d_0$
- 5 (1)  $h_0 d_0$
- 6 (1)  $h_0^2 d_0 = h_2 Ph_2$

Stem 15

- 1 (1)  $h_4$
- 2 (1)  $h_0 h_4$
- 3 (1)  $h_0^2 h_4$
- 4 (1)  $h_0^3 h_4$
- 5 (10)  $h_1 d_0$
- (01)  $h_0^4 h_4$
- 6 (1)  $h_0^5 h_4$
- 7 (1)  $h_0^6 h_4$
- 8 (1)  $h_0^7 h_4$

Stem 16

- 2 (1)  $h_1 h_4$
- 6 (1)  $h_1^2 d_0 = h_3 P h_1 = c_0^2$
- 7 (1)  $P c_0$

Stem 17

- 3 (1)  $h_1^2 h_4$
- 4 (1)  $e_0$
- 5 (1)  $h_0 e_0 = h_2 d_0$
- 6 (1)  $h_0^2 e_0 = h_0 h_2 d_0$
- 7 (1)  $h_0^3 e_0 = h_0^2 h_2 d_0 = h_1^3 d_0 = h_1 h_3 P h_1 = h_1 c_0^2 = h_2^2 P h_2$
- 8 (1)  $h_1 P c_0 = c_0 P h_1$
- 9 (1)  $P^2 h_1$

Stem 18

- 2 (1)  $h_2 h_4$
- 3 (1)  $h_0 h_2 h_4$
- 4 (10)  $f_0$
- (01)  $h_0^2 h_2 h_4 = h_1^3 h_4$
- 5 (1)  $h_0 f_0 = h_1 e_0$
- 10 (1)  $h_1 P^2 h_1 = P h_1^2$

Stem 19

- 3 (1)  $c_1$
- 9 (1)  $P^2 h_2$
- 10 (1)  $h_0 P^2 h_2$
- 11 (1)  $h_0^2 P^2 h_2 = h_1^2 P^2 h_1 = h_1 P h_1^2$

Stem 20

- 4 (1)  $g$
- 5 (1)  $h_0 g = h_2 e_0$
- 6 (1)  $h_0^2 g = h_0 h_2 e_0 = h_2^2 d_0$

Stem 21

- 3 (1)  $h_2^2 h_4 = h_3^3$
- 5 (1)  $h_1 g = h_2 f_0$

Stem 22

- 4 (1)  $h_2c_1$   
 8 (1)  $Pd_0$   
 9 (1)  $h_0Pd_0$   
 10 (1)  $h_0^2Pd_0 = h_2P^2h_2 = Ph_2^2$

Stem 23

- 4 (1)  $h_4c_0$   
 5 (1)  $h_2g$   
 6 (1)  $h_0h_2g = h_2^2e_0$   
 7 (1)  $i$   
 8 (1)  $h_0i$   
 9 (01)  $h_0^2i$   
 (11)  $h_1Pd_0 = d_0Ph_1$   
 10 (1)  $h_0^3i$   
 11 (1)  $h_0^4i$   
 12 (1)  $h_0^5i$

Stem 24

- 5 (1)  $h_1h_4c_0 = h_3e_0$   
 10 (1)  $h_1^2Pd_0 = h_1d_0Ph_1 = h_3P^2h_1 = c_0Pc_0$   
 11 (1)  $P^2c_0$

Stem 25

- 8 (1)  $Pe_0$   
 9 (1)  $h_0Pe_0 = h_2Pd_0 = d_0Ph_2$   
 10 (1)  $h_0^2Pe_0 = h_0h_2Pd_0 = h_0d_0Ph_2$   
 11 (1)  $h_0^3Pe_0 = h_0^2h_2Pd_0 = h_0^2d_0Ph_2 = h_1^3Pd_0 = h_1^2d_0Ph_1 = h_1h_3P^2h_1 = h_1c_0Pc_0 = h_2^2P^2h_2 = h_2Ph_2^2 = h_3Ph_1^2 = c_0^2Ph_1$   
 12 (1)  $h_1P^2c_0 = c_0P^2h_1 = Ph_1Pc_0$   
 13 (1)  $P^3h_1$

Stem 26

- 6 (1)  $h_2^2g = h_4Ph_2$   
 7 (1)  $j$   
 8 (1)  $h_0j = h_2i$   
 9 (1)  $h_0^2j = h_0h_2i = h_1Pe_0 = e_0Ph_1$   
 14 (1)  $h_1P^3h_1 = Ph_1P^2h_1$

Stem 27

- 13 (1)  $P^3h_2$   
 14 (1)  $h_0P^3h_2$   
 15 (1)  $h_0^2P^3h_2 = h_1^2P^3h_1 = h_1Ph_1P^2h_1 = Ph_1^3$

Stem 28

- 8 (1)  $d_0^2$   
 9 (1)  $h_0d_0^2 = h_2Pe_0 = e_0Ph_2$   
 10 (1)  $h_0^2d_0^2 = h_0h_2Pe_0 = h_0e_0Ph_2 = h_2^2Pd_0 = h_2d_0Ph_2$

Stem 29

- 7 (1)  $k$   
 8 (1)  $h_0k = h_2j$   
 9 (1)  $h_0^2k = h_0h_2j = h_1d_0^2 = h_2^2i = f_0Ph_2 = gPh_1$

Stem 30

- 2 (1)  $h_4^2$   
 3 (1)  $h_0h_4^2$   
 4 (1)  $h_0^2h_4^2$   
 5 (1)  $h_0^3h_4^2$   
 6 (1)  $r$   
 7 (1)  $h_0r$   
 8 (1)  $h_0^2r = h_3i$   
 9 (1)  $h_0^3r = h_0h_3i$   
 10 (1)  $h_0^4r = h_0^2h_3i$   
 11 (1)  $h_0^5r = h_0^3h_3i = c_0Pd_0 = d_0Pc_0$   
 12 (1)  $P^2d_0$   
 13 (1)  $h_0P^2d_0$   
 14 (1)  $h_0^2P^2d_0 = h_2P^3h_2 = Ph_2P^2h_2$

Stem 31

- 1 (1)  $h_5$   
 2 (1)  $h_0h_5$   
 3 (10)  $h_1h_4^2$   
 (01)  $h_0^2h_5$   
 4 (1)  $h_0^3h_5$   
 5 (10)  $n$   
 (01)  $h_0^4h_5$   
 6 (1)  $h_0^5h_5$   
 7 (1)  $h_0^6h_5$   
 8 (10)  $d_0e_0$   
 (01)  $h_0^7h_5$   
 9 (10)  $h_0d_0e_0 = h_2d_0^2 = gPh_2$   
 (01)  $h_0^8h_5$   
 10 (10)  $h_0^2d_0e_0 = h_0h_2d_0^2 = h_0gPh_2 = h_2^2Pe_0 = h_2e_0Ph_2 = c_0i$   
 (01)  $h_0^9h_5$   
 11 (1)  $h_0^{10}h_5$   
 12 (1)  $h_0^{11}h_5$   
 13 (10)  $h_1P^2d_0 = d_0P^2h_1 = Ph_1Pd_0$   
 (01)  $h_0^{12}h_5$   
 14 (1)  $h_0^{13}h_5$   
 15 (1)  $h_0^{14}h_5$   
 16 (1)  $h_0^{15}h_5$

Stem 32

- 2 (1)  $h_1h_5$   
4 (1)  $d_1$   
6 (1)  $q$   
7 (1)  $l$   
8 (1)  $h_0l = h_2k = d_0f_0$   
9 (1)  $h_0^2l = h_0h_2k = h_0d_0f_0 = h_1d_0e_0 = h_2^2j$   
14 (1)  $h_1^2P^2d_0 = h_1d_0P^2h_1 = h_1Ph_1Pd_0 = h_3P^3h_1 = c_0P^2c_0 = d_0Ph_1^2 = Pc_0^2$   
15 (1)  $P^3c_0$

Stem 33

- 3 (1)  $h_1^2h_5$   
4 (1)  $p$   
5 (1)  $h_0p = h_1d_1$   
7 (1)  $h_1q = h_2r$   
12 (1)  $P^2e_0$   
13 (1)  $h_0P^2e_0 = h_2P^2d_0 = d_0P^2h_2 = Ph_2Pd_0$   
14 (1)  $h_0^2P^2e_0 = h_0h_2P^2d_0 = h_0d_0P^2h_2 = h_0Ph_2Pd_0$   
15 (1)  $h_0^3P^2e_0 = h_0^2h_2P^2d_0 = h_0^2d_0P^2h_2 = h_0^2Ph_2Pd_0 = h_1^3P^2d_0 = h_1^2d_0P^2h_1 = h_1^2Ph_1Pd_0 = h_1h_3P^3h_1 = h_1c_0P^2c_0 = h_1d_0Ph_1^2 = h_1Pc_0^2 = h_2^2P^3h_2 = h_2Ph_2P^2h_2 = h_3Ph_1P^2h_1 = c_0^2P^2h_1 = c_0Ph_1Pc_0 = Ph_2^3$   
16 (1)  $h_1P^3c_0 = c_0P^3h_1 = Ph_1P^2c_0 = Pc_0P^2h_1$   
17 (1)  $P^4h_1$

Stem 34

- 2 (1)  $h_2h_5$   
3 (1)  $h_0h_2h_5$   
4 (1)  $h_0^2h_2h_5 = h_1^3h_5$   
6 (1)  $h_2n$   
8 (1)  $d_0g = e_0^2$   
9 (1)  $h_0d_0g = h_0e_0^2 = h_2d_0e_0$   
10 (1)  $h_0^2d_0g = h_0^2e_0^2 = h_0h_2d_0e_0 = h_2^2d_0^2 = h_2gPh_2 = h_4P^2h_2 = c_0j$   
11 (1)  $Pj$   
12 (1)  $h_0Pj = Ph_2i$   
13 (1)  $h_0^2Pj = h_0Ph_2i = h_1P^2e_0 = e_0P^2h_1 = Ph_1Pe_0$   
18 (1)  $h_1P^4h_1 = Ph_1P^3h_1 = P^2h_1^2$

Stem 35

- 5 (1)  $h_2d_1 = h_4g$   
7 (1)  $m$   
8 (1)  $h_0m = h_2l = e_0f_0$   
9 (1)  $h_0^2m = h_0h_2l = h_0e_0f_0 = h_1d_0g = h_1e_0^2 = h_2^2k = h_2d_0f_0$   
17 (1)  $P^4h_2$   
18 (1)  $h_0P^4h_2$   
19 (1)  $h_0^2P^4h_2 = h_1^2P^4h_1 = h_1Ph_1P^3h_1 = h_1P^2h_1^2 = Ph_1^2P^2h_1$

Stem 36

- 6 (1)  $t$   
 12 (1)  $d_0 P d_0$   
 13 (1)  $h_0 d_0 P d_0 = h_2 P^2 e_0 = e_0 P^2 h_2 = P h_2 P e_0$   
 14 (1)  $h_0^2 d_0 P d_0 = h_0 h_2 P^2 e_0 = h_0 e_0 P^2 h_2 = h_0 P h_2 P e_0 = h_2^2 P^2 d_0 =$   
 $h_2 d_0 P^2 h_2 = h_2 P h_2 P d_0 = d_0 P h_2^2$

Stem 37

- 3 (1)  $h_2^2 h_5$   
 5 (1)  $x$   
 6 (1)  $h_0 x$   
 7 (10)  $h_1 t = h_2^2 n = c_1 f_0$   
 (01)  $h_0^2 x$   
 (11)  $h_3 r$   
 8 (10)  $e_0 g$   
 (01)  $h_0^3 x = h_0 h_3 r$   
 9 (1)  $h_0^4 x = h_0^2 h_3 r = h_0 e_0 g = h_2 d_0 g = h_2 e_0^2 = h_3^2 i = h_4 P d_0$   
 10 (1)  $h_0^5 x = h_0^3 h_3 r = h_0^2 e_0 g = h_0 h_2 d_0 g = h_0 h_2 e_0^2 = h_0 h_3^2 i = h_0 h_4 P d_0 =$   
 $h_2^2 d_0 e_0 = c_0 k$   
 11 (1)  $d_0 i$   
 12 (1)  $h_0 d_0 i = h_2 P j = P h_2 j$   
 13 (1)  $h_0^2 d_0 i = h_0 h_2 P j = h_0 P h_2 j = h_1 d_0 P d_0 = h_2 P h_2 i = d_0^2 P h_1 =$   
 $f_0 P^2 h_2 = g P^2 h_1$

Stem 38

- 2 (1)  $h_3 h_5$   
 3 (1)  $h_0 h_3 h_5$   
 4 (01)  $h_0^2 h_3 h_5$   
 (11)  $e_1$   
 5 (1)  $h_0^3 h_3 h_5$   
 6 (10)  $y$   
 (01)  $h_1 x = h_2^2 d_1 = h_2 h_4 g = h_3 n = c_1^2$   
 7 (1)  $h_0 y$   
 8 (1)  $h_0^2 y = h_2 m = f_0 g$   
 9 (1)  $h_0^3 y = h_0 h_2 m = h_0 f_0 g = h_1 e_0 g = h_2^2 l = h_2 e_0 f_0 = c_0 r$   
 16 (1)  $P^3 d_0$   
 17 (1)  $h_0 P^3 d_0$   
 18 (1)  $h_0^2 P^3 d_0 = h_2 P^4 h_2 = P h_2 P^3 h_2 = P^2 h_2^2$



Stem 39

- 3 (1)  $h_1h_3h_5$   
4 (1)  $h_5c_0$   
5 (1)  $h_1e_1 = h_3d_1$   
7 (1)  $h_1y = h_2t = h_3q = c_1g$   
9 (1)  $u$   
12 (1)  $d_0Pe_0 = e_0Pd_0$   
13 (1)  $h_0d_0Pe_0 = h_0e_0Pd_0 = h_2d_0Pd_0 = d_0^2Ph_2 = gP^2h_2$   
14 (1)  $h_0^2d_0Pe_0 = h_0^2e_0Pd_0 = h_0h_2d_0Pd_0 = h_0d_0^2Ph_2 = h_0gP^2h_2 =$   
 $h_2^2P^2e_0 = h_2e_0P^2h_2 = h_2Ph_2Pe_0 = e_0Ph_2^2 = Pc_0i$   
15 (1)  $P^2i$   
16 (1)  $h_0P^2i$   
17 (01)  $h_0^2P^2i$   
(11)  $h_1P^3d_0 = d_0P^3h_1 = Ph_1P^2d_0 = Pd_0P^2h_1$   
18 (1)  $h_0^3P^2i$   
19 (1)  $h_0^4P^2i$   
20 (1)  $h_0^5P^2i$

Stem 40

- 4 (01)  $h_1^2h_3h_5 = h_2^3h_5$   
(11)  $f_1$   
5 (01)  $h_0f_1 = h_3p$   
(11)  $h_1h_5c_0$   
6 (10)  $h_5Ph_1$   
(01)  $h_0^2f_1 = h_0h_3p = h_1^2e_1 = h_1h_3d_1$   
8 (1)  $g^2$   
10 (1)  $h_1u$   
11 (1)  $d_0j = e_0i$   
12 (1)  $h_0d_0j = h_0e_0i = h_2d_0i = f_0Pd_0 = Ph_2k$   
13 (1)  $h_0^2d_0j = h_0^2e_0i = h_0h_2d_0i = h_0f_0Pd_0 = h_0Ph_2k = h_1d_0Pe_0 =$   
 $h_1e_0Pd_0 = h_2^2Pj = h_2Ph_2j = d_0e_0Ph_1$   
18 (1)  $h_1^2P^3d_0 = h_1d_0P^3h_1 = h_1Ph_1P^2d_0 = h_1Pd_0P^2h_1 = h_3P^4h_1 =$   
 $c_0P^3c_0 = d_0Ph_1P^2h_1 = Ph_1^2Pd_0 = Pc_0P^2c_0$   
19 (1)  $P^4c_0$

Stem 41

- 3 (1)  $c_2$   
4 (1)  $h_0c_2$   
5 (1)  $h_0^2c_2 = h_1f_1 = h_2e_1$   
7 (1)  $h_1h_5Ph_1$   
10 (1)  $z$   
11 (1)  $h_0z = h_1^2u = f_0i = Ph_1q = Ph_2r$   
16 (1)  $P^3e_0$   
17 (1)  $h_0P^3e_0 = h_2P^3d_0 = d_0P^3h_2 = Ph_2P^2d_0 = Pd_0P^2h_2$   
18 (1)  $h_0^2P^3e_0 = h_0h_2P^3d_0 = h_0d_0P^3h_2 = h_0Ph_2P^2d_0 = h_0Pd_0P^2h_2$   
19 (1)  $h_0^3P^3e_0 = h_0^2h_2P^3d_0 = h_0^2d_0P^3h_2 = h_0^2Ph_2P^2d_0 = h_0^2Pd_0P^2h_2 =$   
 $h_1^3P^3d_0 = h_1^2d_0P^3h_1 = h_1^2Ph_1P^2d_0 = h_1^2Pd_0P^2h_1 = h_1h_3P^4h_1 =$   
 $h_1c_0P^3c_0 = h_1d_0Ph_1P^2h_1 = h_1Ph_1^2Pd_0 = h_1Pc_0P^2c_0 =$   
 $h_2^2P^4h_2 = h_2Ph_2P^3h_2 = h_2P^2h_2^2 = h_3Ph_1P^3h_1 = h_3P^2h_1^2 =$   
 $c_0^2P^3h_1 = c_0Ph_1P^2c_0 = c_0Pc_0P^2h_1 = d_0Ph_1^3 = Ph_1Pc_0^2 =$   
 $Ph_2^2P^2h_2$   
20 (1)  $h_1P^4c_0 = c_0P^4h_1 = Ph_1P^3c_0 = Pc_0P^3h_1 = P^2h_1P^2c_0$   
21 (1)  $P^5h_1$

Stem 42

- 6 (1)  $h_5Ph_2$   
7 (1)  $h_0h_5Ph_2$   
8 (1)  $h_0^2h_5Ph_2 = h_1^2h_5Ph_1$   
9 (1)  $v$   
12 (1)  $d_0^3 = e_0Pe_0 = gPd_0$   
13 (1)  $h_0d_0^3 = h_0e_0Pe_0 = h_0gPd_0 = h_2d_0Pe_0 = h_2e_0Pd_0 = d_0e_0Ph_2$   
14 (1)  $h_0^2d_0^3 = h_0^2e_0Pe_0 = h_0^2gPd_0 = h_0h_2d_0Pe_0 = h_0h_2e_0Pd_0 =$   
 $h_0d_0e_0Ph_2 = h_2^2d_0Pd_0 = h_2d_0^2Ph_2 = h_2gP^2h_2 = h_4P^3h_2 =$   
 $c_0Pj = gPh_2^2 = Pc_0j$   
15 (1)  $P^2j$   
16 (1)  $h_0P^2j = h_2P^2i = iP^2h_2$   
17 (1)  $h_0^2P^2j = h_0h_2P^2i = h_0iP^2h_2 = h_1P^3e_0 = e_0P^3h_1 = Ph_1P^2e_0 =$   
 $Pe_0P^2h_1$   
22 (1)  $h_1P^5h_1 = Ph_1P^4h_1 = P^2h_1P^3h_1$

Stem 43

- 11 (1)  $d_0k = e_0j = gi$   
12 (1)  $h_0d_0k = h_0e_0j = h_0gi = h_2d_0j = h_2e_0i = f_0Pe_0 = Ph_2l$   
13 (1)  $h_0^2d_0k = h_0^2e_0j = h_0^2gi = h_0h_2d_0j = h_0h_2e_0i = h_0f_0Pe_0 =$   
 $h_0Ph_2l = h_1d_0^3 = h_1e_0Pe_0 = h_1gPd_0 = h_2^2d_0i = h_2f_0Pd_0 =$   
 $h_2Ph_2k = d_0f_0Ph_2 = d_0gPh_1 = e_0^2Ph_1$   
21 (1)  $P^5h_2$   
22 (1)  $h_0P^5h_2$   
23 (1)  $h_0^2P^5h_2 = h_1^2P^5h_1 = h_1Ph_1P^4h_1 = h_1P^2h_1P^3h_1 = Ph_1^2P^3h_1 =$   
 $Ph_1P^2h_1^2$

Stem 44

- 4 (1)  $g_2$   
5 (1)  $h_0 g_2$   
6 (1)  $h_0^2 g_2 = h_3 x$   
10 (1)  $d_0 r$   
16 (1)  $d_0 P^2 d_0 = P d_0^2$   
17 (1)  $h_0 d_0 P^2 d_0 = h_0 P d_0^2 = h_2 P^3 e_0 = e_0 P^3 h_2 = P h_2 P^2 e_0 = P e_0 P^2 h_2$   
18 (1)  $h_0^2 d_0 P^2 d_0 = h_0^2 P d_0^2 = h_0 h_2 P^3 e_0 = h_0 e_0 P^3 h_2 = h_0 P h_2 P^2 e_0 = h_0 P e_0 P^2 h_2 = h_2^2 P^3 d_0 = h_2 d_0 P^3 h_2 = h_2 P h_2 P^2 d_0 = h_2 P d_0 P^2 h_2 = d_0 P h_2 P^2 h_2 = P h_2^2 P d_0$

Stem 45

- 3 (1)  $h_3^2 h_5 = h_4^3$   
4 (1)  $h_0 h_3^2 h_5 = h_0 h_4^3$   
5 (10)  $h_5 d_0$   
(01)  $h_1 g_2 = h_3 e_1$   
6 (1)  $h_0 h_5 d_0$   
7 (1)  $h_0^2 h_5 d_0 = h_2 h_5 P h_2 = h_3 y$   
9 (1)  $w$   
12 (1)  $d_0^2 e_0 = g P e_0$   
15 (1)  $i P d_0$   
16 (1)  $h_0 i P d_0 = h_2 P^2 j = P h_2 P j = j P^2 h_2$   
17 (1)  $h_0^2 i P d_0 = h_0 h_2 P^2 j = h_0 P h_2 P j = h_0 j P^2 h_2 = h_1 d_0 P^2 d_0 = h_1 P d_0^2 = h_2^2 P^2 i = h_2 i P^2 h_2 = d_0^2 P^2 h_1 = d_0 P h_1 P d_0 = f_0 P^3 h_2 = g P^3 h_1 = P h_2^2 i$

Stem 46

- 6 (1)  $h_1 h_5 d_0$   
7 (1)  $B_1$   
8 (1)  $N$   
11 (1)  $d_0 l = e_0 k = g j$   
14 (1)  $i^2$   
15 (1)  $h_0 i^2$   
16 (1)  $h_0^2 i^2 = h_3 P^2 i$   
17 (1)  $h_0^3 i^2 = h_0 h_3 P^2 i$   
18 (1)  $h_0^4 i^2 = h_0^2 h_3 P^2 i$   
19 (1)  $h_0^5 i^2 = h_0^3 h_3 P^2 i = c_0 P^3 d_0 = d_0 P^3 c_0 = P c_0 P^2 d_0 = P d_0 P^2 c_0$   
20 (1)  $P^4 d_0$   
21 (1)  $h_0 P^4 d_0$   
22 (1)  $h_0^2 P^4 d_0 = h_2 P^5 h_2 = P h_2 P^4 h_2 = P^2 h_2 P^3 h_2$

Stem 47

- 5 (1)  $h_2g_2 = h_3f_1$   
6 (1)  $h_0h_2g_2 = h_0h_3f_1 = h_3^2p$   
7 (1)  $h_1^2h_5d_0 = h_3h_5Ph_1 = h_4q = h_5c_0^2$   
8 (10)  $h_5Pc_0$   
(01)  $h_1B_1$   
10 (1)  $e_0r$   
13 (10)  $Q$   
(01)  $Pu$   
14 (1)  $h_0Q$   
15 (1)  $h_0^2Q$   
16 (10)  $d_0P^2e_0 = e_0P^2d_0 = Pd_0Pe_0$   
(01)  $h_0^3Q$   
17 (01)  $h_0^4Q$   
(11)  $h_0d_0P^2e_0 = h_0e_0P^2d_0 = h_0Pd_0Pe_0 = h_2d_0P^2d_0 = h_2Pd_0^2 =$   
 $d_0^2P^2h_2 = d_0Ph_2Pd_0 = gP^3h_2$   
18 (01)  $h_0^5Q$   
(11)  $h_0^2d_0P^2e_0 = h_0^2e_0P^2d_0 = h_0^2Pd_0Pe_0 = h_0h_2d_0P^2d_0 = h_0h_2Pd_0^2 =$   
 $h_0d_0^2P^2h_2 = h_0d_0Ph_2Pd_0 = h_0gP^3h_2 = h_2^2P^3e_0 = h_2e_0P^3h_2 =$   
 $h_2Ph_2P^2e_0 = h_2Pe_0P^2h_2 = c_0P^2i = e_0Ph_2P^2h_2 = Ph_2^2Pe_0 =$   
 $iP^2c_0$   
19 (1)  $h_0^6Q$   
20 (1)  $h_0^7Q$   
21 (10)  $h_1P^4d_0 = d_0P^4h_1 = Ph_1P^3d_0 = Pd_0P^3h_1 = P^2h_1P^2d_0$   
(01)  $h_0^8Q$   
22 (1)  $h_0^9Q$   
23 (1)  $h_0^{10}Q$   
24 (1)  $h_0^{11}Q$

Stem 48

- 4 (1)  $h_3c_2$   
5 (1)  $h_5e_0$   
6 (1)  $h_0h_5e_0 = h_2h_5d_0$   
7 (10)  $B_2$   
(01)  $h_0^2h_5e_0 = h_0h_2h_5d_0$   
8 (1)  $h_0B_2$   
9 (10)  $h_1h_5Pc_0 = h_5c_0Ph_1$   
(01)  $h_0^2B_2 = h_1^2B_1$   
12 (1)  $d_0^2g = d_0e_0^2$   
14 (1)  $h_1Q = h_1Pu = Ph_1u$   
15 (1)  $d_0Pj = iPe_0 = jPd_0$   
16 (1)  $h_0d_0Pj = h_0iPe_0 = h_0jPd_0 = h_2iPd_0 = d_0Ph_2i = f_0P^2d_0 = kP^2h_2$   
17 (1)  $h_0^2d_0Pj = h_0^2iPe_0 = h_0^2jPd_0 = h_0h_2iPd_0 = h_0d_0Ph_2i = h_0f_0P^2d_0 = h_0kP^2h_2 = h_1d_0P^2e_0 = h_1e_0P^2d_0 = h_1Pd_0Pe_0 = h_2^2P^2j = h_2Ph_2Pj = h_2jP^2h_2 = d_0e_0P^2h_1 = d_0Ph_1Pe_0 = e_0Ph_1Pd_0 = Ph_2^2j$   
22 (1)  $h_1^2P^4d_0 = h_1d_0P^4h_1 = h_1Ph_1P^3d_0 = h_1Pd_0P^3h_1 = h_1P^2h_1P^2d_0 = h_3P^5h_1 = c_0P^4c_0 = d_0Ph_1P^3h_1 = d_0P^2h_1^2 = Ph_1^2P^2d_0 = Ph_1Pd_0P^2h_1 = Pc_0P^3c_0 = P^2c_0^2$   
23 (1)  $P^5c_0$

Stem 49

- 5 (1)  $h_5f_0$   
6 (1)  $h_0h_5f_0 = h_1h_5e_0$   
11 (1)  $d_0m = e_0l = gk$   
14 (1)  $ij$   
15 (1)  $h_0ij = h_1^2Q = h_1^2Pu = h_1Ph_1u = h_2i^2 = rP^2h_2 = qP^2h_1$   
20 (1)  $P^4e_0$   
21 (1)  $h_0P^4e_0 = h_2P^4d_0 = d_0P^4h_2 = Ph_2P^3d_0 = Pd_0P^3h_2 = P^2h_2P^2d_0$   
22 (1)  $h_0^2P^4e_0 = h_0h_2P^4d_0 = h_0d_0P^4h_2 = h_0Ph_2P^3d_0 = h_0Pd_0P^3h_2 = h_0P^2h_2P^2d_0$   
23 (1)  $h_0^3P^4e_0 = h_0^2h_2P^4d_0 = h_0^2d_0P^4h_2 = h_0^2Ph_2P^3d_0 = h_0^2Pd_0P^3h_2 = h_0^2P^2h_2P^2d_0 = h_1^3P^4d_0 = h_1^2d_0P^4h_1 = h_1^2Ph_1P^3d_0 = h_1^2Pd_0P^3h_1 = h_1^2P^2h_1P^2d_0 = h_1h_3P^5h_1 = h_1c_0P^4c_0 = h_1d_0Ph_1P^3h_1 = h_1d_0P^2h_1^2 = h_1Ph_1^2P^2d_0 = h_1Ph_1Pd_0P^2h_1 = h_1Pc_0P^3c_0 = h_1P^2c_0^2 = h_2^2P^5h_2 = h_2Ph_2P^4h_2 = h_2P^2h_2P^3h_2 = h_3Ph_1P^4h_1 = h_3P^2h_1P^3h_1 = c_0^2P^4h_1 = c_0Ph_1P^3c_0 = c_0Pc_0P^3h_1 = c_0P^2h_1P^2c_0 = d_0Ph_1^2P^2h_1 = Ph_1^3Pd_0 = Ph_1Pc_0P^2c_0 = Ph_2^2P^3h_2 = Ph_2P^2h_2^2 = Pc_0^2P^2h_1$   
24 (1)  $h_1P^5c_0 = c_0P^5h_1 = Ph_1P^4c_0 = Pc_0P^4h_1 = P^2h_1P^3c_0 = P^2c_0P^3h_1$   
25 (1)  $P^6h_1$

Stem 50

- 4 (1)  $h_5 c_1$   
6 (1)  $C$   
10 (1)  $gr$   
13 (1)  $Pv$   
16 (1)  $d_0^2 P d_0 = e_0 P^2 e_0 = g P^2 d_0 = P e_0^2$   
17 (1)  $h_0 d_0^2 P d_0 = h_0 e_0 P^2 e_0 = h_0 g P^2 d_0 = h_0 P e_0^2 = h_2 d_0 P^2 e_0 =$   
 $h_2 e_0 P^2 d_0 = h_2 P d_0 P e_0 = d_0 e_0 P^2 h_2 = d_0 P h_2 P e_0 = e_0 P h_2 P d_0$   
18 (1)  $h_0^2 d_0^2 P d_0 = h_0^2 e_0 P^2 e_0 = h_0^2 g P^2 d_0 = h_0^2 P e_0^2 = h_0 h_2 d_0 P^2 e_0 =$   
 $h_0 h_2 e_0 P^2 d_0 = h_0 h_2 P d_0 P e_0 = h_0 d_0 e_0 P^2 h_2 = h_0 d_0 P h_2 P e_0 =$   
 $h_0 e_0 P h_2 P d_0 = h_2^2 d_0 P^2 d_0 = h_2^2 P d_0^2 = h_2 d_0^2 P^2 h_2 = h_2 d_0 P h_2 P d_0 =$   
 $h_2 g P^3 h_2 = h_4 P^4 h_2 = c_0 P^2 j = d_0^2 P h_2^2 = g P h_2 P^2 h_2 = P c_0 P j =$   
 $j P^2 c_0$   
19 (1)  $P^3 j$   
20 (1)  $h_0 P^3 j = P h_2 P^2 i = i P^3 h_2$   
21 (1)  $h_0^2 P^3 j = h_0 P h_2 P^2 i = h_0 i P^3 h_2 = h_1 P^4 e_0 = e_0 P^4 h_1 = P h_1 P^3 e_0 =$   
 $P e_0 P^3 h_1 = P^2 h_1 P^2 e_0$   
26 (1)  $h_1 P^6 h_1 = P h_1 P^5 h_1 = P^2 h_1 P^4 h_1 = P^3 h_1^2$

Stem 51

- 5 (1)  $h_3 g_2 = h_5 g$   
6 (1)  $h_0 h_3 g_2 = h_0 h_5 g = h_2 h_5 e_0$   
7 (1)  $h_0^2 h_3 g_2 = h_0^2 h_5 g = h_0 h_2 h_5 e_0 = h_2^2 h_5 d_0 = h_3^2 x$   
8 (1)  $h_2 B_2$   
9 (1)  $gn$   
12 (1)  $d_0 e_0 g = e_0^3$   
15 (1)  $d_0^2 i = e_0 P j = j P e_0 = k P d_0$   
16 (1)  $h_0 d_0^2 i = h_0 e_0 P j = h_0 j P e_0 = h_0 k P d_0 = h_2 d_0 P j = h_2 i P e_0 =$   
 $h_2 j P d_0 = d_0 P h_2 j = e_0 P h_2 i = f_0 P^2 e_0 = l P^2 h_2$   
17 (1)  $h_0^2 d_0^2 i = h_0^2 e_0 P j = h_0^2 j P e_0 = h_0^2 k P d_0 = h_0 h_2 d_0 P j = h_0 h_2 i P e_0 =$   
 $h_0 h_2 j P d_0 = h_0 d_0 P h_2 j = h_0 e_0 P h_2 i = h_0 f_0 P^2 e_0 = h_0 l P^2 h_2 =$   
 $h_1 d_0^2 P d_0 = h_1 e_0 P^2 e_0 = h_1 g P^2 d_0 = h_1 P e_0^2 = h_2^2 i P d_0 =$   
 $h_2 d_0 P h_2 i = h_2 f_0 P^2 d_0 = h_2 k P^2 h_2 = d_0^3 P h_1 = d_0 f_0 P^2 h_2 =$   
 $d_0 g P^2 h_1 = e_0^2 P^2 h_1 = e_0 P h_1 P e_0 = f_0 P h_2 P d_0 = g P h_1 P d_0 = P h_2^2 k$   
25 (1)  $P^6 h_2$   
26 (1)  $h_0 P^6 h_2$   
27 (1)  $h_0^2 P^6 h_2 = h_1^2 P^6 h_1 = h_1 P h_1 P^5 h_1 = h_1 P^2 h_1 P^4 h_1 = h_1 P^3 h_1^2 =$   
 $P h_1^2 P^4 h_1 = P h_1 P^2 h_1 P^3 h_1 = P^2 h_1^3$

Stem 52

- 5 (1)  $D_1$   
6 (1)  $h_1h_3g_2 = h_1h_5g = h_2h_5f_0 = h_3^2e_1$   
8 (1)  $gd_1$   
11 (1)  $e_0m = gl$   
14 (1)  $rPd_0 = ik = j^2$   
20 (1)  $d_0P^3d_0 = Pd_0P^2d_0$   
21 (1)  $h_0d_0P^3d_0 = h_0Pd_0P^2d_0 = h_2P^4e_0 = e_0P^4h_2 = Ph_2P^3e_0 =$   
 $Pe_0P^3h_2 = P^2h_2P^2e_0$   
22 (1)  $h_0^2d_0P^3d_0 = h_0^2Pd_0P^2d_0 = h_0h_2P^4e_0 = h_0e_0P^4h_2 =$   
 $h_0Ph_2P^3e_0 = h_0Pe_0P^3h_2 = h_0P^2h_2P^2e_0 = h_2^2P^4d_0 =$   
 $h_2d_0P^4h_2 = h_2Ph_2P^3d_0 = h_2Pd_0P^3h_2 = h_2P^2h_2P^2d_0 =$   
 $d_0Ph_2P^3h_2 = d_0P^2h_2^2 = Ph_2^2P^2d_0 = Ph_2Pd_0P^2h_2$

Stem 53

- 5 (1)  $h_2h_5c_1 = h_4e_1$   
7 (1)  $h_2C$   
9 (1)  $h_5Pd_0$   
10 (1)  $x'$   
11 (1)  $h_0x'$   
12 (1)  $h_0^2x'$   
13 (10)  $d_0u$   
(01)  $h_0^3x'$   
(11)  $ri$   
14 (1)  $h_0^4x' = h_0ri$   
15 (1)  $h_0^5x' = h_0^2ri = h_3i^2$   
16 (01)  $h_0^6x' = h_0^3ri = h_0h_3i^2$   
(11)  $d_0^2Pe_0 = d_0e_0Pd_0 = gP^2e_0$   
17 (1)  $h_0^7x' = h_0^4ri = h_0^2h_3i^2 = h_0d_0^2Pe_0 = h_0d_0e_0Pd_0 = h_0gP^2e_0 =$   
 $h_2d_0^2Pd_0 = h_2e_0P^2e_0 = h_2gP^2d_0 = h_2Pe_0^2 = h_3^2P^2i = h_4P^3d_0 =$   
 $d_0^3Ph_2 = d_0gP^2h_2 = e_0^2P^2h_2 = e_0Ph_2Pe_0 = gPh_2Pd_0$   
18 (1)  $h_0^8x' = h_0^5ri = h_0^3h_3i^2 = h_0^2d_0^2Pe_0 = h_0^2d_0e_0Pd_0 = h_0^2gP^2e_0 =$   
 $h_0h_2d_0^2Pd_0 = h_0h_2e_0P^2e_0 = h_0h_2gP^2d_0 = h_0h_2Pe_0^2 =$   
 $h_0h_3^2P^2i = h_0h_4P^3d_0 = h_0d_0^3Ph_2 = h_0d_0gP^2h_2 = h_0e_0^2P^2h_2 =$   
 $h_0e_0Ph_2Pe_0 = h_0gPh_2Pd_0 = h_2^2d_0P^2e_0 = h_2^2e_0P^2d_0 =$   
 $h_2^2Pd_0Pe_0 = h_2d_0e_0P^2h_2 = h_2d_0Ph_2Pe_0 = h_2e_0Ph_2Pd_0 =$   
 $c_0iPd_0 = d_0e_0Ph_2^2 = d_0Pc_0i = kP^2c_0$   
19 (1)  $d_0P^2i = iP^2d_0$   
20 (1)  $h_0d_0P^2i = h_0iP^2d_0 = h_2P^3j = Ph_2P^2j = jP^3h_2 = P^2h_2Pj$   
21 (1)  $h_0^2d_0P^2i = h_0^2iP^2d_0 = h_0h_2P^3j = h_0Ph_2P^2j = h_0jP^3h_2 =$   
 $h_0P^2h_2Pj = h_1d_0P^3d_0 = h_1Pd_0P^2d_0 = h_2Ph_2P^2i = h_2iP^3h_2 =$   
 $d_0^2P^3h_1 = d_0Ph_1P^2d_0 = d_0Pd_0P^2h_1 = f_0P^4h_2 = gP^4h_1 =$   
 $Ph_1Pd_0^2 = Ph_2iP^2h_2$

Stem 54

- 6 (1)  $G$
- 8 (1)  $h_5i$
- 9 (1)  $h_0h_5i$
- 10 (10)  $R_1$   
 (01)  $h_0^2h_5i = h_1h_5Pd_0 = h_4u = h_5d_0Ph_1 = c_0B_1$
- 11 (10)  $h_1x'$   
 (01)  $h_0R_1$
- 12 (10)  $d_0g^2 = e_0^2g$   
 (01)  $h_0^2R_1$
- 13 (1)  $h_0^3R_1$
- 14 (1)  $h_0^4R_1 = h_3Q$
- 15 (01)  $h_0^5R_1 = h_0h_3Q$   
 (11)  $d_0^2j = d_0e_0i = gPj = kPe_0 = lPd_0$
- 16 (1)  $h_0^6R_1 = h_0^2h_3Q = h_0d_0^2j = h_0d_0e_0i = h_0gPj = h_0kPe_0 =$   
 $h_0lPd_0 = h_2d_0^2i = h_2e_0Pj = h_2jPe_0 = h_2kPd_0 = d_0f_0Pd_0 =$   
 $d_0Ph_2k = e_0Ph_2j = gPh_2i = mP^2h_2$
- 17 (1)  $h_0^7R_1 = h_0^3h_3Q = h_0^2d_0^2j = h_0^2d_0e_0i = h_0^2gPj = h_0^2kPe_0 =$   
 $h_0^2lPd_0 = h_0h_2d_0^2i = h_0h_2e_0Pj = h_0h_2jPe_0 = h_0h_2kPd_0 =$   
 $h_0d_0f_0Pd_0 = h_0d_0Ph_2k = h_0e_0Ph_2j = h_0gPh_2i = h_0mP^2h_2 =$   
 $h_1d_0^2Pe_0 = h_1d_0e_0Pd_0 = h_1gP^2e_0 = h_2^2d_0Pj = h_2^2iPe_0 =$   
 $h_2^2jPd_0 = h_2d_0Ph_2j = h_2e_0Ph_2i = h_2f_0P^2e_0 = h_2lP^2h_2 = c_0i^2 =$   
 $d_0^2e_0Ph_1 = e_0f_0P^2h_2 = e_0gP^2h_1 = f_0Ph_2Pe_0 = gPh_1Pe_0 =$   
 $Ph_2^2l = rP^2c_0$
- 24 (1)  $P^5d_0$
- 25 (1)  $h_0P^5d_0$
- 26 (1)  $h_0^2P^5d_0 = h_2P^6h_2 = Ph_2P^5h_2 = P^2h_2P^4h_2 = P^3h_2^2$



Stem 55

- 7 (1)  $h_1G$
- 11 (1)  $gm$
- 12 (1)  $h_1^2x' = Ph_1B_1$
- 14 (1)  $d_0z = rPe_0 = il = jk$
- 17 (1)  $P^2u$
- 20 (1)  $d_0P^3e_0 = e_0P^3d_0 = Pd_0P^2e_0 = Pe_0P^2d_0$
- 21 (1)  $h_0d_0P^3e_0 = h_0e_0P^3d_0 = h_0Pd_0P^2e_0 = h_0Pe_0P^2d_0 = h_2d_0P^3d_0 =$   
 $h_2Pd_0P^2d_0 = d_0^2P^3h_2 = d_0Ph_2P^2d_0 = d_0Pd_0P^2h_2 = gP^4h_2 =$   
 $Ph_2Pd_0^2$
- 22 (1)  $h_0^2d_0P^3e_0 = h_0^2e_0P^3d_0 = h_0^2Pd_0P^2e_0 = h_0^2Pe_0P^2d_0 =$   
 $h_0h_2d_0P^3d_0 = h_0h_2Pd_0P^2d_0 = h_0d_0^2P^3h_2 = h_0d_0Ph_2P^2d_0 =$   
 $h_0d_0Pd_0P^2h_2 = h_0gP^4h_2 = h_0Ph_2Pd_0^2 = h_2^2P^4e_0 = h_2e_0P^4h_2 =$   
 $h_2Ph_2P^3e_0 = h_2Pe_0P^3h_2 = h_2P^2h_2P^2e_0 = e_0Ph_2P^3h_2 =$   
 $e_0P^2h_2^2 = Ph_2^2P^2e_0 = Ph_2Pe_0P^2h_2 = Pc_0P^2i = iP^3c_0$
- 23 (1)  $P^4i$
- 24 (1)  $h_0P^4i$
- 25 (01)  $h_0^2P^4i$
- (11)  $h_1P^5d_0 = d_0P^5h_1 = Ph_1P^4d_0 = Pd_0P^4h_1 = P^2h_1P^3d_0 =$   
 $P^2d_0P^3h_1$
- 26 (1)  $h_0^3P^4i$
- 27 (1)  $h_0^4P^4i$
- 28 (1)  $h_0^5P^4i$

Stem 56

- 9 (1)  $h_5Pe_0$
- 10 (10)  $gt$   
(01)  $Q_1$
- 11 (1)  $h_0Q_1 = h_2x'$
- 12 (1)  $h_0^2Q_1 = h_0h_2x'$
- 13 (10)  $d_0v$   
(01)  $h_0^3Q_1 = h_0^2h_2x' = h_1^3x' = h_1Ph_1B_1$   
(11)  $e_0u = rj$
- 16 (1)  $d_0^4 = d_0e_0Pe_0 = d_0gPd_0 = e_0^2Pd_0$
- 18 (1)  $h_1P^2u = Ph_1Q = Ph_1Pu = P^2h_1u$
- 19 (1)  $d_0P^2j = e_0P^2i = iP^2e_0 = jP^2d_0 = Pd_0Pj$
- 20 (1)  $h_0d_0P^2j = h_0e_0P^2i = h_0iP^2e_0 = h_0jP^2d_0 = h_0Pd_0Pj =$   
 $h_2d_0P^2i = h_2iP^2d_0 = d_0iP^2h_2 = f_0P^3d_0 = Ph_2iPd_0 = kP^3h_2$
- 21 (1)  $h_0^2d_0P^2j = h_0^2e_0P^2i = h_0^2iP^2e_0 = h_0^2jP^2d_0 = h_0^2Pd_0Pj =$   
 $h_0h_2d_0P^2i = h_0h_2iP^2d_0 = h_0d_0iP^2h_2 = h_0f_0P^3d_0 =$   
 $h_0Ph_2iPd_0 = h_0kP^3h_2 = h_1d_0P^3e_0 = h_1e_0P^3d_0 = h_1Pd_0P^2e_0 =$   
 $h_1Pe_0P^2d_0 = h_2^2P^3j = h_2Ph_2P^2j = h_2jP^3h_2 = h_2P^2h_2Pj =$   
 $d_0e_0P^3h_1 = d_0Ph_1P^2e_0 = d_0Pe_0P^2h_1 = e_0Ph_1P^2d_0 =$   
 $e_0Pd_0P^2h_1 = Ph_1Pd_0Pe_0 = Ph_2^2Pj = Ph_2jP^2h_2$
- 26 (1)  $h_1^2P^5d_0 = h_1d_0P^5h_1 = h_1Ph_1P^4d_0 = h_1Pd_0P^4h_1 =$   
 $h_1P^2h_1P^3d_0 = h_1P^2d_0P^3h_1 = h_3P^6h_1 = c_0P^5c_0 = d_0Ph_1P^4h_1 =$   
 $d_0P^2h_1P^3h_1 = Ph_1^2P^3d_0 = Ph_1Pd_0P^3h_1 = Ph_1P^2h_1P^2d_0 =$   
 $Pc_0P^4c_0 = Pd_0P^2h_1^2 = P^2c_0P^3c_0$
- 27 (1)  $P^6c_0$

Stem 57

- 7 (1)  $Q_2$
- 8 (10)  $h_5j$   
(01)  $h_0Q_2$
- 9 (10)  $h_0h_5j = h_2h_5i$   
(01)  $h_0^2Q_2$
- 10 (1)  $h_0^2h_5j = h_0h_2h_5i = h_1h_5Pe_0 = h_4v = h_5e_0Ph_1$
- 11 (1)  $h_1Q_1 = h_2R_1$
- 12 (1)  $e_0g^2$
- 15 (1)  $d_0^2k = d_0e_0j = d_0gi = e_0^2i = lPe_0 = mPd_0$
- 18 (1)  $iPj$
- 19 (1)  $h_0iPj = h_1^2P^2u = h_1Ph_1Q = h_1Ph_1Pu = h_1P^2h_1u = f_0P^2i = Ph_1^2u = Ph_2i^2 = rP^3h_2 = qP^3h_1$
- 24 (1)  $P^5e_0$
- 25 (1)  $h_0P^5e_0 = h_2P^5d_0 = d_0P^5h_2 = Ph_2P^4d_0 = Pd_0P^4h_2 = P^2h_2P^3d_0 = P^2d_0P^3h_2$
- 26 (1)  $h_0^2P^5e_0 = h_0h_2P^5d_0 = h_0d_0P^5h_2 = h_0Ph_2P^4d_0 = h_0Pd_0P^4h_2 = h_0P^2h_2P^3d_0 = h_0P^2d_0P^3h_2$
- 27 (1)  $h_0^3P^5e_0 = h_0^2h_2P^5d_0 = h_0^2d_0P^5h_2 = h_0^2Ph_2P^4d_0 = h_0^2Pd_0P^4h_2 = h_0^2P^2h_2P^3d_0 = h_0^2P^2d_0P^3h_2 = h_1^3P^5d_0 = h_1^2d_0P^5h_1 = h_1^2Ph_1P^4d_0 = h_1^2Pd_0P^4h_1 = h_1^2P^2h_1P^3d_0 = h_1^2P^2d_0P^3h_1 = h_1h_3P^6h_1 = h_1c_0P^5c_0 = h_1d_0Ph_1P^4h_1 = h_1d_0P^2h_1P^3h_1 = h_1Ph_1^2P^3d_0 = h_1Ph_1Pd_0P^3h_1 = h_1Ph_1P^2h_1P^2d_0 = h_1Pc_0P^4c_0 = h_1Pd_0P^2h_1^2 = h_1P^2c_0P^3c_0 = h_2^2P^6h_2 = h_2Ph_2P^5h_2 = h_2P^2h_2P^4h_2 = h_2P^3h_2^2 = h_3Ph_1P^5h_1 = h_3P^2h_1P^4h_1 = h_3P^3h_1^2 = c_0^2P^5h_1 = c_0Ph_1P^4c_0 = c_0Pc_0P^4h_1 = c_0P^2h_1P^3c_0 = c_0P^2c_0P^3h_1 = d_0Ph_1^2P^3h_1 = d_0Ph_1P^2h_1^2 = Ph_1^3P^2d_0 = Ph_1^2Pd_0P^2h_1 = Ph_1Pc_0P^3c_0 = Ph_1P^2c_0^2 = Ph_2^2P^4h_2 = Ph_2P^2h_2P^3h_2 = Pc_0^2P^3h_1 = Pc_0P^2h_1P^2c_0 = P^2h_2^3$
- 28 (1)  $h_1P^6c_0 = c_0P^6h_1 = Ph_1P^5c_0 = Pc_0P^5h_1 = P^2h_1P^4c_0 = P^2c_0P^4h_1 = P^3h_1P^3c_0$
- 29 (1)  $P^7h_1$

Stem 58

- 6 (1)  $D_2$
- 7 (1)  $h_0 D_2$
- 8 (1)  $h_0^2 D_2 = h_1 Q_2$
- 14 (1)  $d_0^2 r = e_0 z = im = jl = k^2$
- 17 (1)  $P^2 v$
- 20 (1)  $d_0^2 P^2 d_0 = d_0 P d_0^2 = e_0 P^3 e_0 = g P^3 d_0 = P e_0 P^2 e_0$
- 21 (1)  $h_0 d_0^2 P^2 d_0 = h_0 d_0 P d_0^2 = h_0 e_0 P^3 e_0 = h_0 g P^3 d_0 = h_0 P e_0 P^2 e_0 =$   
 $h_2 d_0 P^3 e_0 = h_2 e_0 P^3 d_0 = h_2 P d_0 P^2 e_0 = h_2 P e_0 P^2 d_0 = d_0 e_0 P^3 h_2 =$   
 $d_0 P h_2 P^2 e_0 = d_0 P e_0 P^2 h_2 = e_0 P h_2 P^2 d_0 = e_0 P d_0 P^2 h_2 =$   
 $P h_2 P d_0 P e_0$
- 22 (1)  $h_0^2 d_0^2 P^2 d_0 = h_0^2 d_0 P d_0^2 = h_0^2 e_0 P^3 e_0 = h_0^2 g P^3 d_0 = h_0^2 P e_0 P^2 e_0 =$   
 $h_0 h_2 d_0 P^3 e_0 = h_0 h_2 e_0 P^3 d_0 = h_0 h_2 P d_0 P^2 e_0 = h_0 h_2 P e_0 P^2 d_0 =$   
 $h_0 d_0 e_0 P^3 h_2 = h_0 d_0 P h_2 P^2 e_0 = h_0 d_0 P e_0 P^2 h_2 = h_0 e_0 P h_2 P^2 d_0 =$   
 $h_0 e_0 P d_0 P^2 h_2 = h_0 P h_2 P d_0 P e_0 = h_2^2 d_0 P^3 d_0 = h_2^2 P d_0 P^2 d_0 =$   
 $h_2 d_0^2 P^3 h_2 = h_2 d_0 P h_2 P^2 d_0 = h_2 d_0 P d_0 P^2 h_2 = h_2 g P^4 h_2 =$   
 $h_2 P h_2 P d_0^2 = h_4 P^5 h_2 = c_0 P^3 j = d_0^2 P h_2 P^2 h_2 = d_0 P h_2^2 P d_0 =$   
 $g P h_2 P^3 h_2 = g P^2 h_2^2 = P c_0 P^2 j = j P^3 c_0 = P^2 c_0 P j$
- 23 (1)  $P^4 j$
- 24 (1)  $h_0 P^4 j = h_2 P^4 i = i P^4 h_2 = P^2 h_2 P^2 i$
- 25 (1)  $h_0^2 P^4 j = h_0 h_2 P^4 i = h_0 i P^4 h_2 = h_0 P^2 h_2 P^2 i = h_1 P^5 e_0 = e_0 P^5 h_1 =$   
 $P h_1 P^4 e_0 = P e_0 P^4 h_1 = P^2 h_1 P^3 e_0 = P^2 e_0 P^3 h_1$
- 30 (1)  $h_1 P^7 h_1 = P h_1 P^6 h_1 = P^2 h_1 P^5 h_1 = P^3 h_1 P^4 h_1$

Stem 59

- 10 (1)  $B_{21}$   
11 (1)  $h_0 B_{21} = h_2 Q_1$   
12 (1)  $h_0^2 B_{21} = h_0 h_2 Q_1 = h_2^2 x' = Ph_2 B_2$   
13 (1)  $d_0 w = e_0 v = gu = rk$   
16 (1)  $d_0^3 e_0 = d_0 g P e_0 = e_0^2 P e_0 = e_0 g P d_0$   
19 (1)  $d_0 i P d_0 = e_0 P^2 j = g P^2 i = j P^2 e_0 = k P^2 d_0 = P e_0 P j$   
20 (1)  $h_0 d_0 i P d_0 = h_0 e_0 P^2 j = h_0 g P^2 i = h_0 j P^2 e_0 = h_0 k P^2 d_0 =$   
 $h_0 P e_0 P j = h_2 d_0 P^2 j = h_2 e_0 P^2 i = h_2 i P^2 e_0 = h_2 j P^2 d_0 =$   
 $h_2 P d_0 P j = d_0 P h_2 P j = d_0 j P^2 h_2 = e_0 i P^2 h_2 = f_0 P^3 e_0 =$   
 $Ph_2 i P e_0 = Ph_2 j P d_0 = l P^3 h_2$   
21 (1)  $h_0^2 d_0 i P d_0 = h_0^2 e_0 P^2 j = h_0^2 g P^2 i = h_0^2 j P^2 e_0 = h_0^2 k P^2 d_0 =$   
 $h_0^2 P e_0 P j = h_0 h_2 d_0 P^2 j = h_0 h_2 e_0 P^2 i = h_0 h_2 i P^2 e_0 = h_0 h_2 j P^2 d_0 =$   
 $h_0 h_2 P d_0 P j = h_0 d_0 P h_2 P j = h_0 d_0 j P^2 h_2 = h_0 e_0 i P^2 h_2 =$   
 $h_0 f_0 P^3 e_0 = h_0 P h_2 i P e_0 = h_0 P h_2 j P d_0 = h_0 l P^3 h_2 = h_1 d_0^2 P^2 d_0 =$   
 $h_1 d_0 P d_0^2 = h_1 e_0 P^3 e_0 = h_1 g P^3 d_0 = h_1 P e_0 P^2 e_0 = h_2^2 d_0 P^2 i =$   
 $h_2^2 i P^2 d_0 = h_2 d_0 i P^2 h_2 = h_2 f_0 P^3 d_0 = h_2 P h_2 i P d_0 = h_2 k P^3 h_2 =$   
 $d_0^3 P^2 h_1 = d_0^2 P h_1 P d_0 = d_0 f_0 P^3 h_2 = d_0 g P^3 h_1 = d_0 P h_2^2 i =$   
 $e_0^2 P^3 h_1 = e_0 P h_1 P^2 e_0 = e_0 P e_0 P^2 h_1 = f_0 P h_2 P^2 d_0 =$   
 $f_0 P d_0 P^2 h_2 = g P h_1 P^2 d_0 = g P d_0 P^2 h_1 = P h_1 P e_0^2 = P h_2 k P^2 h_2$   
29 (1)  $P^7 h_2$   
30 (1)  $h_0 P^7 h_2$   
31 (1)  $h_0^2 P^7 h_2 = h_1^2 P^7 h_1 = h_1 P h_1 P^6 h_1 = h_1 P^2 h_1 P^5 h_1 =$   
 $h_1 P^3 h_1 P^4 h_1 = P h_1^2 P^5 h_1 = P h_1 P^2 h_1 P^4 h_1 = P h_1 P^3 h_1^2 =$   
 $P^2 h_1^2 P^3 h_1$

Stem 60

- 7 (1)  $B_3$   
8 (1)  $h_0 B_3 = h_2 Q_2 = h_5 k$   
9 (10)  $B_4$   
(01)  $h_0^2 B_3 = h_0 h_2 Q_2 = h_0 h_5 k = h_2 h_5 j$   
10 (1)  $h_0 B_4$   
11 (10)  $h_3 x'$   
(01)  $h_0^2 B_4$   
(11)  $h_1 B_{21} = d_0 B_1$   
12 (10)  $g^3$   
(01)  $h_0^3 B_4 = h_0 h_3 x' = xi$   
(11)  $r^2$   
13 (1)  $h_0^4 B_4 = h_0^2 h_3 x' = h_0 xi = h_0 r^2$   
14 (1)  $h_0^5 B_4 = h_0^3 h_3 x' = h_0^2 xi = h_0^2 r^2 = h_3 ri$   
15 (1)  $d_0^2 l = d_0 e_0 k = d_0 g j = e_0^2 j = e_0 g i = m P e_0$   
18 (1)  $d_0 i^2 = r P^2 d_0 = j P j$   
24 (1)  $d_0 P^4 d_0 = P d_0 P^3 d_0 = P^2 d_0^2$   
25 (1)  $h_0 d_0 P^4 d_0 = h_0 P d_0 P^3 d_0 = h_0 P^2 d_0^2 = h_2 P^5 e_0 = e_0 P^5 h_2 =$   
 $Ph_2 P^4 e_0 = P e_0 P^4 h_2 = P^2 h_2 P^3 e_0 = P^2 e_0 P^3 h_2$   
26 (1)  $h_0^2 d_0 P^4 d_0 = h_0^2 P d_0 P^3 d_0 = h_0^2 P^2 d_0^2 = h_0 h_2 P^5 e_0 = h_0 e_0 P^5 h_2 =$   
 $h_0 P h_2 P^4 e_0 = h_0 P e_0 P^4 h_2 = h_0 P^2 h_2 P^3 e_0 = h_0 P^2 e_0 P^3 h_2 =$   
 $h_2^2 P^5 d_0 = h_2 d_0 P^5 h_2 = h_2 P h_2 P^4 d_0 = h_2 P d_0 P^4 h_2 =$   
 $h_2 P^2 h_2 P^3 d_0 = h_2 P^2 d_0 P^3 h_2 = d_0 P h_2 P^4 h_2 = d_0 P^2 h_2 P^3 h_2 =$   
 $Ph_2^2 P^3 d_0 = Ph_2 P d_0 P^3 h_2 = Ph_2 P^2 h_2 P^2 d_0 = P d_0 P^2 h_2^2$

Stem 61

- 4 (1)  $D_3$
- 6 (01)  $A$   
(11)  $A'$
- 7 (01)  $h_0A = h_2D_2$   
(11)  $h_0A'$
- 8 (1)  $h_0^2A = h_0h_2D_2 = h_1B_3 = h_4B_1$
- 9 (1)  $X_1$
- 10 (1)  $h_0X_1$
- 11 (10)  $nr$   
(01)  $h_0^2X_1 = h_3R_1$
- 12 (1)  $h_0^3X_1 = h_0h_3R_1$
- 13 (1)  $h_0^4X_1 = h_0^2h_3R_1 = c_0x' = yi$
- 14 (1)  $d_0e_0r = gz = jm = kl$
- 17 (1)  $d_0Pu = Pd_0u$
- 20 (1)  $d_0^2P^2e_0 = d_0e_0P^2d_0 = d_0Pd_0Pe_0 = e_0Pd_0^2 = gP^3e_0$
- 23 (1)  $iP^3d_0 = Pd_0P^2i$
- 24 (1)  $h_0iP^3d_0 = h_0Pd_0P^2i = h_2P^4j = Ph_2P^3j = jP^4h_2 = P^2h_2P^2j = PjP^3h_2$
- 25 (1)  $h_0^2iP^3d_0 = h_0^2Pd_0P^2i = h_0h_2P^4j = h_0Ph_2P^3j = h_0jP^4h_2 = h_0P^2h_2P^2j = h_0PjP^3h_2 = h_1d_0P^4d_0 = h_1Pd_0P^3d_0 = h_1P^2d_0^2 = h_2^2P^4i = h_2iP^4h_2 = h_2P^2h_2P^2i = d_0^2P^4h_1 = d_0Ph_1P^3d_0 = d_0Pd_0P^3h_1 = d_0P^2h_1P^2d_0 = f_0P^5h_2 = gP^5h_1 = Ph_1Pd_0P^2d_0 = Ph_2^2P^2i = Ph_2iP^3h_2 = iP^2h_2^2 = Pd_0^2P^2h_1$

Stem 62

2	(1)	$h_5^2$
3	(1)	$h_0 h_5^2$
4	(1)	$h_0^2 h_5^2$
5	(100)	$H_1$
	(010)	$h_1 D_3$
	(001)	$h_0^3 h_5^2$
6	(10)	$h_5 n$
	(01)	$h_0^4 h_5^2$
7	(1)	$h_0^5 h_5^2$
8	(100)	$x_{8,32}$
	(010)	$x_{8,33}$
	(001)	$h_0^6 h_5^2$
9	(1)	$h_0^7 h_5^2 = h_0 x_{8,32} = h_0 x_{8,33}$
10	(100)	$x_{10,27}$
	(010)	$x_{10,28}$
	(001)	$h_1 X_1$
11	(10)	$h_0 x_{10,27}$
	(01)	$h_0 x_{10,28} = h_2 B_{21} = d_0 B_2$
12	(10)	$h_0^2 x_{10,27}$
	(01)	$h_0^2 x_{10,28} = h_0 h_2 B_{21} = h_0 d_0 B_2 = h_2^2 Q_1$
13	(10)	$e_0 w = g v = r l$
	(01)	$h_0^3 x_{10,27}$
14	(1)	$h_0^4 x_{10,27} = h_4 Q$
15	(10)	$Ph_1 x'$
	(01)	$h_0^5 x_{10,27} = h_0 h_4 Q$
16	(10)	$d_0^3 g = d_0^2 e_0^2 = e_0 g P e_0 = g^2 P d_0 = i u$
	(01)	$h_0^6 x_{10,27} = h_0^2 h_4 Q$
17	(1)	$h_0^7 x_{10,27} = h_0^3 h_4 Q$
18	(1)	$h_0^8 x_{10,27} = h_0^4 h_4 Q$
19	(01)	$h_0^9 x_{10,27} = h_0^5 h_4 Q$
	(11)	$d_0^2 P j = d_0 i P e_0 = d_0 j P d_0 = e_0 i P d_0 = g P^2 j = k P^2 e_0 = l P^2 d_0$
20	(1)	$h_0^{10} x_{10,27} = h_0^6 h_4 Q = h_0 d_0^2 P j = h_0 d_0 i P e_0 = h_0 d_0 j P d_0 =$ $h_0 e_0 i P d_0 = h_0 g P^2 j = h_0 k P^2 e_0 = h_0 l P^2 d_0 = h_2 d_0 i P d_0 =$ $h_2 e_0 P^2 j = h_2 g P^2 i = h_2 j P^2 e_0 = h_2 k P^2 d_0 = h_2 P e_0 P j =$ $d_0^2 P h_2 i = d_0 f_0 P^2 d_0 = d_0 k P^2 h_2 = e_0 P h_2 P j = e_0 j P^2 h_2 =$ $f_0 P d_0^2 = g i P^2 h_2 = P h_2 j P e_0 = P h_2 k P d_0 = m P^3 h_2$

continued



Stem 62 continued

- 21 (1)  $h_0^{11}x_{10,27} = h_0^7h_4Q = h_0^2d_0^2Pj = h_0^2d_0iPe_0 = h_0^2d_0jPd_0 =$   
 $h_0^2e_0iPd_0 = h_0^2gP^2j = h_0^2kP^2e_0 = h_0^2lP^2d_0 = h_0h_2d_0iPd_0 =$   
 $h_0h_2e_0P^2j = h_0h_2gP^2i = h_0h_2jP^2e_0 = h_0h_2kP^2d_0 =$   
 $h_0h_2Pe_0Pj = h_0d_0^2Ph_2i = h_0d_0f_0P^2d_0 = h_0d_0kP^2h_2 =$   
 $h_0e_0Ph_2Pj = h_0e_0jP^2h_2 = h_0f_0Pd_0^2 = h_0giP^2h_2 = h_0Ph_2jPe_0 =$   
 $h_0Ph_2kPd_0 = h_0mP^3h_2 = h_1d_0^2P^2e_0 = h_1d_0e_0P^2d_0 =$   
 $h_1d_0Pd_0Pe_0 = h_1e_0Pd_0^2 = h_1gP^3e_0 = h_2^2d_0P^2j = h_2^2e_0P^2i =$   
 $h_2^2iP^2e_0 = h_2^2jP^2d_0 = h_2^2Pd_0Pj = h_2d_0Ph_2Pj = h_2d_0jP^2h_2 =$   
 $h_2e_0iP^2h_2 = h_2f_0P^3e_0 = h_2Ph_2iPe_0 = h_2Ph_2jPd_0 = h_2lP^3h_2 =$   
 $d_0^2e_0P^2h_1 = d_0^2Ph_1Pe_0 = d_0e_0Ph_1Pd_0 = d_0Ph_2^2j = e_0f_0P^3h_2 =$   
 $e_0gP^3h_1 = e_0Ph_2^2i = f_0Ph_2P^2e_0 = f_0Pe_0P^2h_2 = gPh_1P^2e_0 =$   
 $gPe_0P^2h_1 = Ph_2lP^2h_2 = rP^3c_0 = Pc_0i^2$
- 22 (1)  $iP^2i$
- 23 (1)  $h_0iP^2i$
- 24 (1)  $h_0^2iP^2i = h_3P^4i$
- 25 (1)  $h_0^3iP^2i = h_0h_3P^4i$
- 26 (1)  $h_0^4iP^2i = h_0^2h_3P^4i$
- 27 (1)  $h_0^5iP^2i = h_0^3h_3P^4i = c_0P^5d_0 = d_0P^5c_0 = Pc_0P^4d_0 = Pd_0P^4c_0 =$   
 $P^2c_0P^3d_0 = P^2d_0P^3c_0$
- 28 (1)  $P^6d_0$
- 29 (1)  $h_0P^6d_0$
- 30 (1)  $h_0^2P^6d_0 = h_2P^7h_2 = Ph_2P^6h_2 = P^2h_2P^5h_2 = P^3h_2P^4h_2$

Stem 63

1	(1)	$h_6$
2	(1)	$h_0h_6$
3	(10)	$h_1h_5^2$
	(01)	$h_0^2h_6$
4	(1)	$h_0^3h_6$
5	(1)	$h_0^4h_6$
6	(10)	$h_1H_1$
	(01)	$h_0^5h_6$
7	(100)	$x_{7,33}$
	(010)	$x_{7,34}$
	(001)	$h_0^6h_6$
8	(10)	$h_0x_{7,33} = h_0x_{7,34} = h_2B_3 = h_4B_2 = h_5l$
	(01)	$h_0^7h_6$
9	(100)	$h_1x_{8,32}$
	(010)	$h_0^2x_{7,33} = h_0^2x_{7,34} = h_0h_2B_3 = h_0h_4B_2 = h_0h_5l = h_2^2Q_2 =$ $h_2h_5k = h_5d_0f_0$
	(001)	$h_0^8h_6$
10	(10)	$h_2B_4$
	(01)	$h_0^9h_6$
11	(100)	$h_1^2X_1 = h_3Q_1 = Ph_1G$
	(010)	$h_0h_2B_4 = h_1x_{10,28} = e_0B_1$
	(110)	$h_1x_{10,27}$
	(001)	$h_0^{10}h_6$
12	(1)	$h_0^{11}h_6$
13	(1)	$h_0^{12}h_6$
14	(1)	$h_0^{13}h_6$
15	(10)	$d_0^2m = d_0e_0l = d_0gk = e_0^2k = e_0gj = g^2i$
	(01)	$h_0^{14}h_6$
16	(10)	$h_1Ph_1x' = B_1P^2h_1$
	(01)	$h_0^{15}h_6$
17	(1)	$h_0^{16}h_6$
18	(10)	$d_0ij = e_0i^2 = rP^2e_0 = kPj = Pd_0z$
	(01)	$h_0^{17}h_6$
19	(1)	$h_0^{18}h_6$
20	(1)	$h_0^{19}h_6$
21	(10)	$P^3u$
	(01)	$h_0^{20}h_6$
22	(1)	$h_0^{21}h_6$
23	(1)	$h_0^{22}h_6$

continued

Stem 63 continued

- 24 (10)  $d_0P^4e_0 = e_0P^4d_0 = Pd_0P^3e_0 = Pe_0P^3d_0 = P^2d_0P^2e_0$   
 (01)  $h_0^{23}h_6$
- 25 (10)  $h_0d_0P^4e_0 = h_0e_0P^4d_0 = h_0Pd_0P^3e_0 = h_0Pe_0P^3d_0 =$   
 $h_0P^2d_0P^2e_0 = h_2d_0P^4d_0 = h_2Pd_0P^3d_0 = h_2P^2d_0^2 = d_0^2P^4h_2 =$   
 $d_0Ph_2P^3d_0 = d_0Pd_0P^3h_2 = d_0P^2h_2P^2d_0 = gP^5h_2 =$   
 $Ph_2Pd_0P^2d_0 = Pd_0^2P^2h_2$   
 (01)  $h_0^{24}h_6$
- 26 (10)  $h_0^2d_0P^4e_0 = h_0^2e_0P^4d_0 = h_0^2Pd_0P^3e_0 = h_0^2Pe_0P^3d_0 =$   
 $h_0^2P^2d_0P^2e_0 = h_0h_2d_0P^4d_0 = h_0h_2Pd_0P^3d_0 = h_0h_2P^2d_0^2 =$   
 $h_0d_0^2P^4h_2 = h_0d_0Ph_2P^3d_0 = h_0d_0Pd_0P^3h_2 = h_0d_0P^2h_2P^2d_0 =$   
 $h_0gP^5h_2 = h_0Ph_2Pd_0P^2d_0 = h_0Pd_0^2P^2h_2 = h_2^2P^5e_0 =$   
 $h_2e_0P^5h_2 = h_2Ph_2P^4e_0 = h_2Pe_0P^4h_2 = h_2P^2h_2P^3e_0 =$   
 $h_2P^2e_0P^3h_2 = c_0P^4i = e_0Ph_2P^4h_2 = e_0P^2h_2P^3h_2 = Ph_2^2P^3e_0 =$   
 $Ph_2Pe_0P^3h_2 = Ph_2P^2h_2P^2e_0 = iP^4c_0 = Pe_0P^2h_2^2 = P^2c_0P^2i$   
 (01)  $h_0^{25}h_6$
- 27 (1)  $h_0^{26}h_6$
- 28 (1)  $h_0^{27}h_6$
- 29 (10)  $h_1P^6d_0 = d_0P^6h_1 = Ph_1P^5d_0 = Pd_0P^5h_1 = P^2h_1P^4d_0 =$   
 $P^2d_0P^4h_1 = P^3h_1P^3d_0$   
 (01)  $h_0^{28}h_6$
- 30 (1)  $h_0^{29}h_6$
- 31 (1)  $h_0^{30}h_6$
- 32 (1)  $h_0^{31}h_6$

Stem 64

- 2 (1)  $h_1h_6$
- 4 (1)  $h_1^2h_5^2$
- 5 (1)  $h_2D_3$
- 6 (1)  $A''$
- 7 (10)  $h_2A$   
 (01)  $h_0A''$   
 (11)  $h_2A'$
- 8 (100)  $h_3Q_2$   
 (010)  $h_0h_2A = h_1x_{7,34} = h_2^2D_2$   
 (001)  $h_0^2A'' = h_1x_{7,33}$   
 (011)  $h_0h_2A' = gg_2 = d_1^2$
- 9 (1)  $h_0h_3Q_2$
- 10 (10)  $x_{10,32}$   
 (01)  $h_0^2h_3Q_2 = h_1^2x_{8,32} = d_1q$
- 14 (10)  $PQ_1$   
 (01)  $d_0gr = e_0^2r = km = l^2$
- 15 (1)  $h_0PQ_1 = Ph_2x'$
- 16 (1)  $h_0^2PQ_1 = h_0Ph_2x'$
- 17 (10)  $d_0Pv = Pd_0v$   
 (01)  $h_0^3PQ_1 = h_0^2Ph_2x' = h_1^2Ph_1x' = h_1B_1P^2h_1 = e_0Q = Ph_1^2B_1$   
 (11)  $e_0Pu = rPj = iz = Pe_0u$
- 20 (1)  $d_0^3Pd_0 = d_0e_0P^2e_0 = d_0gP^2d_0 = d_0Pe_0^2 = e_0^2P^2d_0 = e_0Pd_0Pe_0 = gPd_0^2$
- 22 (1)  $h_1P^3u = Ph_1P^2u = P^2h_1Q = P^2h_1Pu = uP^3h_1$
- 23 (1)  $d_0P^3j = iP^3e_0 = jP^3d_0 = Pd_0P^2j = Pe_0P^2i = PjP^2d_0$
- 24 (1)  $h_0d_0P^3j = h_0iP^3e_0 = h_0jP^3d_0 = h_0Pd_0P^2j = h_0Pe_0P^2i = h_0PjP^2d_0 = h_2iP^3d_0 = h_2Pd_0P^2i = d_0Ph_2P^2i = d_0iP^3h_2 = f_0P^4d_0 = Ph_2iP^2d_0 = iPd_0P^2h_2 = kP^4h_2$
- 25 (1)  $h_0^2d_0P^3j = h_0^2iP^3e_0 = h_0^2jP^3d_0 = h_0^2Pd_0P^2j = h_0^2Pe_0P^2i = h_0^2PjP^2d_0 = h_0h_2iP^3d_0 = h_0h_2Pd_0P^2i = h_0d_0Ph_2P^2i = h_0d_0iP^3h_2 = h_0f_0P^4d_0 = h_0Ph_2iP^2d_0 = h_0iPd_0P^2h_2 = h_0kP^4h_2 = h_1d_0P^4e_0 = h_1e_0P^4d_0 = h_1Pd_0P^3e_0 = h_1Pe_0P^3d_0 = h_1P^2d_0P^2e_0 = h_2^2P^4j = h_2Ph_2P^3j = h_2jP^4h_2 = h_2P^2h_2P^2j = h_2PjP^3h_2 = d_0e_0P^4h_1 = d_0Ph_1P^3e_0 = d_0Pe_0P^3h_1 = d_0P^2h_1P^2e_0 = e_0Ph_1P^3d_0 = e_0Pd_0P^3h_1 = e_0P^2h_1P^2d_0 = Ph_1Pd_0P^2e_0 = Ph_1Pe_0P^2d_0 = Ph_2^2P^2j = Ph_2jP^3h_2 = Ph_2P^2h_2Pj = jP^2h_2^2 = Pd_0Pe_0P^2h_1$
- 30 (1)  $h_1^2P^6d_0 = h_1d_0P^6h_1 = h_1Ph_1P^5d_0 = h_1Pd_0P^5h_1 = h_1P^2h_1P^4d_0 = h_1P^2d_0P^4h_1 = h_1P^3h_1P^3d_0 = h_3P^7h_1 = c_0P^6c_0 = d_0Ph_1P^5h_1 = d_0P^2h_1P^4h_1 = d_0P^3h_1^2 = Ph_1^2P^4d_0 = Ph_1Pd_0P^4h_1 = Ph_1P^2h_1P^3d_0 = Ph_1P^2d_0P^3h_1 = Pc_0P^5c_0 = Pd_0P^2h_1P^3h_1 = P^2h_1^2P^2d_0 = P^2c_0P^4c_0 = P^3c_0^2$
- 31 (1)  $P^7c_0$

Stem 65

- 3 (10)  $h_2h_5^2$   
 (01)  $h_1^2h_6$
- 4 (1)  $h_0h_2h_5^2$
- 5 (1)  $h_0^2h_2h_5^2 = h_1^3h_5^2$
- 6 (1)  $h_2H_1$
- 7 (10)  $h_2h_5n = h_4C$   
 (01)  $h_3D_2$
- 8 (1)  $h_0h_3D_2$
- 9 (10)  $h_2x_{8,33}$   
 (01)  $h_0^2h_3D_2 = h_1h_3Q_2$   
 (11)  $h_2x_{8,32}$
- 10 (1)  $B_{23}$
- 11 (10)  $h_1x_{10,32}$   
 (01)  $h_0B_{23} = h_2x_{10,27} = h_2x_{10,28} = e_0B_2$
- 12 (10)  $h_5Pj$   
 (01)  $h_0^2B_{23} = h_0h_2x_{10,27} = h_0h_2x_{10,28} = h_0e_0B_2 = h_2^2B_{21} = h_2d_0B_2$
- 13 (10)  $gw = rm$   
 (01)  $R_2$
- 14 (1)  $h_0R_2$
- 15 (1)  $h_0^2R_2 = h_1PQ_1 = Ph_1Q_1 = Ph_2R_1$
- 16 (1)  $d_0^2e_0g = d_0e_0^3 = g^2Pe_0 = iv = ju$
- 19 (1)  $d_0^3i = d_0e_0Pj = d_0jPe_0 = d_0kPd_0 = e_0iPe_0 = e_0jPd_0 = giPd_0 = lP^2e_0 = mP^2d_0$
- 22 (1)  $iP^2j = jP^2i$
- 23 (1)  $h_0iP^2j = h_0jP^2i = h_1^2P^3u = h_1Ph_1P^2u = h_1P^2h_1Q = h_1P^2h_1Pu = h_1uP^3h_1 = h_2iP^2i = Ph_1^2Q = Ph_1^2Pu = Ph_1P^2h_1u = rP^4h_2 = qP^4h_1 = i^2P^2h_2$
- 28 (1)  $P^6e_0$
- 29 (1)  $h_0P^6e_0 = h_2P^6d_0 = d_0P^6h_2 = Ph_2P^5d_0 = Pd_0P^5h_2 = P^2h_2P^4d_0 = P^2d_0P^4h_2 = P^3h_2P^3d_0$
- 30 (1)  $h_0^2P^6e_0 = h_0h_2P^6d_0 = h_0d_0P^6h_2 = h_0Ph_2P^5d_0 = h_0Pd_0P^5h_2 = h_0P^2h_2P^4d_0 = h_0P^2d_0P^4h_2 = h_0P^3h_2P^3d_0$

continued

Stem 65 continued

$$\begin{aligned}
31 \quad (1) \quad & h_0^3 P^6 e_0 = h_0^2 h_2 P^6 d_0 = h_0^2 d_0 P^6 h_2 = h_0^2 P h_2 P^5 d_0 = h_0^2 P d_0 P^5 h_2 = \\
& h_0^2 P^2 h_2 P^4 d_0 = h_0^2 P^2 d_0 P^4 h_2 = h_0^2 P^3 h_2 P^3 d_0 = h_1^3 P^6 d_0 = \\
& h_1^2 d_0 P^6 h_1 = h_1^2 P h_1 P^5 d_0 = h_1^2 P d_0 P^5 h_1 = h_1^2 P^2 h_1 P^4 d_0 = \\
& h_1^2 P^2 d_0 P^4 h_1 = h_1^2 P^3 h_1 P^3 d_0 = h_1 h_3 P^7 h_1 = h_1 c_0 P^6 c_0 = \\
& h_1 d_0 P h_1 P^5 h_1 = h_1 d_0 P^2 h_1 P^4 h_1 = h_1 d_0 P^3 h_1^2 = h_1 P h_1^2 P^4 d_0 = \\
& h_1 P h_1 P d_0 P^4 h_1 = h_1 P h_1 P^2 h_1 P^3 d_0 = h_1 P h_1 P^2 d_0 P^3 h_1 = \\
& h_1 P c_0 P^5 c_0 = h_1 P d_0 P^2 h_1 P^3 h_1 = h_1 P^2 h_1^2 P^2 d_0 = h_1 P^2 c_0 P^4 c_0 = \\
& h_1 P^3 c_0^2 = h_2^2 P^7 h_2 = h_2 P h_2 P^6 h_2 = h_2 P^2 h_2 P^5 h_2 = \\
& h_2 P^3 h_2 P^4 h_2 = h_3 P h_1 P^6 h_1 = h_3 P^2 h_1 P^5 h_1 = h_3 P^3 h_1 P^4 h_1 = \\
& c_0^2 P^6 h_1 = c_0 P h_1 P^5 c_0 = c_0 P c_0 P^5 h_1 = c_0 P^2 h_1 P^4 c_0 = \\
& c_0 P^2 c_0 P^4 h_1 = c_0 P^3 h_1 P^3 c_0 = d_0 P h_1^2 P^4 h_1 = d_0 P h_1 P^2 h_1 P^3 h_1 = \\
& d_0 P^2 h_1^3 = P h_1^3 P^3 d_0 = P h_1^2 P d_0 P^3 h_1 = P h_1^2 P^2 h_1 P^2 d_0 = \\
& P h_1 P c_0 P^4 c_0 = P h_1 P d_0 P^2 h_1^2 = P h_1 P^2 c_0 P^3 c_0 = P h_2^2 P^5 h_2 = \\
& P h_2 P^2 h_2 P^4 h_2 = P h_2 P^3 h_2^2 = P c_0^2 P^4 h_1 = P c_0 P^2 h_1 P^3 c_0 = \\
& P c_0 P^2 c_0 P^3 h_1 = P^2 h_1 P^2 c_0^2 = P^2 h_2^2 P^3 h_2 \\
32 \quad (1) \quad & h_1 P^7 c_0 = c_0 P^7 h_1 = P h_1 P^6 c_0 = P c_0 P^6 h_1 = P^2 h_1 P^5 c_0 = \\
& P^2 c_0 P^5 h_1 = P^3 h_1 P^4 c_0 = P^3 c_0 P^4 h_1 \\
33 \quad (1) \quad & P^8 h_1
\end{aligned}$$

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- 2 (1)  $h_2h_6$   
3 (1)  $h_0h_2h_6$   
4 (1)  $h_0^2h_2h_6 = h_1^3h_6$   
6 (1)  $r_1$   
7 (10)  $x_{7,40}$   
(01)  $h_0r_1$   
8 (1)  $h_0x_{7,40} = h_2x_{7,34}$   
10 (10)  $B_5$   
(01)  $PD_2$   
11 (01)  $h_0PD_2$   
(11)  $h_0B_5 = h_1B_{23} = h_2^2B_4 = f_0B_2 = gB_1$   
12 (10)  $gN = nm = rt$   
(01)  $h_0^2PD_2 = h_1^2x_{10,32} = Ph_1Q_2$   
15 (1)  $d_0e_0m = d_0gl = e_0^2l = e_0gk = g^2j$   
18 (1)  $d_0rPd_0 = d_0ik = d_0j^2 = e_0ij = gi^2 = lPj = Pe_0z$   
21 (1)  $P^3v$   
24 (1)  $d_0^2P^3d_0 = d_0Pd_0P^2d_0 = e_0P^4e_0 = gP^4d_0 = Pd_0^3 = Pe_0P^3e_0 = P^2e_0^2$   
25 (1)  $h_0d_0^2P^3d_0 = h_0d_0Pd_0P^2d_0 = h_0e_0P^4e_0 = h_0gP^4d_0 = h_0Pd_0^3 = h_0Pe_0P^3e_0 = h_0P^2e_0^2 = h_2d_0P^4e_0 = h_2e_0P^4d_0 = h_2Pd_0P^3e_0 = h_2Pe_0P^3d_0 = h_2P^2d_0P^2e_0 = d_0e_0P^4h_2 = d_0Ph_2P^3e_0 = d_0Pe_0P^3h_2 = d_0P^2h_2P^2e_0 = e_0Ph_2P^3d_0 = e_0Pd_0P^3h_2 = e_0P^2h_2P^2d_0 = Ph_2Pd_0P^2e_0 = Ph_2Pe_0P^2d_0 = Pd_0Pe_0P^2h_2$   
26 (1)  $h_0^2d_0^2P^3d_0 = h_0^2d_0Pd_0P^2d_0 = h_0^2e_0P^4e_0 = h_0^2gP^4d_0 = h_0^2Pd_0^3 = h_0^2Pe_0P^3e_0 = h_0^2P^2e_0^2 = h_0h_2d_0P^4e_0 = h_0h_2e_0P^4d_0 = h_0h_2Pd_0P^3e_0 = h_0h_2Pe_0P^3d_0 = h_0h_2P^2d_0P^2e_0 = h_0d_0e_0P^4h_2 = h_0d_0Ph_2P^3e_0 = h_0d_0Pe_0P^3h_2 = h_0d_0P^2h_2P^2e_0 = h_0e_0Ph_2P^3d_0 = h_0e_0Pd_0P^3h_2 = h_0e_0P^2h_2P^2d_0 = h_0Ph_2Pd_0P^2e_0 = h_0Ph_2Pe_0P^2d_0 = h_0Pd_0Pe_0P^2h_2 = h_2^2d_0P^4d_0 = h_2^2Pd_0P^3d_0 = h_2^2P^2d_0^2 = h_2d_0^2P^4h_2 = h_2d_0Ph_2P^3d_0 = h_2d_0Pd_0P^3h_2 = h_2d_0P^2h_2P^2d_0 = h_2gP^5h_2 = h_2Ph_2Pd_0P^2d_0 = h_2Pd_0^2P^2h_2 = h_4P^6h_2 = c_0P^4j = d_0^2Ph_2P^3h_2 = d_0^2P^2h_2^2 = d_0Ph_2^2P^2d_0 = d_0Ph_2Pd_0P^2h_2 = gPh_2P^4h_2 = gP^2h_2P^3h_2 = Ph_2^2Pd_0^2 = Pc_0P^3j = jP^4c_0 = P^2c_0P^2j = PjP^3c_0$   
27 (1)  $P^5j$   
28 (1)  $h_0P^5j = Ph_2P^4i = iP^5h_2 = P^3h_2P^2i$   
29 (1)  $h_0^2P^5j = h_0Ph_2P^4i = h_0iP^5h_2 = h_0P^3h_2P^2i = h_1P^6e_0 = e_0P^6h_1 = Ph_1P^5e_0 = Pe_0P^5h_1 = P^2h_1P^4e_0 = P^2e_0P^4h_1 = P^3h_1P^3e_0$   
34 (1)  $h_1P^8h_1 = Ph_1P^7h_1 = P^2h_1P^6h_1 = P^3h_1P^5h_1 = P^4h_1^2$

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- 5 (10)  $n_1$   
(01)  $Q_3$
- 6 (01)  $h_0Q_3$   
(11)  $h_0n_1 = h_2^2D_3 = h_4D_1$
- 7 (1)  $h_0^2Q_3 = h_2A''$
- 8 (1)  $h_1x_{7,40} = h_2^2A' = h_2^2A$
- 9 (10)  $x_{9,39}$   
(01)  $x_{9,40}$
- 10 (1)  $h_0x_{9,40} = h_3B_4$
- 11 (10)  $x_{11,35}$   
(01)  $h_0^2x_{9,40} = h_0h_3B_4 = g_2i = xr$
- 12 (1)  $h_0^3x_{9,40} = h_0^2h_3B_4 = h_0g_2i = h_0xr = h_0x_{11,35} = h_3^2x'$
- 14 (10)  $e_0gr = lm$   
(01)  $d_0x'$
- 15 (1)  $h_0d_0x' = h_2PQ_1 = Ph_2Q_1$
- 16 (1)  $h_0^2d_0x' = h_0h_2PQ_1 = h_0Ph_2Q_1 = h_2Ph_2x' = B_2P^2h_2$
- 17 (1)  $d_0^2u = d_0ri = e_0Pv = gPu = jz = Pd_0w = Pe_0v$
- 20 (1)  $d_0^3Pe_0 = d_0^2e_0Pd_0 = d_0gP^2e_0 = e_0^2P^2e_0 = e_0gP^2d_0 = e_0Pe_0^2 = gPd_0Pe_0$
- 23 (1)  $d_0^2P^2i = d_0iP^2d_0 = e_0P^3j = iPd_0^2 = jP^3e_0 = kP^3d_0 = Pe_0P^2j = PjP^2e_0$
- 24 (1)  $h_0d_0^2P^2i = h_0d_0iP^2d_0 = h_0e_0P^3j = h_0iPd_0^2 = h_0jP^3e_0 = h_0kP^3d_0 = h_0Pe_0P^2j = h_0PjP^2e_0 = h_2d_0P^3j = h_2iP^3e_0 = h_2jP^3d_0 = h_2Pd_0P^2j = h_2Pe_0P^2i = h_2PjP^2d_0 = d_0Ph_2P^2j = d_0jP^3h_2 = d_0P^2h_2Pj = e_0Ph_2P^2i = e_0iP^3h_2 = f_0P^4e_0 = Ph_2iP^2e_0 = Ph_2jP^2d_0 = Ph_2Pd_0Pj = iPe_0P^2h_2 = jPd_0P^2h_2 = lP^4h_2$
- 25 (1)  $h_0^2d_0^2P^2i = h_0^2d_0iP^2d_0 = h_0^2e_0P^3j = h_0^2iPd_0^2 = h_0^2jP^3e_0 = h_0^2kP^3d_0 = h_0^2Pe_0P^2j = h_0^2PjP^2e_0 = h_0h_2d_0P^3j = h_0h_2iP^3e_0 = h_0h_2jP^3d_0 = h_0h_2Pd_0P^2j = h_0h_2Pe_0P^2i = h_0h_2PjP^2d_0 = h_0d_0Ph_2P^2j = h_0d_0jP^3h_2 = h_0d_0P^2h_2Pj = h_0e_0Ph_2P^2i = h_0e_0iP^3h_2 = h_0f_0P^4e_0 = h_0Ph_2iP^2e_0 = h_0Ph_2jP^2d_0 = h_0Ph_2Pd_0Pj = h_0iPe_0P^2h_2 = h_0jPd_0P^2h_2 = h_0lP^4h_2 = h_1d_0^2P^3d_0 = h_1d_0Pd_0P^2d_0 = h_1e_0P^4e_0 = h_1gP^4d_0 = h_1Pd_0^3 = h_1Pe_0P^3e_0 = h_1P^2e_0^2 = h_2^2iP^3d_0 = h_2^2Pd_0P^2i = h_2d_0Ph_2P^2i = h_2d_0iP^3h_2 = h_2f_0P^4d_0 = h_2Ph_2iP^2d_0 = h_2iPd_0P^2h_2 = h_2kP^4h_2 = d_0^3P^3h_1 = d_0^2Ph_1P^2d_0 = d_0^2Pd_0P^2h_1 = d_0f_0P^4h_2 = d_0gP^4h_1 = d_0Ph_1Pd_0^2 = d_0Ph_2iP^2h_2 = e_0^2P^4h_1 = e_0Ph_1P^3e_0 = e_0Pe_0P^3h_1 = e_0P^2h_1P^2e_0 = f_0Ph_2P^3d_0 = f_0Pd_0P^3h_2 = f_0P^2h_2P^2d_0 = gPh_1P^3d_0 = gPd_0P^3h_1 = gP^2h_1P^2d_0 = Ph_1Pe_0P^2e_0 = Ph_2^2iPd_0 = Ph_2kP^3h_2 = kP^2h_2^2 = Pe_0^2P^2h_1$

continued



Stem 67 continued

- 33 (1)  $P^8 h_2$   
 34 (1)  $h_0 P^8 h_2$   
 35 (1)  $h_0^2 P^8 h_2 = h_1^2 P^8 h_1 = h_1 P h_1 P^7 h_1 = h_1 P^2 h_1 P^6 h_1 =$   
 $h_1 P^3 h_1 P^5 h_1 = h_1 P^4 h_1^2 = P h_1^2 P^6 h_1 = P h_1 P^2 h_1 P^5 h_1 =$   
 $P h_1 P^3 h_1 P^4 h_1 = P^2 h_1^2 P^4 h_1 = P^2 h_1 P^3 h_1^2$

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- 4 (1)  $d_2$   
 5 (1)  $h_0 d_2 = h_3 D_3$   
 6 (1)  $h_1 Q_3$   
 7 (10)  $h_2^2 H_1 = h_3 A$   
 (11)  $h_3 A'$   
 8 (10)  $G_{21}$   
 (01)  $h_0 h_3 A'$   
 9 (1)  $h_0 G_{21}$   
 10 (10)  $h_1 x_{9,39} = h_2^2 x_{8,32} = h_2^2 x_{8,33} = f_0 C = d_1 t = e_1 r$   
 (01)  $h_0^2 G_{21}$   
 (11)  $h_3 X_1$   
 11 (10)  $h_2 B_{23} = g B_2$   
 (01)  $h_0^3 G_{21} = h_0 h_3 X_1$   
 (11)  $h_4 x'$   
 12 (10)  $h_0 h_4 x' = h_5 d_0 i$   
 (01)  $h_0^4 G_{21} = h_0^2 h_3 X_1 = h_3^2 R_1 = r y$   
 (11)  $h_0 h_2 B_{23} = h_0 g B_2 = h_2^2 x_{10,27} = h_2^2 x_{10,28} = h_2 e_0 B_2 = c_0 B_4 =$   
 $Ph_2 Q_2$   
 13 (10)  $P^2 D_1$   
 (01)  $h_0^5 G_{21} = h_0^3 h_3 X_1 = h_0^2 h_4 x' = h_0 h_3^2 R_1 = h_0 h_5 d_0 i = h_0 r y =$   
 $h_2 h_5 P j = h_5 P h_2 j$   
 14 (1)  $h_0 P^2 D_1 = h_2 R_2 = d_0 R_1$   
 15 (1)  $h_0^2 P^2 D_1 = h_0 h_2 R_2 = h_0 d_0 R_1 = h_1 d_0 x' = P h_1 B_{21} = B_1 P d_0$   
 16 (1)  $d_0^2 g^2 = d_0 e_0^2 g = e_0^4 = i w = j v = k u$   
 19 (1)  $d_0^3 j = d_0^2 e_0 i = d_0 g P j = d_0 k P e_0 = d_0 l P d_0 = e_0^2 P j = e_0 j P e_0 =$   
 $e_0 k P d_0 = g i P e_0 = g j P d_0 = m P^2 e_0$   
 22 (1)  $r P^3 d_0 = i^2 P d_0 = j P^2 j = k P^2 i = P j^2$   
 28 (1)  $d_0 P^5 d_0 = P d_0 P^4 d_0 = P^2 d_0 P^3 d_0$   
 29 (1)  $h_0 d_0 P^5 d_0 = h_0 P d_0 P^4 d_0 = h_0 P^2 d_0 P^3 d_0 = h_2 P^6 e_0 = e_0 P^6 h_2 =$   
 $Ph_2 P^5 e_0 = P e_0 P^5 h_2 = P^2 h_2 P^4 e_0 = P^2 e_0 P^4 h_2 = P^3 h_2 P^3 e_0$   
 30 (1)  $h_0^2 d_0 P^5 d_0 = h_0^2 P d_0 P^4 d_0 = h_0^2 P^2 d_0 P^3 d_0 = h_0 h_2 P^6 e_0 =$   
 $h_0 e_0 P^6 h_2 = h_0 P h_2 P^5 e_0 = h_0 P e_0 P^5 h_2 = h_0 P^2 h_2 P^4 e_0 =$   
 $h_0 P^2 e_0 P^4 h_2 = h_0 P^3 h_2 P^3 e_0 = h_2^2 P^6 d_0 = h_2 d_0 P^6 h_2 =$   
 $h_2 P h_2 P^5 d_0 = h_2 P d_0 P^5 h_2 = h_2 P^2 h_2 P^4 d_0 = h_2 P^2 d_0 P^4 h_2 =$   
 $h_2 P^3 h_2 P^3 d_0 = d_0 P h_2 P^5 h_2 = d_0 P^2 h_2 P^4 h_2 = d_0 P^3 h_2^2 =$   
 $Ph_2^2 P^4 d_0 = Ph_2 P d_0 P^4 h_2 = Ph_2 P^2 h_2 P^3 d_0 = Ph_2 P^2 d_0 P^3 h_2 =$   
 $P d_0 P^2 h_2 P^3 h_2 = P^2 h_2^2 P^2 d_0$

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- 3 (1)  $h_2^2 h_6$   
4 (1)  $p'$   
5 (1)  $h_0 p'$   
6 (10)  $h_3 H_1$   
(01)  $h_0^2 p'$   
7 (1)  $h_0^3 p' = h_1^2 Q_3 = h_4 G = c_0 D_3$   
8 (10)  $h_2 x_{7,40}$   
(01)  $PD_3$   
9 (10)  $h_1 G_{21}$   
(01)  $h_0 h_2 x_{7,40} = h_2^2 x_{7,34} = h_3 x_{8,33} = c_0 A' = c_0 A = c_1 C = e_0 D_1 = e_1 n$   
(11)  $h_3 x_{8,32}$   
10 (1)  $PA$   
11 (10)  $h_2 B_5 = h_4 R_1$   
(01)  $h_0 PA = h_2 PD_2 = Ph_2 D_2$   
(11)  $h_3 x_{10,27}$   
13 (1)  $W_1$   
15 (1)  $d_0 gm = e_0^2 m = e_0 gl = g^2 k = ru$   
18 (10)  $x_{18,20}$   
(01)  $d_0^2 z = d_0 r P e_0 = d_0 i l = d_0 j k = e_0 r P d_0 = e_0 i k = e_0 j^2 = g i j = m P j$   
19 (1)  $h_0 x_{18,20}$   
20 (1)  $h_0^2 x_{18,20}$   
21 (10)  $d_0 P^2 u = P d_0 P u = u P^2 d_0$   
(01)  $h_0^3 x_{18,20}$   
(11)  $r P^2 i = i^3$   
22 (1)  $h_0^4 x_{18,20} = h_0 r P^2 i = h_0 i^3$   
23 (1)  $h_0^5 x_{18,20} = h_0^2 r P^2 i = h_0^2 i^3 = h_3 i P^2 i$   
24 (01)  $h_0^6 x_{18,20} = h_0^3 r P^2 i = h_0^3 i^3 = h_0 h_3 i P^2 i$   
(11)  $d_0^2 P^3 e_0 = d_0 e_0 P^3 d_0 = d_0 P d_0 P^2 e_0 = d_0 P e_0 P^2 d_0 = e_0 P d_0 P^2 d_0 = g P^4 e_0 = P d_0^2 P e_0$   
25 (1)  $h_0^7 x_{18,20} = h_0^4 r P^2 i = h_0^4 i^3 = h_0^2 h_3 i P^2 i = h_0 d_0^2 P^3 e_0 = h_0 d_0 e_0 P^3 d_0 = h_0 d_0 P d_0 P^2 e_0 = h_0 d_0 P e_0 P^2 d_0 = h_0 e_0 P d_0 P^2 d_0 = h_0 g P^4 e_0 = h_0 P d_0^2 P e_0 = h_2 d_0^2 P^3 d_0 = h_2 d_0 P d_0 P^2 d_0 = h_2 e_0 P^4 e_0 = h_2 g P^4 d_0 = h_2 P d_0^3 = h_2 P e_0 P^3 e_0 = h_2 P^2 e_0^2 = h_3^2 P^4 i = h_4 P^5 d_0 = d_0^3 P^3 h_2 = d_0^2 P h_2 P^2 d_0 = d_0^2 P d_0 P^2 h_2 = d_0 g P^4 h_2 = d_0 P h_2 P d_0^2 = e_0^2 P^4 h_2 = e_0 P h_2 P^3 e_0 = e_0 P e_0 P^3 h_2 = e_0 P^2 h_2 P^2 e_0 = g P h_2 P^3 d_0 = g P d_0 P^3 h_2 = g P^2 h_2 P^2 d_0 = P h_2 P e_0 P^2 e_0 = P e_0^2 P^2 h_2$

continued

Stem 69 continued

$$\begin{aligned}
26 \quad (1) \quad & h_0^8 x_{18,20} = h_0^5 r P^2 i = h_0^5 i^3 = h_0^3 h_3 i P^2 i = h_0^2 d_0^2 P^3 e_0 = \\
& h_0^2 d_0 e_0 P^3 d_0 = h_0^2 d_0 P d_0 P^2 e_0 = h_0^2 d_0 P e_0 P^2 d_0 = h_0^2 e_0 P d_0 P^2 d_0 = \\
& h_0^2 g P^4 e_0 = h_0^2 P d_0^2 P e_0 = h_0 h_2 d_0^2 P^3 d_0 = h_0 h_2 d_0 P d_0 P^2 d_0 = \\
& h_0 h_2 e_0 P^4 e_0 = h_0 h_2 g P^4 d_0 = h_0 h_2 P d_0^3 = h_0 h_2 P e_0 P^3 e_0 = \\
& h_0 h_2 P^2 e_0^2 = h_0 h_3^2 P^4 i = h_0 h_4 P^5 d_0 = h_0 d_0^3 P^3 h_2 = h_0 d_0^2 P h_2 P^2 d_0 = \\
& h_0 d_0^2 P d_0 P^2 h_2 = h_0 d_0 g P^4 h_2 = h_0 d_0 P h_2 P d_0^2 = h_0 e_0^2 P^4 h_2 = \\
& h_0 e_0 P h_2 P^3 e_0 = h_0 e_0 P e_0 P^3 h_2 = h_0 e_0 P^2 h_2 P^2 e_0 = h_0 g P h_2 P^3 d_0 = \\
& h_0 g P d_0 P^3 h_2 = h_0 g P^2 h_2 P^2 d_0 = h_0 P h_2 P e_0 P^2 e_0 = h_0 P e_0^2 P^2 h_2 = \\
& h_2^2 d_0 P^4 e_0 = h_2^2 e_0 P^4 d_0 = h_2^2 P d_0 P^3 e_0 = h_2^2 P e_0 P^3 d_0 = \\
& h_2^2 P^2 d_0 P^2 e_0 = h_2 d_0 e_0 P^4 h_2 = h_2 d_0 P h_2 P^3 e_0 = h_2 d_0 P e_0 P^3 h_2 = \\
& h_2 d_0 P^2 h_2 P^2 e_0 = h_2 e_0 P h_2 P^3 d_0 = h_2 e_0 P d_0 P^3 h_2 = \\
& h_2 e_0 P^2 h_2 P^2 d_0 = h_2 P h_2 P d_0 P^2 e_0 = h_2 P h_2 P e_0 P^2 d_0 = \\
& h_2 P d_0 P e_0 P^2 h_2 = c_0 i P^3 d_0 = c_0 P d_0 P^2 i = d_0 e_0 P h_2 P^3 h_2 = \\
& d_0 e_0 P^2 h_2^2 = d_0 P h_2^2 P^2 e_0 = d_0 P h_2 P e_0 P^2 h_2 = d_0 P c_0 P^2 i = \\
& d_0 i P^3 c_0 = e_0 P h_2^2 P^2 d_0 = e_0 P h_2 P d_0 P^2 h_2 = P h_2^2 P d_0 P e_0 = \\
& P c_0 i P^2 d_0 = i P d_0 P^2 c_0 = k P^4 c_0 \\
27 \quad (1) \quad & d_0 P^4 i = i P^4 d_0 = P^2 d_0 P^2 i \\
28 \quad (1) \quad & h_0 d_0 P^4 i = h_0 i P^4 d_0 = h_0 P^2 d_0 P^2 i = h_2 P^5 j = P h_2 P^4 j = j P^5 h_2 = \\
& P^2 h_2 P^3 j = P j P^4 h_2 = P^3 h_2 P^2 j \\
29 \quad (1) \quad & h_0^2 d_0 P^4 i = h_0^2 i P^4 d_0 = h_0^2 P^2 d_0 P^2 i = h_0 h_2 P^5 j = h_0 P h_2 P^4 j = \\
& h_0 j P^5 h_2 = h_0 P^2 h_2 P^3 j = h_0 P j P^4 h_2 = h_0 P^3 h_2 P^2 j = \\
& h_1 d_0 P^5 d_0 = h_1 P d_0 P^4 d_0 = h_1 P^2 d_0 P^3 d_0 = h_2 P h_2 P^4 i = \\
& h_2 i P^5 h_2 = h_2 P^3 h_2 P^2 i = d_0^2 P^5 h_1 = d_0 P h_1 P^4 d_0 = d_0 P d_0 P^4 h_1 = \\
& d_0 P^2 h_1 P^3 d_0 = d_0 P^2 d_0 P^3 h_1 = f_0 P^6 h_2 = g P^6 h_1 = \\
& P h_1 P d_0 P^3 d_0 = P h_1 P^2 d_0^2 = P h_2 i P^4 h_2 = P h_2 P^2 h_2 P^2 i = \\
& i P^2 h_2 P^3 h_2 = P d_0^2 P^3 h_1 = P d_0 P^2 h_1 P^2 d_0
\end{aligned}$$

Stem 70

- 2 (1)  $h_3h_6$   
3 (1)  $h_0h_3h_6$   
4 (01)  $h_0^2h_3h_6$   
(11)  $p_1$   
5 (10)  $h_1p' = h_3^2c_0$   
(01)  $h_0^3h_3h_6$   
6 (1)  $h_2Q_3$   
7 (10)  $h_1h_3H_1$   
(01)  $h_0h_2Q_3$   
8 (1)  $h_3x_{7,33} = d_1e_1$   
9 (1)  $h_1PD_3 = D_3Ph_1$   
10 (1)  $h_1^2G_{21} = h_1h_3x_{8,32} = h_2x_{9,39} = gC = d_1y = e_1q$   
12 (1)  $h_2x_{11,35}$   
14 (010)  $d_0Q_1$   
(110)  $g^2r = m^2$   
(001)  $h_1W_1 = Ph_1X_1$   
(011)  $e_0x'$   
15 (1)  $h_0d_0Q_1 = h_0e_0x' = h_2d_0x' = Ph_2B_{21} = B_2Pd_0$   
16 (1)  $h_0^2d_0Q_1 = h_0^2e_0x' = h_0h_2d_0x' = h_0Ph_2B_{21} = h_0B_2Pd_0 =$   
 $h_2^2PQ_1 = h_2Ph_2Q_1$   
17 (10)  $R_1$   
(01)  $d_0^2v = d_0e_0u = d_0rj = e_0ri = gPv = kz = Pe_0w$   
18 (1)  $h_0R_1$   
19 (10)  $h_1x_{18,20} = P^2h_1x'$   
(01)  $h_0^2R_1$   
20 (10)  $d_0^5 = d_0^2e_0Pe_0 = d_0^2gPd_0 = d_0e_0^2Pd_0 = e_0gP^2e_0 = g^2P^2d_0 =$   
 $gPe_0^2 = iPu$   
(01)  $h_0^3R_1 = iQ$   
21 (1)  $h_0^4R_1 = h_0iQ$   
22 (1)  $h_0^5R_1 = h_0^2iQ$   
23 (01)  $h_0^6R_1 = h_0^3iQ$   
(11)  $d_0^2P^2j = d_0e_0P^2i = d_0iP^2e_0 = d_0jP^2d_0 = d_0Pd_0Pj = e_0iP^2d_0 =$   
 $gP^3j = iPd_0Pe_0 = jPd_0^2 = kP^3e_0 = lP^3d_0$   
24 (1)  $h_0^7R_1 = h_0^4iQ = h_0d_0^2P^2j = h_0d_0e_0P^2i = h_0d_0iP^2e_0 =$   
 $h_0d_0jP^2d_0 = h_0d_0Pd_0Pj = h_0e_0iP^2d_0 = h_0gP^3j = h_0iPd_0Pe_0 =$   
 $h_0jPd_0^2 = h_0kP^3e_0 = h_0lP^3d_0 = h_2d_0^2P^2i = h_2d_0iP^2d_0 =$   
 $h_2e_0P^3j = h_2iPd_0^2 = h_2jP^3e_0 = h_2kP^3d_0 = h_2Pe_0P^2j =$   
 $h_2PjP^2e_0 = d_0^2iP^2h_2 = d_0f_0P^3d_0 = d_0Ph_2iPd_0 = d_0kP^3h_2 =$   
 $e_0Ph_2P^2j = e_0jP^3h_2 = e_0P^2h_2Pj = f_0Pd_0P^2d_0 = gPh_2P^2i =$   
 $giP^3h_2 = Ph_2jP^2e_0 = Ph_2kP^2d_0 = Ph_2Pe_0Pj = jPe_0P^2h_2 =$   
 $kPd_0P^2h_2 = mP^4h_2$

continued

Stem 70 continued

$$\begin{aligned}
25 \quad (1) \quad & h_0^8 R_1 = h_0^5 i Q = h_0^2 d_0^2 P^2 j = h_0^2 d_0 e_0 P^2 i = h_0^2 d_0 i P^2 e_0 = \\
& h_0^2 d_0 j P^2 d_0 = h_0^2 d_0 P d_0 P j = h_0^2 e_0 i P^2 d_0 = h_0^2 g P^3 j = h_0^2 i P d_0 P e_0 = \\
& h_0^2 j P d_0^2 = h_0^2 k P^3 e_0 = h_0^2 l P^3 d_0 = h_0 h_2 d_0^2 P^2 i = h_0 h_2 d_0 i P^2 d_0 = \\
& h_0 h_2 e_0 P^3 j = h_0 h_2 i P d_0^2 = h_0 h_2 j P^3 e_0 = h_0 h_2 k P^3 d_0 = \\
& h_0 h_2 P e_0 P^2 j = h_0 h_2 P j P^2 e_0 = h_0 d_0^2 i P^2 h_2 = h_0 d_0 f_0 P^3 d_0 = \\
& h_0 d_0 P h_2 i P d_0 = h_0 d_0 k P^3 h_2 = h_0 e_0 P h_2 P^2 j = h_0 e_0 j P^3 h_2 = \\
& h_0 e_0 P^2 h_2 P j = h_0 f_0 P d_0 P^2 d_0 = h_0 g P h_2 P^2 i = h_0 g i P^3 h_2 = \\
& h_0 P h_2 j P^2 e_0 = h_0 P h_2 k P^2 d_0 = h_0 P h_2 P e_0 P j = h_0 j P e_0 P^2 h_2 = \\
& h_0 k P d_0 P^2 h_2 = h_0 m P^4 h_2 = h_1 d_0^2 P^3 e_0 = h_1 d_0 e_0 P^3 d_0 = \\
& h_1 d_0 P d_0 P^2 e_0 = h_1 d_0 P e_0 P^2 d_0 = h_1 e_0 P d_0 P^2 d_0 = h_1 g P^4 e_0 = \\
& h_1 P d_0^2 P e_0 = h_2^2 d_0 P^3 j = h_2^2 i P^3 e_0 = h_2^2 j P^3 d_0 = h_2^2 P d_0 P^2 j = \\
& h_2^2 P e_0 P^2 i = h_2^2 P j P^2 d_0 = h_2 d_0 P h_2 P^2 j = h_2 d_0 j P^3 h_2 = \\
& h_2 d_0 P^2 h_2 P j = h_2 e_0 P h_2 P^2 i = h_2 e_0 i P^3 h_2 = h_2 f_0 P^4 e_0 = \\
& h_2 P h_2 i P^2 e_0 = h_2 P h_2 j P^2 d_0 = h_2 P h_2 P d_0 P j = h_2 i P e_0 P^2 h_2 = \\
& h_2 j P d_0 P^2 h_2 = h_2 l P^4 h_2 = c_0 i P^2 i = d_0^2 e_0 P^3 h_1 = d_0^2 P h_1 P^2 e_0 = \\
& d_0^2 P e_0 P^2 h_1 = d_0 e_0 P h_1 P^2 d_0 = d_0 e_0 P d_0 P^2 h_1 = d_0 P h_1 P d_0 P e_0 = \\
& d_0 P h_2^2 P j = d_0 P h_2 j P^2 h_2 = e_0 f_0 P^4 h_2 = e_0 g P^4 h_1 = e_0 P h_1 P d_0^2 = \\
& e_0 P h_2 i P^2 h_2 = f_0 P h_2 P^3 e_0 = f_0 P e_0 P^3 h_2 = f_0 P^2 h_2 P^2 e_0 = \\
& g P h_1 P^3 e_0 = g P e_0 P^3 h_1 = g P^2 h_1 P^2 e_0 = P h_2^2 i P e_0 = P h_2^2 j P d_0 = \\
& P h_2 l P^3 h_2 = r P^4 c_0 = i^2 P^2 c_0 = l P^2 h_2^2 \\
32 \quad (1) \quad & P^7 d_0 \\
33 \quad (1) \quad & h_0 P^7 d_0 \\
34 \quad (1) \quad & h_0^2 P^7 d_0 = h_2 P^8 h_2 = P h_2 P^7 h_2 = P^2 h_2 P^6 h_2 = P^3 h_2 P^5 h_2 = P^4 h_2^2
\end{aligned}$$

Stem 71

- 3 (1)  $h_1h_3h_6$   
4 (1)  $h_6c_0$   
5 (1)  $h_1p_1 = h_2d_2$   
6 (10)  $x_{6,47}$   
(01)  $h_1^2p' = h_1h_5^2c_0$   
7 (1)  $h_0x_{6,47} = h_3A''$   
9 (1)  $h_2G_{21} = h_3^2Q_2$   
10 (1)  $h_0h_2G_{21} = h_0h_3^2Q_2 = py$   
11 (1)  $h_4Q_1 = d_0Q_2$   
12 (10)  $x_{12,37}$   
(01)  $h_0h_4Q_1 = h_0d_0Q_2 = h_2^2B_{23} = h_2h_4x' = h_2gB_2 = h_5d_0j = h_5e_0i = Ph_2B_3$   
13 (100)  $g^2n = tm$   
(010)  $x_{13,34}$   
(001)  $x_{13,35}$   
14 (10)  $h_0x_{13,34}$   
(01)  $h_0x_{13,35} = f_0x' = Ph_2B_4 = iB_2$   
(11)  $h_2P^2D_1 = e_0R_1$   
15 (10)  $h_0^2x_{13,34} = h_1^2W_1 = h_1Ph_1X_1 = h_3PQ_1 = qu = GP^2h_1$   
(01)  $h_0^2x_{13,35} = h_0f_0x' = h_0Ph_2B_4 = h_0iB_2 = h_1e_0x' = Ph_1x_{10,28} = B_1Pe_0$   
(11)  $h_0h_2P^2D_1 = h_0e_0R_1 = h_1d_0Q_1 = h_2^2R_2 = h_2d_0R_1 = Ph_1x_{10,27}$   
16 (1)  $d_0e_0g^2 = e_0^3g = rz = jw = kv = lu$   
19 (1)  $d_0^3k = d_0^2e_0j = d_0^2gi = d_0e_0^2i = d_0lPe_0 = d_0mPd_0 = e_0gPj = e_0kPe_0 = e_0lPd_0 = gjPe_0 = gkPd_0$   
20 (1)  $h_1^2x_{18,20} = h_1P^2h_1x' = Ph_1^2x' = B_1P^3h_1$   
22 (1)  $d_0iPj = rP^3e_0 = i^2Pe_0 = ijPd_0 = kP^2j = lP^2i = zP^2d_0$   
25 (1)  $P^4u$   
28 (1)  $d_0P^5e_0 = e_0P^5d_0 = Pd_0P^4e_0 = Pe_0P^4d_0 = P^2d_0P^3e_0 = P^2e_0P^3d_0$   
29 (1)  $h_0d_0P^5e_0 = h_0e_0P^5d_0 = h_0Pd_0P^4e_0 = h_0Pe_0P^4d_0 = h_0P^2d_0P^3e_0 = h_0P^2e_0P^3d_0 = h_2d_0P^5d_0 = h_2Pd_0P^4d_0 = h_2P^2d_0P^3d_0 = d_0^2P^5h_2 = d_0Ph_2P^4d_0 = d_0Pd_0P^4h_2 = d_0P^2h_2P^3d_0 = d_0P^2d_0P^3h_2 = gP^6h_2 = Ph_2Pd_0P^3d_0 = Ph_2P^2d_0^2 = Pd_0^2P^3h_2 = Pd_0P^2h_2P^2d_0$

continued

Stem 71 continued

- 30 (1)  $h_0^2 d_0 P^5 e_0 = h_0^2 e_0 P^5 d_0 = h_0^2 P d_0 P^4 e_0 = h_0^2 P e_0 P^4 d_0 =$   
 $h_0^2 P^2 d_0 P^3 e_0 = h_0^2 P^2 e_0 P^3 d_0 = h_0 h_2 d_0 P^5 d_0 = h_0 h_2 P d_0 P^4 d_0 =$   
 $h_0 h_2 P^2 d_0 P^3 d_0 = h_0 d_0^2 P^5 h_2 = h_0 d_0 P h_2 P^4 d_0 = h_0 d_0 P d_0 P^4 h_2 =$   
 $h_0 d_0 P^2 h_2 P^3 d_0 = h_0 d_0 P^2 d_0 P^3 h_2 = h_0 g P^6 h_2 = h_0 P h_2 P d_0 P^3 d_0 =$   
 $h_0 P h_2 P^2 d_0^2 = h_0 P d_0^2 P^3 h_2 = h_0 P d_0 P^2 h_2 P^2 d_0 = h_0^2 P^6 e_0 =$   
 $h_2 e_0 P^6 h_2 = h_2 P h_2 P^5 e_0 = h_2 P e_0 P^5 h_2 = h_2 P^2 h_2 P^4 e_0 =$   
 $h_2 P^2 e_0 P^4 h_2 = h_2 P^3 h_2 P^3 e_0 = e_0 P h_2 P^5 h_2 = e_0 P^2 h_2 P^4 h_2 =$   
 $e_0 P^3 h_2^2 = P h_2^2 P^4 e_0 = P h_2 P e_0 P^4 h_2 = P h_2 P^2 h_2 P^3 e_0 =$   
 $P h_2 P^2 e_0 P^3 h_2 = P c_0 P^4 i = i P^5 c_0 = P e_0 P^2 h_2 P^3 h_2 = P^2 h_2^2 P^2 e_0 =$   
 $P^3 c_0 P^2 i$
- 31 (1)  $P^6 i$
- 32 (1)  $h_0 P^6 i$
- 33 (01)  $h_0^2 P^6 i$
- (11)  $h_1 P^7 d_0 = d_0 P^7 h_1 = P h_1 P^6 d_0 = P d_0 P^6 h_1 = P^2 h_1 P^5 d_0 =$   
 $P^2 d_0 P^5 h_1 = P^3 h_1 P^4 d_0 = P^3 d_0 P^4 h_1$
- 34 (1)  $h_0^3 P^6 i$
- 35 (1)  $h_0^4 P^6 i$
- 36 (1)  $h_0^5 P^6 i$

Stem 72

- 4 (1)  $h_1^2 h_3 h_6 = h_2^3 h_6$   
5 (1)  $h_1 h_6 c_0$   
6 (1)  $h_6 P h_1$   
8 (10)  $h_3^2 D_2$   
(11)  $h_4 Q_2$   
9 (1)  $h_0 h_3^2 D_2 = h_0 h_4 Q_2 = h_2^2 x_{7,40} = g D_1$   
10 (1)  $d_0 D_2$   
11 (1)  $h_0 d_0 D_2 = h_2 P A = P h_2 A$   
12 (1)  $h_0^2 d_0 D_2 = h_0 h_2 P A = h_0 P h_2 A = h_1 h_4 Q_1 = h_1 d_0 Q_2 = h_2^2 B_5 =$   
 $h_2^2 P D_2 = h_2 h_4 R_1 = h_2 P h_2 D_2 = g^2 d_1 = P h_1 x_{7,33} = P h_1 x_{7,34} = t^2$
- 13 (1)  $h_1 x_{12,37} = c_0 x_{10,32}$   
15 (1)  $e_0 g m = g^2 l = r v$   
18 (10)  $P^2 Q_1$   
(01)  $d_0^3 r = d_0 e_0 z = d_0 i m = d_0 j l = d_0 k^2 = e_0 r P e_0 = e_0 i l = e_0 j k =$   
 $g r P d_0 = g i k = g j^2$   
19 (1)  $h_0 P^2 Q_1 = h_2 x_{18,20} = P^2 h_2 x'$   
20 (1)  $h_0^2 P^2 Q_1 = h_0 h_2 x_{18,20} = h_0 P^2 h_2 x'$   
21 (10)  $d_0 P^2 v = P d_0 P v = v P^2 d_0$   
(01)  $h_0^3 P^2 Q_1 = h_0^2 h_2 x_{18,20} = h_0^2 P^2 h_2 x' = h_1^3 x_{18,20} = h_1^2 P^2 h_1 x' =$   
 $h_1 P h_1^2 x' = h_1 B_1 P^3 h_1 = P h_1 B_1 P^2 h_1 = P e_0 Q$   
(11)  $e_0 P^2 u = r P^2 j = i^2 j = P e_0 P u = u P^2 e_0$   
24 (1)  $d_0^3 P^2 d_0 = d_0^2 P d_0^2 = d_0 e_0 P^3 e_0 = d_0 g P^3 d_0 = d_0 P e_0 P^2 e_0 =$   
 $e_0^2 P^3 d_0 = e_0 P d_0 P^2 e_0 = e_0 P e_0 P^2 d_0 = g P d_0 P^2 d_0 = P d_0 P e_0^2$   
26 (1)  $h_1 P^4 u = P h_1 P^3 u = P^2 h_1 P^2 u = u P^4 h_1 = P^3 h_1 Q = P^3 h_1 P u$   
27 (1)  $d_0 P^4 j = e_0 P^4 i = i P^4 e_0 = j P^4 d_0 = P d_0 P^3 j = P j P^3 d_0 =$   
 $P^2 d_0 P^2 j = P^2 e_0 P^2 i$   
28 (1)  $h_0 d_0 P^4 j = h_0 e_0 P^4 i = h_0 i P^4 e_0 = h_0 j P^4 d_0 = h_0 P d_0 P^3 j =$   
 $h_0 P j P^3 d_0 = h_0 P^2 d_0 P^2 j = h_0 P^2 e_0 P^2 i = h_2 d_0 P^4 i = h_2 i P^4 d_0 =$   
 $h_2 P^2 d_0 P^2 i = d_0 i P^4 h_2 = d_0 P^2 h_2 P^2 i = f_0 P^5 d_0 = P h_2 i P^3 d_0 =$   
 $P h_2 P d_0 P^2 i = i P d_0 P^3 h_2 = i P^2 h_2 P^2 d_0 = k P^5 h_2$

continued



Stem 72 continued

$$\begin{aligned}
29 \quad (1) \quad & h_0^2 d_0 P^4 j = h_0^2 e_0 P^4 i = h_0^2 i P^4 e_0 = h_0^2 j P^4 d_0 = h_0^2 P d_0 P^3 j = \\
& h_0^2 P j P^3 d_0 = h_0^2 P^2 d_0 P^2 j = h_0^2 P^2 e_0 P^2 i = h_0 h_2 d_0 P^4 i = \\
& h_0 h_2 i P^4 d_0 = h_0 h_2 P^2 d_0 P^2 i = h_0 d_0 i P^4 h_2 = h_0 d_0 P^2 h_2 P^2 i = \\
& h_0 f_0 P^5 d_0 = h_0 P h_2 i P^3 d_0 = h_0 P h_2 P d_0 P^2 i = h_0 i P d_0 P^3 h_2 = \\
& h_0 i P^2 h_2 P^2 d_0 = h_0 k P^5 h_2 = h_1 d_0 P^5 e_0 = h_1 e_0 P^5 d_0 = \\
& h_1 P d_0 P^4 e_0 = h_1 P e_0 P^4 d_0 = h_1 P^2 d_0 P^3 e_0 = h_1 P^2 e_0 P^3 d_0 = \\
& h_2^2 P^5 j = h_2 P h_2 P^4 j = h_2 j P^5 h_2 = h_2 P^2 h_2 P^3 j = h_2 P j P^4 h_2 = \\
& h_2 P^3 h_2 P^2 j = d_0 e_0 P^5 h_1 = d_0 P h_1 P^4 e_0 = d_0 P e_0 P^4 h_1 = \\
& d_0 P^2 h_1 P^3 e_0 = d_0 P^2 e_0 P^3 h_1 = e_0 P h_1 P^4 d_0 = e_0 P d_0 P^4 h_1 = \\
& e_0 P^2 h_1 P^3 d_0 = e_0 P^2 d_0 P^3 h_1 = P h_1 P d_0 P^3 e_0 = P h_1 P e_0 P^3 d_0 = \\
& P h_1 P^2 d_0 P^2 e_0 = P h_2^2 P^3 j = P h_2 j P^4 h_2 = P h_2 P^2 h_2 P^2 j = \\
& P h_2 P j P^3 h_2 = j P^2 h_2 P^3 h_2 = P d_0 P e_0 P^3 h_1 = P d_0 P^2 h_1 P^2 e_0 = \\
& P e_0 P^2 h_1 P^2 d_0 = P^2 h_2^2 P j \\
34 \quad (1) \quad & h_1^2 P^7 d_0 = h_1 d_0 P^7 h_1 = h_1 P h_1 P^6 d_0 = h_1 P d_0 P^6 h_1 = \\
& h_1 P^2 h_1 P^5 d_0 = h_1 P^2 d_0 P^5 h_1 = h_1 P^3 h_1 P^4 d_0 = h_1 P^3 d_0 P^4 h_1 = \\
& h_3 P^8 h_1 = c_0 P^7 c_0 = d_0 P h_1 P^6 h_1 = d_0 P^2 h_1 P^5 h_1 = d_0 P^3 h_1 P^4 h_1 = \\
& P h_1^2 P^5 d_0 = P h_1 P d_0 P^5 h_1 = P h_1 P^2 h_1 P^4 d_0 = P h_1 P^2 d_0 P^4 h_1 = \\
& P h_1 P^3 h_1 P^3 d_0 = P c_0 P^6 c_0 = P d_0 P^2 h_1 P^4 h_1 = P d_0 P^3 h_1^2 = \\
& P^2 h_1^2 P^3 d_0 = P^2 h_1 P^2 d_0 P^3 h_1 = P^2 c_0 P^5 c_0 = P^3 c_0 P^4 c_0 \\
35 \quad (1) \quad & P^8 c_0
\end{aligned}$$

Stem 73

- 7 (100)  $h_4D_2$   
 (010)  $h_2^2Q_3 = h_3r_1 = h_5^2Ph_2$   
 (001)  $h_1h_6Ph_1$
- 8 (1)  $h_0h_4D_2$
- 9 (1)  $h_0^2h_4D_2 = h_1h_4Q_2$
- 14 (1)  $d_0B_{21} = e_0Q_1 = gx'$
- 15 (1)  $h_0d_0B_{21} = h_0e_0Q_1 = h_0gx' = h_2d_0Q_1 = h_2e_0x' = Ph_2x_{10,27} = Ph_2x_{10,28} = B_2Pe_0$
- 16 (1)  $h_0^2d_0B_{21} = h_0^2e_0Q_1 = h_0^2gx' = h_0h_2d_0Q_1 = h_0h_2e_0x' = h_0Ph_2x_{10,27} = h_0Ph_2x_{10,28} = h_0B_2Pe_0 = h_2^2d_0x' = h_2Ph_2B_{21} = h_2B_2Pd_0 = c_0R_2 = d_0Ph_2B_2$
- 17 (10)  $PR_2$   
 (01)  $d_0^2w = d_0e_0v = d_0gu = d_0rk = e_0^2u = e_0rj = gri = lz$
- 18 (1)  $h_0PR_2 = h_2R_1$
- 19 (1)  $h_0^2PR_2 = h_0h_2R_1 = h_1P^2Q_1 = Ph_1PQ_1 = P^2h_1Q_1 = P^2h_2R_1$
- 20 (1)  $d_0^4e_0 = d_0^2gPe_0 = d_0e_0^2Pe_0 = d_0e_0gPd_0 = e_0^3Pd_0 = g^2P^2e_0 = iPv = jPu = uPj$
- 23 (1)  $d_0^2iPd_0 = d_0e_0P^2j = d_0gP^2i = d_0jP^2e_0 = d_0kP^2d_0 = d_0Pe_0Pj = e_0^2P^2i = e_0iP^2e_0 = e_0jP^2d_0 = e_0Pd_0Pj = giP^2d_0 = iP^2e_0^2 = jPd_0Pe_0 = kPd_0^2 = lP^3e_0 = mP^3d_0$
- 26 (1)  $iP^3j = PjP^2i$
- 27 (1)  $h_0iP^3j = h_0PjP^2i = h_1^2P^4u = h_1Ph_1P^3u = h_1P^2h_1P^2u = h_1uP^4h_1 = h_1P^3h_1Q = h_1P^3h_1Pu = f_0P^4i = Ph_1^2P^2u = Ph_1P^2h_1Q = Ph_1P^2h_1Pu = Ph_1uP^3h_1 = Ph_2iP^2i = rP^5h_2 = qP^5h_1 = i^2P^3h_2 = P^2h_1^2u$
- 32 (1)  $P^7e_0$
- 33 (1)  $h_0P^7e_0 = h_2P^7d_0 = d_0P^7h_2 = Ph_2P^6d_0 = Pd_0P^6h_2 = P^2h_2P^5d_0 = P^2d_0P^5h_2 = P^3h_2P^4d_0 = P^3d_0P^4h_2$
- 34 (1)  $h_0^2P^7e_0 = h_0h_2P^7d_0 = h_0d_0P^7h_2 = h_0Ph_2P^6d_0 = h_0Pd_0P^6h_2 = h_0P^2h_2P^5d_0 = h_0P^2d_0P^5h_2 = h_0P^3h_2P^4d_0 = h_0P^3d_0P^4h_2$

continued

Stem 73 continued

$$\begin{aligned}
35 \quad (1) \quad & h_0^3 P^7 e_0 = h_0^2 h_2 P^7 d_0 = h_0^2 d_0 P^7 h_2 = h_0^2 P h_2 P^6 d_0 = h_0^2 P d_0 P^6 h_2 = \\
& h_0^2 P^2 h_2 P^5 d_0 = h_0^2 P^2 d_0 P^5 h_2 = h_0^2 P^3 h_2 P^4 d_0 = h_0^2 P^3 d_0 P^4 h_2 = \\
& h_1^3 P^7 d_0 = h_1^2 d_0 P^7 h_1 = h_1^2 P h_1 P^6 d_0 = h_1^2 P d_0 P^6 h_1 = \\
& h_1^2 P^2 h_1 P^5 d_0 = h_1^2 P^2 d_0 P^5 h_1 = h_1^2 P^3 h_1 P^4 d_0 = h_1^2 P^3 d_0 P^4 h_1 = \\
& h_1 h_3 P^8 h_1 = h_1 c_0 P^7 c_0 = h_1 d_0 P h_1 P^6 h_1 = h_1 d_0 P^2 h_1 P^5 h_1 = \\
& h_1 d_0 P^3 h_1 P^4 h_1 = h_1 P h_1^2 P^5 d_0 = h_1 P h_1 P d_0 P^5 h_1 = \\
& h_1 P h_1 P^2 h_1 P^4 d_0 = h_1 P h_1 P^2 d_0 P^4 h_1 = h_1 P h_1 P^3 h_1 P^3 d_0 = \\
& h_1 P c_0 P^6 c_0 = h_1 P d_0 P^2 h_1 P^4 h_1 = h_1 P d_0 P^3 h_1^2 = h_1 P^2 h_1^2 P^3 d_0 = \\
& h_1 P^2 h_1 P^2 d_0 P^3 h_1 = h_1 P^2 c_0 P^5 c_0 = h_1 P^3 c_0 P^4 c_0 = h_2^2 P^8 h_2 = \\
& h_2 P h_2 P^7 h_2 = h_2 P^2 h_2 P^6 h_2 = h_2 P^3 h_2 P^5 h_2 = h_2 P^4 h_2^2 = \\
& h_3 P h_1 P^7 h_1 = h_3 P^2 h_1 P^6 h_1 = h_3 P^3 h_1 P^5 h_1 = h_3 P^4 h_1^2 = \\
& c_0^2 P^7 h_1 = c_0 P h_1 P^6 c_0 = c_0 P c_0 P^6 h_1 = c_0 P^2 h_1 P^5 c_0 = \\
& c_0 P^2 c_0 P^5 h_1 = c_0 P^3 h_1 P^4 c_0 = c_0 P^3 c_0 P^4 h_1 = d_0 P h_1^2 P^5 h_1 = \\
& d_0 P h_1 P^2 h_1 P^4 h_1 = d_0 P h_1 P^3 h_1^2 = d_0 P^2 h_1^2 P^3 h_1 = P h_1^3 P^4 d_0 = \\
& P h_1^2 P d_0 P^4 h_1 = P h_1^2 P^2 h_1 P^3 d_0 = P h_1^2 P^2 d_0 P^3 h_1 = \\
& P h_1 P c_0 P^5 c_0 = P h_1 P d_0 P^2 h_1 P^3 h_1 = P h_1 P^2 h_1^2 P^2 d_0 = \\
& P h_1 P^2 c_0 P^4 c_0 = P h_1 P^3 c_0^2 = P h_2^2 P^6 h_2 = P h_2 P^2 h_2 P^5 h_2 = \\
& P h_2 P^3 h_2 P^4 h_2 = P c_0^2 P^5 h_1 = P c_0 P^2 h_1 P^4 c_0 = P c_0 P^2 c_0 P^4 h_1 = \\
& P c_0 P^3 h_1 P^3 c_0 = P d_0 P^2 h_1^3 = P^2 h_1 P^2 c_0 P^3 c_0 = P^2 h_2^2 P^4 h_2 = \\
& P^2 h_2 P^3 h_2^2 = P^2 c_0^2 P^3 h_1 \\
36 \quad (1) \quad & h_1 P^8 c_0 = c_0 P^8 h_1 = P h_1 P^7 c_0 = P c_0 P^7 h_1 = P^2 h_1 P^6 c_0 = \\
& P^2 c_0 P^6 h_1 = P^3 h_1 P^5 c_0 = P^3 c_0 P^5 h_1 = P^4 h_1 P^4 c_0 \\
37 \quad (1) \quad & P^9 h_1
\end{aligned}$$

Stem 74

- 6 (10)  $h_3n_1$   
 (01)  $h_6Ph_2$
- 7 (1)  $h_0h_6Ph_2$
- 8 (10)  $x_{8,51}$   
 (01)  $h_0^2h_6Ph_2 = h_1^2h_6Ph_1$
- 9 (1)  $h_0x_{8,51}$
- 10 (1)  $h_0^2x_{8,51} = h_3x_{9,40} = g_2r = x^2$
- 11 (1)  $h_0^3x_{8,51} = h_0h_3x_{9,40} = h_0g_2r = h_0x^2 = h_3^2B_4 = h_4B_{21} = d_0B_3 = e_0Q_2$
- 12 (1)  $h_0^4x_{8,51} = h_2^2h_3x_{9,40} = h_0^2g_2r = h_0^2x^2 = h_0h_3^2B_4 = h_0h_4B_{21} = h_0d_0B_3 = h_0e_0Q_2 = h_2h_4Q_1 = h_2d_0Q_2 = h_3g_2i = h_3xr = h_3x_{11,35} = h_5d_0k = h_5e_0j = h_5gi = Ph_2x_{7,33} = Ph_2x_{7,34}$
- 13 (1)  $d_0B_4$
- 14 (10)  $gR_1$   
 (01)  $h_0d_0B_4 = h_2x_{13,35} = f_0Q_1 = jB_2$   
 (11)  $h_2x_{13,34}$
- 15 (1)  $h_0^2d_0B_4 = h_0h_2x_{13,35} = h_0f_0Q_1 = h_0gR_1 = h_0jB_2 = h_1d_0B_{21} = h_1e_0Q_1 = h_1gx' = h_2^2P^2D_1 = h_2e_0R_1 = h_2f_0x' = h_2Ph_2B_4 = h_2iB_2 = d_0^2B_1 = Ph_1B_{23}$
- 16 (1)  $d_0g^3 = d_0r^2 = e_0^2g^2 = kw = lv = mu$
- 19 (1)  $d_0^3l = d_0^2e_0k = d_0^2gj = d_0e_0^2j = d_0e_0gi = d_0mPe_0 = e_0^3i = e_0lPe_0 = e_0mPd_0 = g^2Pj = gkPe_0 = glPd_0$
- 22 (1)  $d_0^2i^2 = d_0rP^2d_0 = d_0jPj = e_0iPj = rPd_0^2 = ijPe_0 = ikPd_0 = j^2Pd_0 = lP^2j = mP^2i = zP^2e_0$
- 25 (1)  $P^4v$
- 28 (1)  $d_0^2P^4d_0 = d_0Pd_0P^3d_0 = d_0P^2d_0^2 = e_0P^5e_0 = gP^5d_0 = Pd_0^2P^2d_0 = Pe_0P^4e_0 = P^2e_0P^3e_0$
- 29 (1)  $h_0d_0^2P^4d_0 = h_0d_0Pd_0P^3d_0 = h_0d_0P^2d_0^2 = h_0e_0P^5e_0 = h_0gP^5d_0 = h_0Pd_0^2P^2d_0 = h_0Pe_0P^4e_0 = h_0P^2e_0P^3e_0 = h_2d_0P^5e_0 = h_2e_0P^5d_0 = h_2Pd_0P^4e_0 = h_2Pe_0P^4d_0 = h_2P^2d_0P^3e_0 = h_2P^2e_0P^3d_0 = d_0e_0P^5h_2 = d_0Ph_2P^4e_0 = d_0Pe_0P^4h_2 = d_0P^2h_2P^3e_0 = d_0P^2e_0P^3h_2 = e_0Ph_2P^4d_0 = e_0Pd_0P^4h_2 = e_0P^2h_2P^3d_0 = e_0P^2d_0P^3h_2 = Ph_2Pd_0P^3e_0 = Ph_2Pe_0P^3d_0 = Ph_2P^2d_0P^2e_0 = Pd_0Pe_0P^3h_2 = Pd_0P^2h_2P^2e_0 = Pe_0P^2h_2P^2d_0$

continued

Stem 74 continued

- 30 (1)  $h_0^2 d_0^2 P^4 d_0 = h_0^2 d_0 P d_0 P^3 d_0 = h_0^2 d_0 P^2 d_0^2 = h_0^2 e_0 P^5 e_0 = h_0^2 g P^5 d_0 =$   
 $h_0^2 P d_0^2 P^2 d_0 = h_0^2 P e_0 P^4 e_0 = h_0^2 P^2 e_0 P^3 e_0 = h_0 h_2 d_0 P^5 e_0 =$   
 $h_0 h_2 e_0 P^5 d_0 = h_0 h_2 P d_0 P^4 e_0 = h_0 h_2 P e_0 P^4 d_0 = h_0 h_2 P^2 d_0 P^3 e_0 =$   
 $h_0 h_2 P^2 e_0 P^3 d_0 = h_0 d_0 e_0 P^5 h_2 = h_0 d_0 P h_2 P^4 e_0 = h_0 d_0 P e_0 P^4 h_2 =$   
 $h_0 d_0 P^2 h_2 P^3 e_0 = h_0 d_0 P^2 e_0 P^3 h_2 = h_0 e_0 P h_2 P^4 d_0 =$   
 $h_0 e_0 P d_0 P^4 h_2 = h_0 e_0 P^2 h_2 P^3 d_0 = h_0 e_0 P^2 d_0 P^3 h_2 =$   
 $h_0 P h_2 P d_0 P^3 e_0 = h_0 P h_2 P e_0 P^3 d_0 = h_0 P h_2 P^2 d_0 P^2 e_0 =$   
 $h_0 P d_0 P e_0 P^3 h_2 = h_0 P d_0 P^2 h_2 P^2 e_0 = h_0 P e_0 P^2 h_2 P^2 d_0 =$   
 $h_2^2 d_0 P^5 d_0 = h_2^2 P d_0 P^4 d_0 = h_2^2 P^2 d_0 P^3 d_0 = h_2 d_0^2 P^5 h_2 =$   
 $h_2 d_0 P h_2 P^4 d_0 = h_2 d_0 P d_0 P^4 h_2 = h_2 d_0 P^2 h_2 P^3 d_0 =$   
 $h_2 d_0 P^2 d_0 P^3 h_2 = h_2 g P^6 h_2 = h_2 P h_2 P d_0 P^3 d_0 = h_2 P h_2 P^2 d_0^2 =$   
 $h_2 P d_0^2 P^3 h_2 = h_2 P d_0 P^2 h_2 P^2 d_0 = h_4 P^7 h_2 = c_0 P^5 j =$   
 $d_0^2 P h_2 P^4 h_2 = d_0^2 P^2 h_2 P^3 h_2 = d_0 P h_2^2 P^3 d_0 = d_0 P h_2 P d_0 P^3 h_2 =$   
 $d_0 P h_2 P^2 h_2 P^2 d_0 = d_0 P d_0 P^2 h_2^2 = g P h_2 P^5 h_2 = g P^2 h_2 P^4 h_2 =$   
 $g P^3 h_2^2 = P h_2^2 P d_0 P^2 d_0 = P h_2 P d_0^2 P^2 h_2 = P c_0 P^4 j = j P^5 c_0 =$   
 $P^2 c_0 P^3 j = P j P^4 c_0 = P^3 c_0 P^2 j$
- 31 (1)  $P^6 j$
- 32 (1)  $h_0 P^6 j = h_2 P^6 i = i P^6 h_2 = P^2 h_2 P^4 i = P^2 i P^4 h_2$
- 33 (1)  $h_0^2 P^6 j = h_0 h_2 P^6 i = h_0 i P^6 h_2 = h_0 P^2 h_2 P^4 i = h_0 P^2 i P^4 h_2 =$   
 $h_1 P^7 e_0 = e_0 P^7 h_1 = P h_1 P^6 e_0 = P e_0 P^6 h_1 = P^2 h_1 P^5 e_0 =$   
 $P^2 e_0 P^5 h_1 = P^3 h_1 P^4 e_0 = P^3 e_0 P^4 h_1$
- 38 (1)  $h_1 P^9 h_1 = P h_1 P^8 h_1 = P^2 h_1 P^7 h_1 = P^3 h_1 P^6 h_1 = P^4 h_1 P^5 h_1$

Stem 75

- 5 (1)  $h_3d_2 = h_5g_2$   
6 (1)  $h_0h_3d_2 = h_0h_5g_2 = h_3^2D_3$   
7 (1)  $x_{7,53}$   
8 (01)  $h_0x_{7,53} = h_3^2A'$   
(11)  $h_4B_3 = c_0Q_3 = d_0D_3$   
9 (01)  $h_0^2x_{7,53} = h_0h_3^2A' = h_1x_{8,51} = e_1x = g_2n$   
(11)  $h_3G_{21}$   
10 (1)  $h_0h_3G_{21} = d_0A = e_0D_2$   
11 (1)  $h_0^2h_3G_{21} = h_0d_0A = h_0e_0D_2 = h_2d_0D_2 = h_3^2X_1 = f_0Q_2 = Ph_2A'' = xy$   
15 (1)  $g^2m = rw$   
18 (10)  $Pd_0x'$   
(01)  $d_0^2e_0r = d_0gz = d_0jm = d_0kl = e_0^2z = e_0im = e_0jl = e_0k^2 = grPe_0 = gil = gjk$   
19 (1)  $h_0Pd_0x' = h_2P^2Q_1 = Ph_2PQ_1 = P^2h_2Q_1$   
20 (1)  $h_0^2Pd_0x' = h_0h_2P^2Q_1 = h_0Ph_2PQ_1 = h_0P^2h_2Q_1 = h_2^2x_{18,20} = h_2P^2h_2x' = Ph_2^2x' = B_2P^3h_2$   
21 (1)  $d_0^2Pu = d_0Pd_0u = e_0P^2v = gP^2u = riPd_0 = i^2k = ij^2 = Pe_0Pv = vP^2e_0 = wP^2d_0 = zPj$   
24 (1)  $d_0^3P^2e_0 = d_0^2e_0P^2d_0 = d_0^2Pd_0Pe_0 = d_0e_0Pd_0^2 = d_0gP^3e_0 = e_0^2P^3e_0 = e_0gP^3d_0 = e_0Pe_0P^2e_0 = gPd_0P^2e_0 = gPe_0P^2d_0 = Pe_0^3$   
27 (1)  $d_0iP^3d_0 = d_0Pd_0P^2i = e_0P^4j = gP^4i = iPd_0P^2d_0 = jP^4e_0 = kP^4d_0 = Pe_0P^3j = PjP^3e_0 = P^2e_0P^2j$   
28 (1)  $h_0d_0iP^3d_0 = h_0d_0Pd_0P^2i = h_0e_0P^4j = h_0gP^4i = h_0iPd_0P^2d_0 = h_0jP^4e_0 = h_0kP^4d_0 = h_0Pe_0P^3j = h_0PjP^3e_0 = h_0P^2e_0P^2j = h_2d_0P^4j = h_2e_0P^4i = h_2iP^4e_0 = h_2jP^4d_0 = h_2Pd_0P^3j = h_2PjP^3d_0 = h_2P^2d_0P^2j = h_2P^2e_0P^2i = d_0Ph_2P^3j = d_0jP^4h_2 = d_0P^2h_2P^2j = d_0PjP^3h_2 = e_0iP^4h_2 = e_0P^2h_2P^2i = f_0P^5e_0 = Ph_2iP^3e_0 = Ph_2jP^3d_0 = Ph_2Pd_0P^2j = Ph_2Pe_0P^2i = Ph_2PjP^2d_0 = iPe_0P^3h_2 = iP^2h_2P^2e_0 = jPd_0P^3h_2 = jP^2h_2P^2d_0 = lP^5h_2 = Pd_0P^2h_2Pj$

continued

Stem 75 continued

$$\begin{aligned}
29 \quad (1) \quad & h_0^2 d_0 i P^3 d_0 = h_0^2 d_0 P d_0 P^2 i = h_0^2 e_0 P^4 j = h_0^2 g P^4 i = \\
& h_0^2 i P d_0 P^2 d_0 = h_0^2 j P^4 e_0 = h_0^2 k P^4 d_0 = h_0^2 P e_0 P^3 j = h_0^2 P j P^3 e_0 = \\
& h_0^2 P^2 e_0 P^2 j = h_0 h_2 d_0 P^4 j = h_0 h_2 e_0 P^4 i = h_0 h_2 i P^4 e_0 = \\
& h_0 h_2 j P^4 d_0 = h_0 h_2 P d_0 P^3 j = h_0 h_2 P j P^3 d_0 = h_0 h_2 P^2 d_0 P^2 j = \\
& h_0 h_2 P^2 e_0 P^2 i = h_0 d_0 P h_2 P^3 j = h_0 d_0 j P^4 h_2 = h_0 d_0 P^2 h_2 P^2 j = \\
& h_0 d_0 P j P^3 h_2 = h_0 e_0 i P^4 h_2 = h_0 e_0 P^2 h_2 P^2 i = h_0 f_0 P^5 e_0 = \\
& h_0 P h_2 i P^3 e_0 = h_0 P h_2 j P^3 d_0 = h_0 P h_2 P d_0 P^2 j = h_0 P h_2 P e_0 P^2 i = \\
& h_0 P h_2 P j P^2 d_0 = h_0 i P e_0 P^3 h_2 = h_0 i P^2 h_2 P^2 e_0 = h_0 j P d_0 P^3 h_2 = \\
& h_0 j P^2 h_2 P^2 d_0 = h_0 l P^5 h_2 = h_0 P d_0 P^2 h_2 P j = h_1 d_0^2 P^4 d_0 = \\
& h_1 d_0 P d_0 P^3 d_0 = h_1 d_0 P^2 d_0^2 = h_1 e_0 P^5 e_0 = h_1 g P^5 d_0 = \\
& h_1 P d_0^2 P^2 d_0 = h_1 P e_0 P^4 e_0 = h_1 P^2 e_0 P^3 e_0 = h_2^2 d_0 P^4 i = h_2^2 i P^4 d_0 = \\
& h_2^2 P^2 d_0 P^2 i = h_2 d_0 i P^4 h_2 = h_2 d_0 P^2 h_2 P^2 i = h_2 f_0 P^5 d_0 = \\
& h_2 P h_2 i P^3 d_0 = h_2 P h_2 P d_0 P^2 i = h_2 i P d_0 P^3 h_2 = h_2 i P^2 h_2 P^2 d_0 = \\
& h_2 k P^5 h_2 = d_0^3 P^4 h_1 = d_0^2 P h_1 P^3 d_0 = d_0^2 P d_0 P^3 h_1 = d_0^2 P^2 h_1 P^2 d_0 = \\
& d_0 f_0 P^5 h_2 = d_0 g P^5 h_1 = d_0 P h_1 P d_0 P^2 d_0 = d_0 P h_2^2 P^2 i = \\
& d_0 P h_2 i P^3 h_2 = d_0 i P^2 h_2^2 = d_0 P d_0^2 P^2 h_1 = e_0^2 P^5 h_1 = e_0 P h_1 P^4 e_0 = \\
& e_0 P e_0 P^4 h_1 = e_0 P^2 h_1 P^3 e_0 = e_0 P^2 e_0 P^3 h_1 = f_0 P h_2 P^4 d_0 = \\
& f_0 P d_0 P^4 h_2 = f_0 P^2 h_2 P^3 d_0 = f_0 P^2 d_0 P^3 h_2 = g P h_1 P^4 d_0 = \\
& g P d_0 P^4 h_1 = g P^2 h_1 P^3 d_0 = g P^2 d_0 P^3 h_1 = P h_1 P d_0^3 = \\
& P h_1 P e_0 P^3 e_0 = P h_1 P^2 e_0^2 = P h_2^2 i P^2 d_0 = P h_2 i P d_0 P^2 h_2 = \\
& P h_2 k P^4 h_2 = k P^2 h_2 P^3 h_2 = P e_0^2 P^3 h_1 = P e_0 P^2 h_1 P^2 e_0 \\
37 \quad (1) \quad & P^9 h_2 \\
38 \quad (1) \quad & h_0 P^9 h_2 \\
39 \quad (1) \quad & h_0^2 P^9 h_2 = h_1^2 P^9 h_1 = h_1 P h_1 P^8 h_1 = h_1 P^2 h_1 P^7 h_1 = \\
& h_1 P^3 h_1 P^6 h_1 = h_1 P^4 h_1 P^5 h_1 = P h_1^2 P^7 h_1 = P h_1 P^2 h_1 P^6 h_1 = \\
& P h_1 P^3 h_1 P^5 h_1 = P h_1 P^4 h_1^2 = P^2 h_1^2 P^5 h_1 = P^2 h_1 P^3 h_1 P^4 h_1 = \\
& P^3 h_1^3
\end{aligned}$$

Stem 76

- 5 (1)  $h_4D_3$   
6 (1)  $x_{6,53}$   
7 (10)  $h_3^2H_1 = h_4A'$   
(01)  $h_0x_{6,53}$   
(11)  $h_4A$   
8 (10)  $h_1x_{7,53} = d_1g_2 = e_1^2$   
(01)  $h_0^2x_{6,53} = h_0h_4A = h_2h_4D_2$   
9 (10)  $x_{9,51}$   
(01)  $h_0^3x_{6,53} = h_0^2h_4A = h_0h_2h_4D_2 = h_1h_4B_3 = h_1c_0Q_3 = h_1d_0D_3 =$   
 $h_3PD_3 = h_4^2B_1$   
10 (1)  $h_0x_{9,51} = h_1h_3G_{21} = h_3^2x_{8,32} = c_1Q_2 = f_0D_2 = e_1y = g_2q =$   
 $Ph_1Q_3$   
14 (01)  $d_0x_{10,27} = d_0x_{10,28} = e_0B_{21} = gQ_1$   
(11)  $g^2t = nw = rN$   
15 (1)  $h_0d_0x_{10,27} = h_0d_0x_{10,28} = h_0e_0B_{21} = h_0gQ_1 = h_2d_0B_{21} =$   
 $h_2e_0Q_1 = h_2gx' = d_0^2B_2 = Ph_2B_{23}$   
16 (1)  $x_{16,32}$   
17 (010)  $d_0e_0w = d_0gv = d_0rl = e_0^2v = e_0gu = e_0rk = grj = mz$   
(110)  $ix'$   
(001)  $h_0x_{16,32}$   
18 (10)  $h_0ix'$   
(01)  $h_0^2x_{16,32}$   
(11)  $h_2PR_2 = Ph_2R_2 = Pd_0R_1$   
19 (10)  $h_0^2ix'$   
(01)  $h_0^3x_{16,32} = h_3x_{18,20}$   
(11)  $h_0h_2PR_2 = h_0Ph_2R_2 = h_0Pd_0R_1 = h_1Pd_0x' = h_2^2R_1 =$   
 $d_0Ph_1x' = B_1P^2d_0 = P^2h_1B_{21}$   
20 (10)  $d_0^4g = d_0^3e_0^2 = d_0e_0gPe_0 = d_0g^2Pd_0 = d_0iu = e_0^3Pe_0 = e_0^2gPd_0 =$   
 $jPv = kPu = vPj$   
(01)  $h_0^4x_{16,32} = h_0^3ix' = h_0h_3x_{18,20} = xP^2i$   
(11)  $ri^2$   
21 (1)  $h_0^5x_{16,32} = h_0^4ix' = h_0^2h_3x_{18,20} = h_0xP^2i = h_0ri^2$   
22 (1)  $h_0^6x_{16,32} = h_0^5ix' = h_0^3h_3x_{18,20} = h_0^2xP^2i = h_0^2ri^2 = h_3rP^2i = h_3i^3$   
23 (1)  $d_0^3Pj = d_0^2iPe_0 = d_0^2jPd_0 = d_0e_0iPd_0 = d_0gP^2j = d_0kP^2e_0 =$   
 $d_0lP^2d_0 = e_0^2P^2j = e_0gP^2i = e_0jP^2e_0 = e_0kP^2d_0 = e_0Pe_0Pj =$   
 $giP^2e_0 = gjP^2d_0 = gPd_0Pj = jPe_0^2 = kPd_0Pe_0 = lPd_0^2 =$   
 $mP^3e_0$   
26 (1)  $d_0iP^2i = rP^4d_0 = i^2P^2d_0 = jP^3j = PjP^2j$

continued



Stem 76 continued

- 32 (1)  $d_0 P^6 d_0 = P d_0 P^5 d_0 = P^2 d_0 P^4 d_0 = P^3 d_0^2$
- 33 (1)  $h_0 d_0 P^6 d_0 = h_0 P d_0 P^5 d_0 = h_0 P^2 d_0 P^4 d_0 = h_0 P^3 d_0^2 = h_2 P^7 e_0 = e_0 P^7 h_2 = P h_2 P^6 e_0 = P e_0 P^6 h_2 = P^2 h_2 P^5 e_0 = P^2 e_0 P^5 h_2 = P^3 h_2 P^4 e_0 = P^3 e_0 P^4 h_2$
- 34 (1)  $h_0^2 d_0 P^6 d_0 = h_0^2 P d_0 P^5 d_0 = h_0^2 P^2 d_0 P^4 d_0 = h_0^2 P^3 d_0^2 = h_0 h_2 P^7 e_0 = h_0 e_0 P^7 h_2 = h_0 P h_2 P^6 e_0 = h_0 P e_0 P^6 h_2 = h_0 P^2 h_2 P^5 e_0 = h_0 P^2 e_0 P^5 h_2 = h_0 P^3 h_2 P^4 e_0 = h_0 P^3 e_0 P^4 h_2 = h_2^2 P^7 d_0 = h_2 d_0 P^7 h_2 = h_2 P h_2 P^6 d_0 = h_2 P d_0 P^6 h_2 = h_2 P^2 h_2 P^5 d_0 = h_2 P^2 d_0 P^5 h_2 = h_2 P^3 h_2 P^4 d_0 = h_2 P^3 d_0 P^4 h_2 = d_0 P h_2 P^6 h_2 = d_0 P^2 h_2 P^5 h_2 = d_0 P^3 h_2 P^4 h_2 = P h_2^2 P^5 d_0 = P h_2 P d_0 P^5 h_2 = P h_2 P^2 h_2 P^4 d_0 = P h_2 P^2 d_0 P^4 h_2 = P h_2 P^3 h_2 P^3 d_0 = P d_0 P^2 h_2 P^4 h_2 = P d_0 P^3 h_2^2 = P^2 h_2^2 P^3 d_0 = P^2 h_2 P^2 d_0 P^3 h_2$

Stem 77

- 3 (1)  $h_3^2 h_6$   
4 (1)  $h_0 h_3^2 h_6$   
5 (1)  $h_6 d_0$   
6 (10)  $h_1 h_4 D_3$   
(01)  $h_0 h_6 d_0$   
7 (0100)  $x_{7,57}$   
(0010)  $h_1 x_{6,53}$   
(1010)  $m_1$   
(0001)  $h_0^2 h_6 d_0 = h_2 h_6 P h_2$   
8 (100)  $x_{8,57}$   
(001)  $h_0 x_{7,57}$   
(011)  $h_0 m_1 = p g_2$   
9 (01)  $h_0^2 x_{7,57}$   
(11)  $h_0^2 m_1 = h_0 p g_2 = h_1^2 x_{7,53} = h_1 d_1 g_2 = h_1 e_1^2 = h_2 x_{8,51} = h_3^2 x_{7,33} =$   
 $h_3 d_1 e_1 = h_4 x_{8,33} = h_5 N = f_1 x$   
10 (1)  $h_0^3 x_{7,57}$   
11 (10)  $g Q_2$   
(01)  $h_0^4 x_{7,57} = h_4 x_{10,27}$   
12 (10)  $P^2 D_3$   
(01)  $h_0^5 x_{7,57} = h_0 h_4 x_{10,27}$   
13 (10)  $e_0 B_4$   
(01)  $h_0^6 x_{7,57} = h_0^2 h_4 x_{10,27}$   
14 (10)  $h_0 e_0 B_4 = h_2 d_0 B_4 = f_0 B_{21} = k B_2$   
(01)  $h_0^7 x_{7,57} = h_0^3 h_4 x_{10,27}$   
15 (1)  $h_0^2 e_0 B_4 = h_0 h_2 d_0 B_4 = h_0 f_0 B_{21} = h_0 k B_2 = h_1 d_0 x_{10,27} =$   
 $h_1 d_0 x_{10,28} = h_1 e_0 B_{21} = h_1 g Q_1 = h_2^2 x_{13,35} = h_2 f_0 Q_1 = h_2 g R_1 =$   
 $h_2 j B_2 = d_0 e_0 B_1 = P h_2 B_5 = P h_2 P D_2 = D_2 P^2 h_2$   
16 (10)  $x_{16,33}$   
(01)  $e_0 g^3 = e_0 r^2 = l w = m v$   
17 (10)  $h_1 x_{16,32}$   
(01)  $h_0 x_{16,33} = i R_1$   
18 (1)  $h_0^2 x_{16,33} = h_0 i R_1 = h_3 R_1$   
19 (10)  $d_0^3 m = d_0^2 e_0 l = d_0^2 g k = d_0 e_0^2 k = d_0 e_0 g j = d_0 g^2 i = e_0^3 j = e_0^2 g i =$   
 $e_0 m P e_0 = g l P e_0 = g m P d_0 = r P u$   
(01)  $h_0^3 x_{16,33} = h_0^2 i R_1 = h_0 h_3 R_1 = r Q$   
20 (1)  $h_0^4 x_{16,33} = h_0^3 i R_1 = h_0^2 h_3 R_1 = h_0 r Q$   
21 (1)  $h_0^5 x_{16,33} = h_0^4 i R_1 = h_0^3 h_3 R_1 = h_0^2 r Q = h_3 i Q = c_0 x_{18,20} = y P^2 i =$   
 $x' P^2 c_0$   
22 (1)  $d_0^2 i j = d_0 e_0 i^2 = d_0 r P^2 e_0 = d_0 k P j = d_0 P d_0 z = e_0 r P^2 d_0 =$   
 $e_0 j P j = g i P j = r P d_0 P e_0 = i k P e_0 = i l P d_0 = j^2 P e_0 = j k P d_0 =$   
 $m P^2 j$

continued

Stem 77 continued

- 25 (1)  $d_0 P^3 u = P d_0 P^2 u = u P^3 d_0 = P^2 d_0 P u$
- 28 (1)  $d_0^2 P^4 e_0 = d_0 e_0 P^4 d_0 = d_0 P d_0 P^3 e_0 = d_0 P e_0 P^3 d_0 = d_0 P^2 d_0 P^2 e_0 =$   
 $e_0 P d_0 P^3 d_0 = e_0 P^2 d_0^2 = g P^5 e_0 = P d_0^2 P^2 e_0 = P d_0 P e_0 P^2 d_0$
- 31 (1)  $i P^5 d_0 = P d_0 P^4 i = P^2 i P^3 d_0$
- 32 (1)  $h_0 i P^5 d_0 = h_0 P d_0 P^4 i = h_0 P^2 i P^3 d_0 = h_2 P^6 j = P h_2 P^5 j =$   
 $j P^6 h_2 = P^2 h_2 P^4 j = P j P^5 h_2 = P^3 h_2 P^3 j = P^2 j P^4 h_2$
- 33 (1)  $h_0^2 i P^5 d_0 = h_0^2 P d_0 P^4 i = h_0^2 P^2 i P^3 d_0 = h_0 h_2 P^6 j = h_0 P h_2 P^5 j =$   
 $h_0 j P^6 h_2 = h_0 P^2 h_2 P^4 j = h_0 P j P^5 h_2 = h_0 P^3 h_2 P^3 j =$   
 $h_0 P^2 j P^4 h_2 = h_1 d_0 P^6 d_0 = h_1 P d_0 P^5 d_0 = h_1 P^2 d_0 P^4 d_0 =$   
 $h_1 P^3 d_0^2 = h_2^2 P^6 i = h_2 i P^6 h_2 = h_2 P^2 h_2 P^4 i = h_2 P^2 i P^4 h_2 =$   
 $d_0^2 P^6 h_1 = d_0 P h_1 P^5 d_0 = d_0 P d_0 P^5 h_1 = d_0 P^2 h_1 P^4 d_0 =$   
 $d_0 P^2 d_0 P^4 h_1 = d_0 P^3 h_1 P^3 d_0 = f_0 P^7 h_2 = g P^7 h_1 =$   
 $P h_1 P d_0 P^4 d_0 = P h_1 P^2 d_0 P^3 d_0 = P h_2^2 P^4 i = P h_2 i P^5 h_2 =$   
 $P h_2 P^3 h_2 P^2 i = i P^2 h_2 P^4 h_2 = i P^3 h_2^2 = P d_0^2 P^4 h_1 =$   
 $P d_0 P^2 h_1 P^3 d_0 = P d_0 P^2 d_0 P^3 h_1 = P^2 h_1 P^2 d_0^2 = P^2 h_2^2 P^2 i$

Stem 78

- 2 (1)  $h_4h_6$   
3 (1)  $h_0h_4h_6$   
4 (1)  $h_0^2h_4h_6$   
5 (1)  $h_0^3h_4h_6$   
6 (010)  $h_1h_6d_0$   
(110)  $t_1$   
(001)  $h_0^4h_4h_6$   
7 (10)  $h_0t_1 = h_3x_{6,47}$   
(01)  $h_0^5h_4h_6$   
8 (100)  $h_4x_{7,33} = h_4x_{7,34}$   
(001)  $h_0^6h_4h_6$   
(011)  $h_0^2t_1 = h_0h_3x_{6,47} = h_1m_1 = h_1x_{7,57} = h_3^2A'' = c_2x = e_0D_3 = e_1f_1$   
(111)  $h_1^2x_{6,53}$   
9 (10)  $x_{9,55}$   
(01)  $h_0^7h_4h_6$   
10 (01)  $e_0A' = e_0A = gD_2$   
(11)  $P^2h_5^2$   
11 (1)  $h_0P^2h_5^2$   
12 (1)  $h_0^2P^2h_5^2$   
13 (10)  $h_1P^2D_3 = e_0X_1 = f_0B_4 = D_3P^2h_1 = Ph_1PD_3 = rB_2 = qB_1$   
(01)  $h_0^3P^2h_5^2$   
18 (010)  $d_0^2gr = d_0e_0^2r = d_0km = d_0l^2 = e_0gz = e_0jm = e_0kl = gim = gjl = gk^2$   
(110)  $d_0PQ_1 = Pd_0Q_1$   
(001)  $h_1^2x_{16,32} = Ph_1W_1 = P^2h_1X_1$   
(011)  $u^2$   
(111)  $Pe_0x'$   
19 (1)  $h_0d_0PQ_1 = h_0Pd_0Q_1 = h_0Pe_0x' = h_2Pd_0x' = d_0Ph_2x' = B_2P^2d_0 = P^2h_2B_{21}$   
20 (1)  $h_0^2d_0PQ_1 = h_0^2Pd_0Q_1 = h_0^2Pe_0x' = h_0h_2Pd_0x' = h_0d_0Ph_2x' = h_0B_2P^2d_0 = h_0P^2h_2B_{21} = h_2^2P^2Q_1 = h_2Ph_2PQ_1 = h_2P^2h_2Q_1 = c_0R_1 = Ph_2^2Q_1$   
21 (1)  $d_0^2Pv = d_0e_0Pu = d_0rPj = d_0iz = d_0Pd_0v = d_0Pe_0u = e_0Pd_0u = gP^2v = riPe_0 = rjPd_0 = i^2l = ijk = j^3 = wP^2e_0$   
23 (1)  $Ph_1x_{18,20} = x'P^3h_1$   
24 (1)  $d_0^4Pd_0 = d_0^2e_0P^2e_0 = d_0^2gP^2d_0 = d_0^2Pe_0^2 = d_0e_0^2P^2d_0 = d_0e_0Pd_0Pe_0 = d_0gPd_0^2 = e_0^2Pd_0^2 = e_0gP^3e_0 = g^2P^3d_0 = gPe_0P^2e_0 = iP^2u = uP^2i$   
27 (1)  $d_0^2P^3j = d_0iP^3e_0 = d_0jP^3d_0 = d_0Pd_0P^2j = d_0Pe_0P^2i = d_0PjP^2d_0 = e_0iP^3d_0 = e_0Pd_0P^2i = gP^4j = iPd_0P^2e_0 = iPe_0P^2d_0 = jPd_0P^2d_0 = kP^4e_0 = lP^4d_0 = Pd_0^2Pj$

continued

Stem 78 continued

- 30 (1)  $iP^4i = P^2i^2$
- 31 (1)  $h_0iP^4i = h_0P^2i^2$
- 32 (1)  $h_0^2iP^4i = h_0^2P^2i^2 = h_3P^6i$
- 33 (1)  $h_0^3iP^4i = h_0^3P^2i^2 = h_0h_3P^6i$
- 34 (1)  $h_0^4iP^4i = h_0^4P^2i^2 = h_0^2h_3P^6i$
- 35 (1)  $h_0^5iP^4i = h_0^5P^2i^2 = h_0^3h_3P^6i = c_0P^7d_0 = d_0P^7c_0 = Pc_0P^6d_0 = Pd_0P^6c_0 = P^2c_0P^5d_0 = P^2d_0P^5c_0 = P^3c_0P^4d_0 = P^3d_0P^4c_0$
- 36 (1)  $P^8d_0$
- 37 (1)  $h_0P^8d_0$
- 38 (1)  $h_0^2P^8d_0 = h_2P^9h_2 = Ph_2P^8h_2 = P^2h_2P^7h_2 = P^3h_2P^6h_2 = P^4h_2P^5h_2$

Stem 79

- 3 (1)  $h_1h_4h_6$   
5 (1)  $x_1$   
6 (1)  $h_0x_1 = h_2h_4D_3 = h_5^2e_0$   
7 (01)  $h_1^2h_6d_0 = h_3h_6Ph_1 = h_6c_0^2$   
(11)  $h_2x_{6,53} = h_4A''$   
8 (10)  $h_6Pc_0$   
(01)  $h_0h_2x_{6,53} = h_0h_4A'' = h_2h_4A$   
9 (1)  $h_0^2h_2x_{6,53} = h_0^2h_4A'' = h_0h_2h_4A = h_1^3x_{6,53} = h_1h_4x_{7,33} =$   
 $h_1h_4x_{7,34} = h_2^2h_4D_2 = h_3^3D_2 = c_0x_{6,47} = c_2y = e_0H_1 = d_2Ph_2 =$   
 $p_1Ph_1$   
10 (1)  $h_1x_{9,55} = h_2x_{9,51} = f_0A' = f_0A$   
11 (1)  $h_1P^2h_5^2 = h_4x_{10,32}$   
13 (1)  $x_{13,42}$   
14 (1)  $d_0B_{23} = e_0x_{10,27} = e_0x_{10,28} = gB_{21}$   
15 (1)  $h_0d_0B_{23} = h_0e_0x_{10,27} = h_0e_0x_{10,28} = h_0gB_{21} = h_2d_0x_{10,27} =$   
 $h_2d_0x_{10,28} = h_2e_0B_{21} = h_2gQ_1 = h_4PQ_1 = d_0e_0B_2 = Q_2Pd_0$
- 16 (1)  $x_{16,35}$   
17 (010)  $d_0gw = d_0rm = e_0^2w = e_0gv = e_0rl = g^2u = grk$   
(110)  $d_0R_2$   
(001)  $h_0x_{16,35} = h_2x_{16,32}$   
(111)  $iQ_1 = jx'$   
18 (10)  $h_0d_0R_2 = Ph_2P^2D_1 = Pe_0R_1$   
(01)  $h_0^2x_{16,35} = h_0h_2x_{16,32}$   
(11)  $h_0iQ_1 = h_0jx' = h_2ix' = P^2h_2B_4$   
19 (10)  $h_0^2d_0R_2 = h_0Ph_2P^2D_1 = h_0Pe_0R_1 = h_1d_0PQ_1 = h_1Pd_0Q_1 =$   
 $h_2^2PR_2 = h_2Ph_2R_2 = h_2Pd_0R_1 = d_0Ph_1Q_1 = d_0Ph_2R_1 =$   
 $P^2h_1x_{10,27}$   
(01)  $h_0^3x_{16,35} = h_0^2h_2x_{16,32} = h_1^3x_{16,32} = h_1Ph_1W_1 = h_1P^2h_1X_1 =$   
 $h_1u^2 = h_3P^2Q_1 = Ph_1^2X_1 = qQ = qPu = GP^3h_1$   
(11)  $h_0^2iQ_1 = h_0^2jx' = h_0h_2ix' = h_0P^2h_2B_4 = h_1Pe_0x' = e_0Ph_1x' =$   
 $B_1P^2e_0 = P^2h_1x_{10,28}$   
20 (1)  $d_0^3e_0g = d_0^2e_0^3 = d_0g^2Pe_0 = d_0iv = d_0ju = e_0^2gPe_0 = e_0g^2Pd_0 =$   
 $e_0iu = rij = kPv = lPu = wPj$   
23 (1)  $d_0^4i = d_0^2e_0Pj = d_0^2jPe_0 = d_0^2kPd_0 = d_0e_0iPe_0 = d_0e_0jPd_0 =$   
 $d_0giPd_0 = d_0lP^2e_0 = d_0mP^2d_0 = e_0^2iPd_0 = e_0gP^2j = e_0kP^2e_0 =$   
 $e_0lP^2d_0 = g^2P^2i = gjP^2e_0 = gkP^2d_0 = gPe_0Pj = kPe_0^2 =$   
 $lPd_0Pe_0 = mPd_0^2$   
24 (1)  $h_1Ph_1x_{18,20} = h_1x'P^3h_1 = Ph_1P^2h_1x' = B_1P^4h_1$

continued

Stem 79 continued

- 26 (1)  $d_0iP^2j = d_0jP^2i = e_0iP^2i = rP^4e_0 = i^2P^2e_0 = ijP^2d_0 = iPd_0Pj = kP^3j = zP^3d_0$
- 29 (01)  $P^5u$   
 (11)  $P^4Q$
- 30 (1)  $h_0P^4Q$
- 31 (1)  $h_0^2P^4Q$
- 32 (01)  $h_0^3P^4Q$   
 (11)  $d_0P^6e_0 = e_0P^6d_0 = Pd_0P^5e_0 = Pe_0P^5d_0 = P^2d_0P^4e_0 = P^2e_0P^4d_0 = P^3d_0P^3e_0$
- 33 (01)  $h_0^4P^4Q$   
 (11)  $h_0d_0P^6e_0 = h_0e_0P^6d_0 = h_0Pd_0P^5e_0 = h_0Pe_0P^5d_0 = h_0P^2d_0P^4e_0 = h_0P^2e_0P^4d_0 = h_0P^3d_0P^3e_0 = h_2d_0P^6d_0 = h_2Pd_0P^5d_0 = h_2P^2d_0P^4d_0 = h_2P^3d_0^2 = d_0^2P^6h_2 = d_0Ph_2P^5d_0 = d_0Pd_0P^5h_2 = d_0P^2h_2P^4d_0 = d_0P^2d_0P^4h_2 = d_0P^3h_2P^3d_0 = gP^7h_2 = Ph_2Pd_0P^4d_0 = Ph_2P^2d_0P^3d_0 = Pd_0^2P^4h_2 = Pd_0P^2h_2P^3d_0 = Pd_0P^2d_0P^3h_2 = P^2h_2P^2d_0^2$
- 34 (01)  $h_0^5P^4Q$   
 (11)  $h_0^2d_0P^6e_0 = h_0^2e_0P^6d_0 = h_0^2Pd_0P^5e_0 = h_0^2Pe_0P^5d_0 = h_0^2P^2d_0P^4e_0 = h_0^2P^2e_0P^4d_0 = h_0^2P^3d_0P^3e_0 = h_0h_2d_0P^6d_0 = h_0h_2Pd_0P^5d_0 = h_0h_2P^2d_0P^4d_0 = h_0h_2P^3d_0^2 = h_0d_0^2P^6h_2 = h_0d_0Ph_2P^5d_0 = h_0d_0Pd_0P^5h_2 = h_0d_0P^2h_2P^4d_0 = h_0d_0P^2d_0P^4h_2 = h_0d_0P^3h_2P^3d_0 = h_0gP^7h_2 = h_0Ph_2Pd_0P^4d_0 = h_0Ph_2P^2d_0P^3d_0 = h_0Pd_0^2P^4h_2 = h_0Pd_0P^2h_2P^3d_0 = h_0Pd_0P^2d_0P^3h_2 = h_0P^2h_2P^2d_0^2 = h_2^2P^7e_0 = h_2e_0P^7h_2 = h_2Ph_2P^6e_0 = h_2Pe_0P^6h_2 = h_2P^2h_2P^5e_0 = h_2P^2e_0P^5h_2 = h_2P^3h_2P^4e_0 = h_2P^3e_0P^4h_2 = c_0P^6i = e_0Ph_2P^6h_2 = e_0P^2h_2P^5h_2 = e_0P^3h_2P^4h_2 = Ph_2^2P^5e_0 = Ph_2Pe_0P^5h_2 = Ph_2P^2h_2P^4e_0 = Ph_2P^2e_0P^4h_2 = Ph_2P^3h_2P^3e_0 = iP^6c_0 = Pe_0P^2h_2P^4h_2 = Pe_0P^3h_2^2 = P^2h_2^2P^3e_0 = P^2h_2P^2e_0P^3h_2 = P^2c_0P^4i = P^2iP^4c_0$
- 35 (1)  $h_0^6P^4Q$
- 36 (1)  $h_0^7P^4Q$
- 37 (10)  $h_1P^8d_0 = d_0P^8h_1 = Ph_1P^7d_0 = Pd_0P^7h_1 = P^2h_1P^6d_0 = P^2d_0P^6h_1 = P^3h_1P^5d_0 = P^3d_0P^5h_1 = P^4h_1P^4d_0$   
 (01)  $h_0^8P^4Q$
- 38 (1)  $h_0^9P^4Q$
- 39 (1)  $h_0^{10}P^4Q$

Stem 80

- 4 (01)  $h_1^2 h_4 h_6$   
 (11)  $e_2$
- 5 (10)  $h_6 e_0$   
 (01)  $h_0 e_2$
- 6 (01)  $h_0^2 e_2 = h_1 x_1$   
 (11)  $h_0 h_6 e_0 = h_2 h_6 d_0$
- 7 (1)  $h_0^2 h_6 e_0 = h_0 h_2 h_6 d_0$
- 8 (1)  $h_0^3 h_6 e_0 = h_0^2 h_2 h_6 d_0 = h_1^3 h_6 d_0 = h_1 h_3 h_6 P h_1 = h_1 h_6 c_0^2 = h_2^2 h_6 P h_2$
- 9 (10)  $h_2 x_{8,57} = c_1 A' = c_1 A = f_0 H_1$   
 (01)  $h_1 h_6 P c_0 = h_6 c_0 P h_1$
- 10 (1)  $h_6 P^2 h_1$
- 12 (1)  $x_{12,44}$
- 13 (1)  $g B_4$
- 14 (10)  $x_{14,42}$   
 (01)  $h_0 g B_4 = h_2 e_0 B_4 = h_4 R_2 = d_0 B_5 = d_0 P D_2 = f_0 x_{10,27} = f_0 x_{10,28} = D_2 P d_0 = i Q_2 = l B_2$
- 15 (1)  $h_0^2 g B_4 = h_0 h_2 e_0 B_4 = h_0 h_4 R_2 = h_0 d_0 B_5 = h_0 d_0 P D_2 = h_0 f_0 x_{10,27} = h_0 f_0 x_{10,28} = h_0 D_2 P d_0 = h_0 i Q_2 = h_0 l B_2 = h_1 d_0 B_{23} = h_1 e_0 x_{10,27} = h_1 e_0 x_{10,28} = h_1 g B_{21} = h_2^2 d_0 B_4 = h_2 f_0 B_{21} = h_2 k B_2 = d_0 f_0 B_2 = d_0 g B_1 = e_0^2 B_1 = P h_2 P A = A P^2 h_2$
- 16 (10)  $g^4 = g r^2 = m w$   
 (01)  $x_{16,37}$
- 17 (1)  $h_0 x_{16,37} = h_1 x_{16,35} = h_2 x_{16,33} = j R_1$
- 19 (1)  $d_0^2 e_0 m = d_0^2 g l = d_0 e_0^2 l = d_0 e_0 g k = d_0 g^2 j = e_0^3 k = e_0^2 g j = e_0 g^2 i = g m P e_0 = r P v = u z$
- 22 (10)  $P^3 Q_1$   
 (01)  $d_0^2 r P d_0 = d_0^2 i k = d_0^2 j^2 = d_0 e_0 i j = d_0 g i^2 = d_0 l P j = d_0 P e_0 z = e_0^2 i^2 = e_0 r P^2 e_0 = e_0 k P j = e_0 P d_0 z = g r P^2 d_0 = g j P j = r P e_0^2 = i l P e_0 = i m P d_0 = j k P e_0 = j l P d_0 = k^2 P d_0$
- 23 (1)  $h_0 P^3 Q_1 = P h_2 x_{18,20} = x' P^3 h_2$
- 24 (1)  $h_0^2 P^3 Q_1 = h_0 P h_2 x_{18,20} = h_0 x' P^3 h_2$
- 25 (10)  $d_0 P^3 v = P d_0 P^2 v = v P^3 d_0 = P^2 d_0 P v$   
 (01)  $h_0^3 P^3 Q_1 = h_0^2 P h_2 x_{18,20} = h_0^2 x' P^3 h_2 = h_1^2 P h_1 x_{18,20} = h_1^2 x' P^3 h_1 = h_1 P h_1 P^2 h_1 x' = h_1 B_1 P^4 h_1 = P h_1^3 x' = P h_1 B_1 P^3 h_1 = B_1 P^2 h_1^2 = P^2 e_0 Q$
- (11)  $e_0 P^3 u = r P^3 j = i^2 P j = P e_0 P^2 u = u P^3 e_0 = z P^2 i = P^2 e_0 P u$
- 28 (1)  $d_0^3 P^3 d_0 = d_0^2 P d_0 P^2 d_0 = d_0 e_0 P^4 e_0 = d_0 g P^4 d_0 = d_0 P d_0^3 = d_0 P e_0 P^3 e_0 = d_0 P^2 e_0^2 = e_0^2 P^4 d_0 = e_0 P d_0 P^3 e_0 = e_0 P e_0 P^3 d_0 = e_0 P^2 d_0 P^2 e_0 = g P d_0 P^3 d_0 = g P^2 d_0^2 = P d_0 P e_0 P^2 e_0 = P e_0^2 P^2 d_0$

continued



Stem 80 continued

- 30 (1)  $h_1P^4Q = h_1P^5u = Ph_1P^4u = P^2h_1P^3u = uP^5h_1 = P^3h_1P^2u = QP^4h_1 = PuP^4h_1$
- 31 (1)  $d_0P^5j = iP^5e_0 = jP^5d_0 = Pd_0P^4j = Pe_0P^4i = PjP^4d_0 = P^2d_0P^3j = P^2iP^3e_0 = P^2jP^3d_0$
- 32 (1)  $h_0d_0P^5j = h_0iP^5e_0 = h_0jP^5d_0 = h_0Pd_0P^4j = h_0Pe_0P^4i = h_0PjP^4d_0 = h_0P^2d_0P^3j = h_0P^2iP^3e_0 = h_0P^2jP^3d_0 = h_2iP^5d_0 = h_2Pd_0P^4i = h_2P^2iP^3d_0 = d_0Ph_2P^4i = d_0iP^5h_2 = d_0P^3h_2P^2i = f_0P^6d_0 = Ph_2iP^4d_0 = Ph_2P^2d_0P^2i = iPd_0P^4h_2 = iP^2h_2P^3d_0 = iP^2d_0P^3h_2 = kP^6h_2 = Pd_0P^2h_2P^2i$
- 33 (1)  $h_0^2d_0P^5j = h_0^2iP^5e_0 = h_0^2jP^5d_0 = h_0^2Pd_0P^4j = h_0^2Pe_0P^4i = h_0^2PjP^4d_0 = h_0^2P^2d_0P^3j = h_0^2P^2iP^3e_0 = h_0^2P^2jP^3d_0 = h_0h_2iP^5d_0 = h_0h_2Pd_0P^4i = h_0h_2P^2iP^3d_0 = h_0d_0Ph_2P^4i = h_0d_0iP^5h_2 = h_0d_0P^3h_2P^2i = h_0f_0P^6d_0 = h_0Ph_2iP^4d_0 = h_0Ph_2P^2d_0P^2i = h_0iPd_0P^4h_2 = h_0iP^2h_2P^3d_0 = h_0iP^2d_0P^3h_2 = h_0kP^6h_2 = h_0Pd_0P^2h_2P^2i = h_1d_0P^6e_0 = h_1e_0P^6d_0 = h_1Pd_0P^5e_0 = h_1Pe_0P^5d_0 = h_1P^2d_0P^4e_0 = h_1P^2e_0P^4d_0 = h_1P^3d_0P^3e_0 = h_2^2P^6j = h_2Ph_2P^5j = h_2jP^6h_2 = h_2P^2h_2P^4j = h_2PjP^5h_2 = h_2P^3h_2P^3j = h_2P^2jP^4h_2 = d_0e_0P^6h_1 = d_0Ph_1P^5e_0 = d_0Pe_0P^5h_1 = d_0P^2h_1P^4e_0 = d_0P^2e_0P^4h_1 = d_0P^3h_1P^3e_0 = e_0Ph_1P^5d_0 = e_0Pd_0P^5h_1 = e_0P^2h_1P^4d_0 = e_0P^2d_0P^4h_1 = e_0P^3h_1P^3d_0 = Ph_1Pd_0P^4e_0 = Ph_1Pe_0P^4d_0 = Ph_1P^2d_0P^3e_0 = Ph_1P^2e_0P^3d_0 = Ph_2^2P^4j = Ph_2jP^5h_2 = Ph_2P^2h_2P^3j = Ph_2PjP^4h_2 = Ph_2P^3h_2P^2j = jP^2h_2P^4h_2 = jP^3h_2^2 = Pd_0Pe_0P^4h_1 = Pd_0P^2h_1P^3e_0 = Pd_0P^2e_0P^3h_1 = Pe_0P^2h_1P^3d_0 = Pe_0P^2d_0P^3h_1 = P^2h_1P^2d_0P^2e_0 = P^2h_2^2P^2j = P^2h_2PjP^3h_2$
- 38 (1)  $h_1^2P^8d_0 = h_1d_0P^8h_1 = h_1Ph_1P^7d_0 = h_1Pd_0P^7h_1 = h_1P^2h_1P^6d_0 = h_1P^2d_0P^6h_1 = h_1P^3h_1P^5d_0 = h_1P^3d_0P^5h_1 = h_1P^4h_1P^4d_0 = h_3P^9h_1 = c_0P^8c_0 = d_0Ph_1P^7h_1 = d_0P^2h_1P^6h_1 = d_0P^3h_1P^5h_1 = d_0P^4h_1^2 = Ph_1^2P^6d_0 = Ph_1Pd_0P^6h_1 = Ph_1P^2h_1P^5d_0 = Ph_1P^2d_0P^5h_1 = Ph_1P^3h_1P^4d_0 = Ph_1P^3d_0P^4h_1 = Pc_0P^7c_0 = Pd_0P^2h_1P^5h_1 = Pd_0P^3h_1P^4h_1 = P^2h_1^2P^4d_0 = P^2h_1P^2d_0P^4h_1 = P^2h_1P^3h_1P^3d_0 = P^2c_0P^6c_0 = P^2d_0P^3h_1^2 = P^3c_0P^5c_0 = P^4c_0^2$
- 39 (1)  $P^9c_0$

Stem 81

- 3 (1)  $h_2h_4h_6$   
4 (1)  $h_0h_2h_4h_6$   
5 (10)  $h_6f_0$   
(01)  $h_0^2h_2h_4h_6 = h_1^3h_4h_6$   
6 (1)  $h_0h_6f_0 = h_1h_6e_0$   
7 (1)  $h_2t_1 = h_3^2r_1 = h_4r_1 = c_2f_1$   
8 (1)  $h_4x_{7,40} = c_1H_1 = gD_3$   
9 (1)  $h_3x_{8,51} = d_0Q_3 = g_2x$   
10 (10)  $gA'$   
(01)  $h_0h_3x_{8,51} = h_0d_0Q_3 = h_0g_2x = h_2x_{9,55} = e_0A''$   
(11)  $gA$   
11 (10)  $h_1h_6P^2h_1 = h_6Ph_1^2$   
(01)  $h_0gA' = h_0gA = h_2e_0A' = h_2e_0A = h_2gD_2 = h_4B_5 = h_4PD_2 =$   
 $c_1x_{8,32} = c_1x_{8,33} = f_0x_{7,34} = nC$   
12 (1)  $x_{12,45}$   
13 (1)  $h_0x_{12,45} = h_1x_{12,44}$   
15 (10)  $gnr = tw = mN$   
(01)  $h_1x_{14,42}$   
18 (01)  $d_0e_0gr = d_0lm = e_0^3r = e_0km = e_0l^2 = g^2z = gjm = gkl = uv$   
(11)  $d_0^2x' = e_0PQ_1 = Pd_0B_{21} = Pe_0Q_1$   
19 (1)  $h_0d_0^2x' = h_0e_0PQ_1 = h_0Pd_0B_{21} = h_0Pe_0Q_1 = h_2d_0PQ_1 =$   
 $h_2Pd_0Q_1 = h_2Pe_0x' = d_0Ph_2Q_1 = e_0Ph_2x' = B_2P^2e_0 =$   
 $P^2h_2x_{10,27} = P^2h_2x_{10,28}$   
20 (1)  $h_0^2d_0^2x' = h_0^2e_0PQ_1 = h_0^2Pd_0B_{21} = h_0^2Pe_0Q_1 = h_0h_2d_0PQ_1 =$   
 $h_0h_2Pd_0Q_1 = h_0h_2Pe_0x' = h_0d_0Ph_2Q_1 = h_0e_0Ph_2x' =$   
 $h_0B_2P^2e_0 = h_0P^2h_2x_{10,27} = h_0P^2h_2x_{10,28} = h_2^2Pd_0x' =$   
 $h_2d_0Ph_2x' = h_2B_2P^2d_0 = h_2P^2h_2B_{21} = c_0PR_2 = d_0B_2P^2h_2 =$   
 $Ph_2^2B_{21} = Ph_2B_2Pd_0 = Pc_0R_2$   
21 (10)  $P^2R_2$   
(01)  $d_0^3u = d_0^2ri = d_0e_0Pv = d_0gPu = d_0jz = d_0Pd_0w = d_0Pe_0v =$   
 $e_0^2Pu = e_0rPj = e_0iz = e_0Pd_0v = e_0Pe_0u = gPd_0u = rjPe_0 =$   
 $rkPd_0 = i^2m = ijl = ik^2 = j^2k$   
22 (1)  $h_0P^2R_2 = Ph_2R_1$   
23 (1)  $h_0^2P^2R_2 = h_0Ph_2R_1 = h_1P^3Q_1 = Ph_1P^2Q_1 = P^2h_1PQ_1 =$   
 $R_1P^3h_2 = Q_1P^3h_1$   
24 (1)  $d_0^4Pe_0 = d_0^3e_0Pd_0 = d_0^2gP^2e_0 = d_0e_0^2P^2e_0 = d_0e_0gP^2d_0 =$   
 $d_0e_0Pe_0^2 = d_0gPd_0Pe_0 = e_0^3P^2d_0 = e_0^2Pd_0Pe_0 = e_0gPd_0^2 =$   
 $g^2P^3e_0 = iP^2v = jP^2u = uP^2j = vP^2i = PjPu$

continued

- Stem 81      continued
- 27 (1)  $d_0^3 P^2 i = d_0^2 i P^2 d_0 = d_0 e_0 P^3 j = d_0 i P d_0^2 = d_0 j P^3 e_0 = d_0 k P^3 d_0 =$   
 $d_0 P e_0 P^2 j = d_0 P j P^2 e_0 = e_0 i P^3 e_0 = e_0 j P^3 d_0 = e_0 P d_0 P^2 j =$   
 $e_0 P e_0 P^2 i = e_0 P j P^2 d_0 = g i P^3 d_0 = g P d_0 P^2 i = i P e_0 P^2 e_0 =$   
 $j P d_0 P^2 e_0 = j P e_0 P^2 d_0 = k P d_0 P^2 d_0 = l P^4 e_0 = m P^4 d_0 =$   
 $P d_0 P e_0 P j$
- 30 (1)  $i P^4 j = j P^4 i = P^2 i P^2 j$
- 31 (1)  $h_0 i P^4 j = h_0 j P^4 i = h_0 P^2 i P^2 j = h_1^2 P^4 Q = h_1^2 P^5 u =$   
 $h_1 P h_1 P^4 u = h_1 P^2 h_1 P^3 u = h_1 u P^5 h_1 = h_1 P^3 h_1 P^2 u =$   
 $h_1 Q P^4 h_1 = h_1 P u P^4 h_1 = h_2 i P^4 i = h_2 P^2 i^2 = P h_1^2 P^3 u =$   
 $P h_1 P^2 h_1 P^2 u = P h_1 u P^4 h_1 = P h_1 P^3 h_1 Q = P h_1 P^3 h_1 P u =$   
 $r P^6 h_2 = q P^6 h_1 = i^2 P^4 h_2 = i P^2 h_2 P^2 i = P^2 h_1^2 Q = P^2 h_1^2 P u =$   
 $P^2 h_1 u P^3 h_1$
- 36 (1)  $P^8 e_0$
- 37 (1)  $h_0 P^8 e_0 = h_2 P^8 d_0 = d_0 P^8 h_2 = P h_2 P^7 d_0 = P d_0 P^7 h_2 =$   
 $P^2 h_2 P^6 d_0 = P^2 d_0 P^6 h_2 = P^3 h_2 P^5 d_0 = P^3 d_0 P^5 h_2 = P^4 h_2 P^4 d_0$
- 38 (1)  $h_0^2 P^8 e_0 = h_0 h_2 P^8 d_0 = h_0 d_0 P^8 h_2 = h_0 P h_2 P^7 d_0 = h_0 P d_0 P^7 h_2 =$   
 $h_0 P^2 h_2 P^6 d_0 = h_0 P^2 d_0 P^6 h_2 = h_0 P^3 h_2 P^5 d_0 = h_0 P^3 d_0 P^5 h_2 =$   
 $h_0 P^4 h_2 P^4 d_0$

continued

Stem 81 continued

$$\begin{aligned}
39 \quad (1) \quad & h_0^3 P^8 e_0 = h_0^2 h_2 P^8 d_0 = h_0^2 d_0 P^8 h_2 = h_0^2 P h_2 P^7 d_0 = h_0^2 P d_0 P^7 h_2 = \\
& h_0^2 P^2 h_2 P^6 d_0 = h_0^2 P^2 d_0 P^6 h_2 = h_0^2 P^3 h_2 P^5 d_0 = h_0^2 P^3 d_0 P^5 h_2 = \\
& h_0^2 P^4 h_2 P^4 d_0 = h_1^3 P^8 d_0 = h_1^2 d_0 P^8 h_1 = h_1^2 P h_1 P^7 d_0 = \\
& h_1^2 P d_0 P^7 h_1 = h_1^2 P^2 h_1 P^6 d_0 = h_1^2 P^2 d_0 P^6 h_1 = h_1^2 P^3 h_1 P^5 d_0 = \\
& h_1^2 P^3 d_0 P^5 h_1 = h_1^2 P^4 h_1 P^4 d_0 = h_1 h_3 P^9 h_1 = h_1 c_0 P^8 c_0 = \\
& h_1 d_0 P h_1 P^7 h_1 = h_1 d_0 P^2 h_1 P^6 h_1 = h_1 d_0 P^3 h_1 P^5 h_1 = h_1 d_0 P^4 h_1^2 = \\
& h_1 P h_1^2 P^6 d_0 = h_1 P h_1 P d_0 P^6 h_1 = h_1 P h_1 P^2 h_1 P^5 d_0 = \\
& h_1 P h_1 P^2 d_0 P^5 h_1 = h_1 P h_1 P^3 h_1 P^4 d_0 = h_1 P h_1 P^3 d_0 P^4 h_1 = \\
& h_1 P c_0 P^7 c_0 = h_1 P d_0 P^2 h_1 P^5 h_1 = h_1 P d_0 P^3 h_1 P^4 h_1 = \\
& h_1 P^2 h_1^2 P^4 d_0 = h_1 P^2 h_1 P^2 d_0 P^4 h_1 = h_1 P^2 h_1 P^3 h_1 P^3 d_0 = \\
& h_1 P^2 c_0 P^6 c_0 = h_1 P^2 d_0 P^3 h_1^2 = h_1 P^3 c_0 P^5 c_0 = h_1 P^4 c_0^2 = h_2^2 P^9 h_2 = \\
& h_2 P h_2 P^8 h_2 = h_2 P^2 h_2 P^7 h_2 = h_2 P^3 h_2 P^6 h_2 = h_2 P^4 h_2 P^5 h_2 = \\
& h_3 P h_1 P^8 h_1 = h_3 P^2 h_1 P^7 h_1 = h_3 P^3 h_1 P^6 h_1 = h_3 P^4 h_1 P^5 h_1 = \\
& c_0^2 P^8 h_1 = c_0 P h_1 P^7 c_0 = c_0 P c_0 P^7 h_1 = c_0 P^2 h_1 P^6 c_0 = \\
& c_0 P^2 c_0 P^6 h_1 = c_0 P^3 h_1 P^5 c_0 = c_0 P^3 c_0 P^5 h_1 = c_0 P^4 h_1 P^4 c_0 = \\
& d_0 P h_1^2 P^6 h_1 = d_0 P h_1 P^2 h_1 P^5 h_1 = d_0 P h_1 P^3 h_1 P^4 h_1 = \\
& d_0 P^2 h_1^2 P^4 h_1 = d_0 P^2 h_1 P^3 h_1^2 = P h_1^3 P^5 d_0 = P h_1^2 P d_0 P^5 h_1 = \\
& P h_1^2 P^2 h_1 P^4 d_0 = P h_1^2 P^2 d_0 P^4 h_1 = P h_1^2 P^3 h_1 P^3 d_0 = \\
& P h_1 P c_0 P^6 c_0 = P h_1 P d_0 P^2 h_1 P^4 h_1 = P h_1 P d_0 P^3 h_1^2 = \\
& P h_1 P^2 h_1^2 P^3 d_0 = P h_1 P^2 h_1 P^2 d_0 P^3 h_1 = P h_1 P^2 c_0 P^5 c_0 = \\
& P h_1 P^3 c_0 P^4 c_0 = P h_2^2 P^7 h_2 = P h_2 P^2 h_2 P^6 h_2 = P h_2 P^3 h_2 P^5 h_2 = \\
& P h_2 P^4 h_2^2 = P c_0^2 P^6 h_1 = P c_0 P^2 h_1 P^5 c_0 = P c_0 P^2 c_0 P^5 h_1 = \\
& P c_0 P^3 h_1 P^4 c_0 = P c_0 P^3 c_0 P^4 h_1 = P d_0 P^2 h_1^2 P^3 h_1 = P^2 h_1^3 P^2 d_0 = \\
& P^2 h_1 P^2 c_0 P^4 c_0 = P^2 h_1 P^3 c_0^2 = P^2 h_2^2 P^5 h_2 = P^2 h_2 P^3 h_2 P^4 h_2 = \\
& P^2 c_0^2 P^4 h_1 = P^2 c_0 P^3 h_1 P^3 c_0 = P^3 h_2^3
\end{aligned}$$

Stem 82

- 4 (1)  $h_6c_1$
- 6 (10)  $h_4Q_3$   
 (01)  $h_2x_1 = h_3^2d_2 = h_3h_5g_2 = h_4n_1 = h_5^2g = c_2^2$
- 7 (10)  $h_0h_4Q_3$   
 (01)  $h_0h_2x_1 = h_0h_3^2d_2 = h_0h_3h_5g_2 = h_0h_4n_1 = h_0h_5^2g = h_0c_2^2 = h_2^2h_4D_3 = h_2h_5^2e_0 = h_3^3D_3 = h_4^2D_1$
- 8 (10)  $e_1g_2$   
 (01)  $h_0^2h_4Q_3 = h_2^2x_{6,53} = h_2h_4A'' = d_0d_2$   
 (11)  $h_3x_{7,53}$
- 9 (1)  $gH_1$
- 10 (1)  $h_6P^2h_2$
- 11 (1)  $h_0h_6P^2h_2$
- 12 (10)  $gx_{8,33}$   
 (01)  $h_0^2h_6P^2h_2 = h_1^2h_6P^2h_1 = h_1h_6Ph_1^2$
- 14 (01)  $e_0B_{23} = gx_{10,27} = gx_{10,28}$   
 (11)  $h_2x_{13,42}$
- 16 (1)  $x_{16,38}$
- 17 (010)  $iB_{21} = jQ_1 = kx' = Pd_0B_4$   
 (001)  $h_0x_{16,38} = h_2x_{16,35}$   
 (011)  $d_0P^2D_1 = e_0R_2$   
 (111)  $e_0gw = e_0rm = g^2v = grl$
- 18 (10)  $h_0d_0P^2D_1 = h_0e_0R_2 = h_2d_0R_2 = d_0^2R_1$   
 (01)  $h_0^2x_{16,38} = h_0h_2x_{16,35} = h_2^2x_{16,32} = Ph_2x_{13,34}$   
 (11)  $h_0iB_{21} = h_0jQ_1 = h_0kx' = h_0Pd_0B_4 = h_2iQ_1 = h_2jx' = f_0PQ_1 = Ph_2x_{13,35} = B_2Pj$
- 19 (1)  $h_0^2d_0P^2D_1 = h_0^2e_0R_2 = h_0^2iB_{21} = h_0^2jQ_1 = h_0^2kx' = h_0^2Pd_0B_4 = h_0h_2d_0R_2 = h_0h_2iQ_1 = h_0h_2jx' = h_0d_0^2R_1 = h_0f_0PQ_1 = h_0Ph_2x_{13,35} = h_0B_2Pj = h_1d_0^2x' = h_1e_0PQ_1 = h_1Pd_0B_{21} = h_1Pe_0Q_1 = h_2^2ix' = h_2Ph_2P^2D_1 = h_2Pe_0R_1 = h_2P^2h_2B_4 = d_0Ph_1B_{21} = d_0B_1Pd_0 = e_0Ph_1Q_1 = e_0Ph_2R_1 = f_0Ph_2x' = gPh_1x' = Ph_2^2B_4 = Ph_2iB_2 = P^2h_1B_{23}$
- 20 (1)  $d_0^3g^2 = d_0^2e_0^2g = d_0e_0^4 = d_0iw = d_0jv = d_0ku = e_0g^2Pe_0 = e_0iv = e_0ju = g^3Pd_0 = giu = r^2Pd_0 = rik = rj^2 = lPv = mPu = z^2$
- 23 (1)  $d_0^4j = d_0^3e_0i = d_0^2gPj = d_0^2kPe_0 = d_0^2lPd_0 = d_0e_0^2Pj = d_0e_0jPe_0 = d_0e_0kPd_0 = d_0giPe_0 = d_0gjPd_0 = d_0mP^2e_0 = e_0^2iPe_0 = e_0^2jPd_0 = e_0giPd_0 = e_0lP^2e_0 = e_0mP^2d_0 = g^2P^2j = gkP^2e_0 = glP^2d_0 = lPe_0^2 = mPd_0Pe_0$
- 26 (1)  $d_0rP^3d_0 = d_0i^2Pd_0 = d_0jP^2j = d_0kP^2i = d_0Pj^2 = e_0iP^2j = e_0jP^2i = giP^2i = rPd_0P^2d_0 = ijP^2e_0 = ikP^2d_0 = iPe_0Pj = j^2P^2d_0 = jPd_0Pj = lP^3j = zP^3e_0$

continued

Stem 82 continued

- 29 (1)  $P^5v$
- 32 (1)  $d_0^2P^5d_0 = d_0Pd_0P^4d_0 = d_0P^2d_0P^3d_0 = e_0P^6e_0 = gP^6d_0 = Pd_0^2P^3d_0 = Pd_0P^2d_0^2 = Pe_0P^5e_0 = P^2e_0P^4e_0 = P^3e_0^2$
- 33 (1)  $h_0d_0^2P^5d_0 = h_0d_0Pd_0P^4d_0 = h_0d_0P^2d_0P^3d_0 = h_0e_0P^6e_0 = h_0gP^6d_0 = h_0Pd_0^2P^3d_0 = h_0Pd_0P^2d_0^2 = h_0Pe_0P^5e_0 = h_0P^2e_0P^4e_0 = h_0P^3e_0^2 = h_2d_0P^6e_0 = h_2e_0P^6d_0 = h_2Pd_0P^5e_0 = h_2Pe_0P^5d_0 = h_2P^2d_0P^4e_0 = h_2P^2e_0P^4d_0 = h_2P^3d_0P^3e_0 = d_0e_0P^6h_2 = d_0Ph_2P^5e_0 = d_0Pe_0P^5h_2 = d_0P^2h_2P^4e_0 = d_0P^2e_0P^4h_2 = d_0P^3h_2P^3e_0 = e_0Ph_2P^5d_0 = e_0Pd_0P^5h_2 = e_0P^2h_2P^4d_0 = e_0P^2d_0P^4h_2 = e_0P^3h_2P^3d_0 = Ph_2Pd_0P^4e_0 = Ph_2Pe_0P^4d_0 = Ph_2P^2d_0P^3e_0 = Ph_2P^2e_0P^3d_0 = Pd_0Pe_0P^4h_2 = Pd_0P^2h_2P^3e_0 = Pd_0P^2e_0P^3h_2 = Pe_0P^2h_2P^3d_0 = Pe_0P^2d_0P^3h_2 = P^2h_2P^2d_0P^2e_0$
- 34 (1)  $h_0^2d_0^2P^5d_0 = h_0^2d_0Pd_0P^4d_0 = h_0^2d_0P^2d_0P^3d_0 = h_0^2e_0P^6e_0 = h_0^2gP^6d_0 = h_0^2Pd_0^2P^3d_0 = h_0^2Pd_0P^2d_0^2 = h_0^2Pe_0P^5e_0 = h_0^2P^2e_0P^4e_0 = h_0^2P^3e_0^2 = h_0h_2d_0P^6e_0 = h_0h_2e_0P^6d_0 = h_0h_2Pd_0P^5e_0 = h_0h_2Pe_0P^5d_0 = h_0h_2P^2d_0P^4e_0 = h_0h_2P^2e_0P^4d_0 = h_0h_2P^3d_0P^3e_0 = h_0d_0e_0P^6h_2 = h_0d_0Ph_2P^5e_0 = h_0d_0Pe_0P^5h_2 = h_0d_0P^2h_2P^4e_0 = h_0d_0P^2e_0P^4h_2 = h_0d_0P^3h_2P^3e_0 = h_0e_0Ph_2P^5d_0 = h_0e_0Pd_0P^5h_2 = h_0e_0P^2h_2P^4d_0 = h_0e_0P^2d_0P^4h_2 = h_0e_0P^3h_2P^3d_0 = h_0Ph_2Pd_0P^4e_0 = h_0Ph_2Pe_0P^4d_0 = h_0Ph_2P^2d_0P^3e_0 = h_0Ph_2P^2e_0P^3d_0 = h_0Pd_0Pe_0P^4h_2 = h_0Pd_0P^2h_2P^3e_0 = h_0Pd_0P^2e_0P^3h_2 = h_0Pe_0P^2h_2P^3d_0 = h_0Pe_0P^2d_0P^3h_2 = h_0P^2h_2P^2d_0P^2e_0 = h_2^2d_0P^6d_0 = h_2^2Pd_0P^5d_0 = h_2^2P^2d_0P^4d_0 = h_2^2P^3d_0^2 = h_2^2d_0^2P^6h_2 = h_2d_0Ph_2P^5d_0 = h_2d_0Pd_0P^5h_2 = h_2d_0P^2h_2P^4d_0 = h_2d_0P^2d_0P^4h_2 = h_2d_0P^3h_2P^3d_0 = h_2gP^7h_2 = h_2Ph_2Pd_0P^4d_0 = h_2Ph_2P^2d_0P^3d_0 = h_2Pd_0^2P^4h_2 = h_2Pd_0P^2h_2P^3d_0 = h_2Pd_0P^2d_0P^3h_2 = h_2P^2h_2P^2d_0^2 = h_4P^8h_2 = c_0P^6j = d_0^2Ph_2P^5h_2 = d_0^2P^2h_2P^4h_2 = d_0^2P^3h_2^2 = d_0Ph_2^2P^4d_0 = d_0Ph_2Pd_0P^4h_2 = d_0Ph_2P^2h_2P^3d_0 = d_0Ph_2P^2d_0P^3h_2 = d_0Pd_0P^2h_2P^3h_2 = d_0P^2h_2^2P^2d_0 = gPh_2P^6h_2 = gP^2h_2P^5h_2 = gP^3h_2P^4h_2 = Ph_2^2Pd_0P^3d_0 = Ph_2^2P^2d_0^2 = Ph_2Pd_0^2P^3h_2 = Ph_2Pd_0P^2h_2P^2d_0 = Pc_0P^5j = jP^6c_0 = Pd_0^2P^2h_2^2 = P^2c_0P^4j = PjP^5c_0 = P^3c_0P^3j = P^2jP^4c_0$
- 35 (1)  $P^7j$
- 36 (1)  $h_0P^7j = Ph_2P^6i = iP^7h_2 = P^3h_2P^4i = P^2iP^5h_2$
- 37 (1)  $h_0^2P^7j = h_0Ph_2P^6i = h_0iP^7h_2 = h_0P^3h_2P^4i = h_0P^2iP^5h_2 = h_1P^8e_0 = e_0P^8h_1 = Ph_1P^7e_0 = Pe_0P^7h_1 = P^2h_1P^6e_0 = P^2e_0P^6h_1 = P^3h_1P^5e_0 = P^3e_0P^5h_1 = P^4h_1P^4e_0$

Stem 83

- 5 (10)  $h_6g$   
 (01)  $h_2e_2 = h_4d_2$
- 6 (1)  $h_0h_6g = h_2h_6e_0$
- 7 (10)  $h_1h_4Q_3 = h_3x_{6,53}$   
 (01)  $h_0^2h_6g = h_0h_2h_6e_0 = h_2^2h_6d_0$
- 10 (1)  $h_1gH_1 = h_2^2x_{8,57} = h_2c_1A' = h_2c_1A = h_2f_0H_1 = h_3x_{9,51} = nD_1$
- 11 (1)  $e_0x_{7,40} = gx_{7,34}$
- 13 (1)  $h_2x_{12,44}$
- 15 (1)  $x_{15,41}$
- 16 (10)  $rx' = iB_4$   
 (01)  $h_0x_{15,41}$
- 17 (10)  $h_0rx' = h_0iB_4 = h_3x_{16,32}$   
 (01)  $h_0^2x_{15,41}$   
 (11)  $h_1x_{16,38} = h_2x_{16,37} = d_0W_1 = f_0R_2 = kR_1$
- 18 (1)  $h_0^3x_{15,41} = h_0^2rx' = h_0^2iB_4 = h_0h_3x_{16,32} = h_3ix'$
- 19 (10)  $d_0^2gm = d_0e_0^2m = d_0e_0gl = d_0g^2k = d_0ru = e_0^3l = e_0^2gk = e_0g^2j = g^3i = vz$   
 (01)  $h_0^4x_{15,41} = h_0^3rx' = h_0^3iB_4 = h_0^2h_3x_{16,32} = h_0h_3ix' = g_2P^2i = xi^2$   
 (11)  $r^2i$
- 20 (1)  $h_0^5x_{15,41} = h_0^4rx' = h_0^4iB_4 = h_0^3h_3x_{16,32} = h_0^2h_3ix' = h_0g_2P^2i = h_0xi^2 = h_0r^2i = h_3^2x_{18,20}$
- 22 (10)  $x'P^2d_0$   
 (01)  $d_0^3z = d_0^2rPe_0 = d_0^2il = d_0^2jk = d_0e_0rPd_0 = d_0e_0ik = d_0e_0j^2 = d_0gij = d_0mPj = e_0^2ij = e_0gi^2 = e_0lPj = e_0Pe_0z = grP^2e_0 = gkPj = gPd_0z = imPe_0 = jlPe_0 = jmPd_0 = k^2Pe_0 = klPd_0$   
 (11)  $d_0x_{18,20}$
- 23 (1)  $h_0d_0x_{18,20} = h_0x'P^2d_0 = h_2P^3Q_1 = Ph_2P^2Q_1 = P^2h_2PQ_1 = Q_1P^3h_2$
- 24 (1)  $h_0^2d_0x_{18,20} = h_0^2x'P^2d_0 = h_0h_2P^3Q_1 = h_0Ph_2P^2Q_1 = h_0P^2h_2PQ_1 = h_0Q_1P^3h_2 = h_2Ph_2x_{18,20} = h_2x'P^3h_2 = Ph_2P^2h_2x' = B_2P^4h_2$
- 25 (1)  $d_0^2P^2u = d_0rP^2i = d_0i^3 = d_0Pd_0Pu = d_0uP^2d_0 = e_0P^3v = gP^3u = riP^2d_0 = ijPj = Pd_0^2u = Pe_0P^2v = vP^3e_0 = wP^3d_0 = zP^2j = P^2e_0Pv$
- 28 (1)  $d_0^3P^3e_0 = d_0^2e_0P^3d_0 = d_0^2Pd_0P^2e_0 = d_0^2Pe_0P^2d_0 = d_0e_0Pd_0P^2d_0 = d_0gP^4e_0 = d_0Pd_0^2Pe_0 = e_0^2P^4e_0 = e_0gP^4d_0 = e_0Pd_0^3 = e_0Pe_0P^3e_0 = e_0P^2e_0^2 = gPd_0P^3e_0 = gPe_0P^3d_0 = gP^2d_0P^2e_0 = Pe_0^2P^2e_0$

continued

Stem 83continued

$$31 \quad (1) \quad d_0^2 P^4 i = d_0 i P^4 d_0 = d_0 P^2 d_0 P^2 i = e_0 P^5 j = i P d_0 P^3 d_0 = i P^2 d_0^2 = j P^5 e_0 = k P^5 d_0 = P d_0^2 P^2 i = P e_0 P^4 j = P j P^4 e_0 = P^2 e_0 P^3 j = P^2 j P^3 e_0$$

$$32 \quad (1) \quad h_0 d_0^2 P^4 i = h_0 d_0 i P^4 d_0 = h_0 d_0 P^2 d_0 P^2 i = h_0 e_0 P^5 j = h_0 i P d_0 P^3 d_0 = h_0 i P^2 d_0^2 = h_0 j P^5 e_0 = h_0 k P^5 d_0 = h_0 P d_0^2 P^2 i = h_0 P e_0 P^4 j = h_0 P j P^4 e_0 = h_0 P^2 e_0 P^3 j = h_0 P^2 j P^3 e_0 = h_2 d_0 P^5 j = h_2 i P^5 e_0 = h_2 j P^5 d_0 = h_2 P d_0 P^4 j = h_2 P e_0 P^4 i = h_2 P j P^4 d_0 = h_2 P^2 d_0 P^3 j = h_2 P^2 i P^3 e_0 = h_2 P^2 j P^3 d_0 = d_0 P h_2 P^4 j = d_0 j P^5 h_2 = d_0 P^2 h_2 P^3 j = d_0 P j P^4 h_2 = d_0 P^3 h_2 P^2 j = e_0 P h_2 P^4 i = e_0 i P^5 h_2 = e_0 P^3 h_2 P^2 i = f_0 P^6 e_0 = P h_2 i P^4 e_0 = P h_2 j P^4 d_0 = P h_2 P d_0 P^3 j = P h_2 P j P^3 d_0 = P h_2 P^2 d_0 P^2 j = P h_2 P^2 e_0 P^2 i = i P e_0 P^4 h_2 = i P^2 h_2 P^3 e_0 = i P^2 e_0 P^3 h_2 = j P d_0 P^4 h_2 = j P^2 h_2 P^3 d_0 = j P^2 d_0 P^3 h_2 = l P^6 h_2 = P d_0 P^2 h_2 P^2 j = P d_0 P j P^3 h_2 = P e_0 P^2 h_2 P^2 i = P^2 h_2 P j P^2 d_0$$

continued



Stem 83 continued

$$\begin{aligned}
33 \quad (1) \quad & h_0^2 d_0^2 P^4 i = h_0^2 d_0 i P^4 d_0 = h_0^2 d_0 P^2 d_0 P^2 i = h_0^2 e_0 P^5 j = \\
& h_0^2 i P d_0 P^3 d_0 = h_0^2 i P^2 d_0^2 = h_0^2 j P^5 e_0 = h_0^2 k P^5 d_0 = h_0^2 P d_0^2 P^2 i = \\
& h_0^2 P e_0 P^4 j = h_0^2 P j P^4 e_0 = h_0^2 P^2 e_0 P^3 j = h_0^2 P^2 j P^3 e_0 = \\
& h_0 h_2 d_0 P^5 j = h_0 h_2 i P^5 e_0 = h_0 h_2 j P^5 d_0 = h_0 h_2 P d_0 P^4 j = \\
& h_0 h_2 P e_0 P^4 i = h_0 h_2 P j P^4 d_0 = h_0 h_2 P^2 d_0 P^3 j = h_0 h_2 P^2 i P^3 e_0 = \\
& h_0 h_2 P^2 j P^3 d_0 = h_0 d_0 P h_2 P^4 j = h_0 d_0 j P^5 h_2 = h_0 d_0 P^2 h_2 P^3 j = \\
& h_0 d_0 P j P^4 h_2 = h_0 d_0 P^3 h_2 P^2 j = h_0 e_0 P h_2 P^4 i = h_0 e_0 i P^5 h_2 = \\
& h_0 e_0 P^3 h_2 P^2 i = h_0 f_0 P^6 e_0 = h_0 P h_2 i P^4 e_0 = h_0 P h_2 j P^4 d_0 = \\
& h_0 P h_2 P d_0 P^3 j = h_0 P h_2 P j P^3 d_0 = h_0 P h_2 P^2 d_0 P^2 j = \\
& h_0 P h_2 P^2 e_0 P^2 i = h_0 i P e_0 P^4 h_2 = h_0 i P^2 h_2 P^3 e_0 = h_0 i P^2 e_0 P^3 h_2 = \\
& h_0 j P d_0 P^4 h_2 = h_0 j P^2 h_2 P^3 d_0 = h_0 j P^2 d_0 P^3 h_2 = h_0 l P^6 h_2 = \\
& h_0 P d_0 P^2 h_2 P^2 j = h_0 P d_0 P j P^3 h_2 = h_0 P e_0 P^2 h_2 P^2 i = \\
& h_0 P^2 h_2 P j P^2 d_0 = h_1 d_0^2 P^5 d_0 = h_1 d_0 P d_0 P^4 d_0 = h_1 d_0 P^2 d_0 P^3 d_0 = \\
& h_1 e_0 P^6 e_0 = h_1 g P^6 d_0 = h_1 P d_0^2 P^3 d_0 = h_1 P d_0 P^2 d_0^2 = \\
& h_1 P e_0 P^5 e_0 = h_1 P^2 e_0 P^4 e_0 = h_1 P^3 e_0^2 = h_2^2 i P^5 d_0 = \\
& h_2^2 P d_0 P^4 i = h_2^2 P^2 i P^3 d_0 = h_2 d_0 P h_2 P^4 i = h_2 d_0 i P^5 h_2 = \\
& h_2 d_0 P^3 h_2 P^2 i = h_2 f_0 P^6 d_0 = h_2 P h_2 i P^4 d_0 = h_2 P h_2 P^2 d_0 P^2 i = \\
& h_2 i P d_0 P^4 h_2 = h_2 i P^2 h_2 P^3 d_0 = h_2 i P^2 d_0 P^3 h_2 = h_2 k P^6 h_2 = \\
& h_2 P d_0 P^2 h_2 P^2 i = d_0^3 P^5 h_1 = d_0^2 P h_1 P^4 d_0 = d_0^2 P d_0 P^4 h_1 = \\
& d_0^2 P^2 h_1 P^3 d_0 = d_0^2 P^2 d_0 P^3 h_1 = d_0 f_0 P^6 h_2 = d_0 g P^6 h_1 = \\
& d_0 P h_1 P d_0 P^3 d_0 = d_0 P h_1 P^2 d_0^2 = d_0 P h_2 i P^4 h_2 = d_0 P h_2 P^2 h_2 P^2 i = \\
& d_0 i P^2 h_2 P^3 h_2 = d_0 P d_0^2 P^3 h_1 = d_0 P d_0 P^2 h_1 P^2 d_0 = e_0^2 P^6 h_1 = \\
& e_0 P h_1 P^5 e_0 = e_0 P e_0 P^5 h_1 = e_0 P^2 h_1 P^4 e_0 = e_0 P^2 e_0 P^4 h_1 = \\
& e_0 P^3 h_1 P^3 e_0 = f_0 P h_2 P^5 d_0 = f_0 P d_0 P^5 h_2 = f_0 P^2 h_2 P^4 d_0 = \\
& f_0 P^2 d_0 P^4 h_2 = f_0 P^3 h_2 P^3 d_0 = g P h_1 P^5 d_0 = g P d_0 P^5 h_1 = \\
& g P^2 h_1 P^4 d_0 = g P^2 d_0 P^4 h_1 = g P^3 h_1 P^3 d_0 = P h_1 P d_0^2 P^2 d_0 = \\
& P h_1 P e_0 P^4 e_0 = P h_1 P^2 e_0 P^3 e_0 = P h_2^2 i P^3 d_0 = P h_2^2 P d_0 P^2 i = \\
& P h_2 i P d_0 P^3 h_2 = P h_2 i P^2 h_2 P^2 d_0 = P h_2 k P^5 h_2 = i P d_0 P^2 h_2^2 = \\
& k P^2 h_2 P^4 h_2 = k P^3 h_2^2 = P d_0^3 P^2 h_1 = P e_0^2 P^4 h_1 = P e_0 P^2 h_1 P^3 e_0 = \\
& P e_0 P^2 e_0 P^3 h_1 = P^2 h_1 P^2 e_0^2
\end{aligned}$$

Stem 84

- 4 (10)  $f_2$   
 (01)  $h_2^2 h_4 h_6 = h_3^3 h_6$
- 5 (1)  $h_0 f_2 = h_4 p'$
- 6 (01)  $h_0^2 f_2 = h_0 h_4 p'$   
 (11)  $h_1 h_6 g = h_2 h_6 f_0$
- 7 (1)  $h_0^3 f_2 = h_0^2 h_4 p'$
- 8 (1)  $h_0^4 f_2 = h_0^3 h_4 p' = h_1^2 h_4 Q_3 = h_1 h_3 x_{6,53} = h_3 m_1 = h_3 x_{7,57} = h_4^2 G =$   
 $h_4 c_0 D_3 = d_0 p_1 = f_1 g_2$
- 9 (1)  $h_2 h_4 x_{7,40} = h_2 c_1 H_1 = h_2 g D_3 = h_3 x_{8,57} = h_4 P D_3 = c_0 x_{6,53} =$   
 $e_0 Q_3 = d_1 D_1$
- 10 (1)  $P x_{6,53}$
- 14 (1)  $x_{14,46}$
- 15 (10)  $x_{15,42}$   
 (01)  $x_{15,43}$
- 16 (1)  $h_0 x_{15,42} = r R_1 = i X_1$
- 17 (1)  $h_0^2 x_{15,42} = h_0 r R_1 = h_0 i X_1 = h_3 x_{16,33}$
- 18 (001)  $h_0^3 x_{15,42} = h_0^2 r R_1 = h_0^2 i X_1 = h_0 h_3 x_{16,33} = h_3 i R_1 = x Q$   
 (011)  $d_0^2 Q_1 = d_0 e_0 x' = g P Q_1 = P d_0 x_{10,27} = P d_0 x_{10,28} = P e_0 B_{21}$   
 (111)  $d_0 g^2 r = d_0 m^2 = e_0^2 g r = e_0 l m = g k m = g l^2 = u w = v^2$
- 19 (10)  $h_4 x_{18,20} = c_0 x_{16,32}$   
 (01)  $h_0^4 x_{15,42} = h_0^3 r R_1 = h_0^3 i X_1 = h_0^2 h_3 x_{16,33} = h_0 h_3 i R_1 = h_0 x Q =$   
 $h_3^2 R_1$   
 (11)  $h_0 d_0^2 Q_1 = h_0 d_0 e_0 x' = h_0 g P Q_1 = h_0 P d_0 x_{10,27} = h_0 P d_0 x_{10,28} =$   
 $h_0 P e_0 B_{21} = h_2 d_0^2 x' = h_2 e_0 P Q_1 = h_2 P d_0 B_{21} = h_2 P e_0 Q_1 =$   
 $d_0 P h_2 B_{21} = d_0 B_2 P d_0 = e_0 P h_2 Q_1 = g P h_2 x' = P^2 h_2 B_{23}$
- 20 (1)  $h_0^5 x_{15,42} = h_0^4 r R_1 = h_0^4 i X_1 = h_0^3 h_3 x_{16,33} = h_0^2 h_3 i R_1 = h_0^2 d_0^2 Q_1 =$   
 $h_0^2 d_0 e_0 x' = h_0^2 g P Q_1 = h_0^2 x Q = h_0^2 P d_0 x_{10,27} = h_0^2 P d_0 x_{10,28} =$   
 $h_0^2 P e_0 B_{21} = h_0 h_2 d_0^2 x' = h_0 h_2 e_0 P Q_1 = h_0 h_2 P d_0 B_{21} =$   
 $h_0 h_2 P e_0 Q_1 = h_0 h_3^2 R_1 = h_0 d_0 P h_2 B_{21} = h_0 d_0 B_2 P d_0 =$   
 $h_0 e_0 P h_2 Q_1 = h_0 g P h_2 x' = h_0 P^2 h_2 B_{23} = h_2^2 d_0 P Q_1 =$   
 $h_2^2 P d_0 Q_1 = h_2^2 P e_0 x' = h_2 d_0 P h_2 Q_1 = h_2 e_0 P h_2 x' = h_2 B_2 P^2 e_0 =$   
 $h_2 P^2 h_2 x_{10,27} = h_2 P^2 h_2 x_{10,28} = h_3 r Q = c_0 i x' = e_0 B_2 P^2 h_2 =$   
 $P h_2^2 x_{10,27} = P h_2^2 x_{10,28} = P h_2 B_2 P e_0 = y i^2 = P c_0 P^2 D_1 =$   
 $Q_2 P^3 h_2 = B_4 P^2 c_0$
- 21 (10)  $d_0 R_1$   
 (01)  $d_0^3 v = d_0^2 e_0 u = d_0^2 r j = d_0 e_0 r i = d_0 g P v = d_0 k z = d_0 P e_0 w =$   
 $e_0^2 P v = e_0 g P u = e_0 j z = e_0 P d_0 w = e_0 P e_0 v = g r P j = g i z =$   
 $g P d_0 v = g P e_0 u = r k P e_0 = r l P d_0 = i j m = i k l = j^2 l = j k^2$
- 22 (1)  $h_0 d_0 R_1 = h_2 P^2 R_2 = P h_2 P R_2 = P^2 h_2 R_2 = R_1 P^2 d_0$

continued

Stem 84 continued

- 23 (1)  $h_0^2 d_0 R_1 = h_0 h_2 P^2 R_2 = h_0 P h_2 P R_2 = h_0 P^2 h_2 R_2 = h_0 R_1 P^2 d_0 = h_1 d_0 x_{18,20} = h_1 x' P^2 d_0 = h_2 P h_2 R_1 = d_0 P^2 h_1 x' = P h_1 P d_0 x' = B_1 P^3 d_0 = B_{21} P^3 h_1$
- 24 (1)  $d_0^6 = d_0^3 e_0 P e_0 = d_0^3 g P d_0 = d_0^2 e_0^2 P d_0 = d_0 e_0 g P^2 e_0 = d_0 g^2 P^2 d_0 = d_0 g P e_0^2 = d_0 i P u = e_0^3 P^2 e_0 = e_0^2 g P^2 d_0 = e_0^2 P e_0^2 = e_0 g P d_0 P e_0 = g^2 P d_0^2 = i P d_0 u = j P^2 v = k P^2 u = v P^2 j = w P^2 i = P j P v$
- 27 (1)  $d_0^3 P^2 j = d_0^2 e_0 P^2 i = d_0^2 i P^2 e_0 = d_0^2 j P^2 d_0 = d_0^2 P d_0 P j = d_0 e_0 i P^2 d_0 = d_0 g P^3 j = d_0 i P d_0 P e_0 = d_0 j P d_0^2 = d_0 k P^3 e_0 = d_0 l P^3 d_0 = e_0^2 P^3 j = e_0 i P d_0^2 = e_0 j P^3 e_0 = e_0 k P^3 d_0 = e_0 P e_0 P^2 j = e_0 P j P^2 e_0 = g i P^3 e_0 = g j P^3 d_0 = g P d_0 P^2 j = g P e_0 P^2 i = g P j P^2 d_0 = j P e_0 P^2 e_0 = k P d_0 P^2 e_0 = k P e_0 P^2 d_0 = l P d_0 P^2 d_0 = m P^4 e_0 = P e_0^2 P j$
- 30 (1)  $r P^5 d_0 = i^2 P^3 d_0 = i P d_0 P^2 i = j P^4 j = k P^4 i = P j P^3 j = P^2 j^2$
- 36 (1)  $d_0 P^7 d_0 = P d_0 P^6 d_0 = P^2 d_0 P^5 d_0 = P^3 d_0 P^4 d_0$
- 37 (1)  $h_0 d_0 P^7 d_0 = h_0 P d_0 P^6 d_0 = h_0 P^2 d_0 P^5 d_0 = h_0 P^3 d_0 P^4 d_0 = h_2 P^8 e_0 = e_0 P^8 h_2 = P h_2 P^7 e_0 = P e_0 P^7 h_2 = P^2 h_2 P^6 e_0 = P^2 e_0 P^6 h_2 = P^3 h_2 P^5 e_0 = P^3 e_0 P^5 h_2 = P^4 h_2 P^4 e_0$
- 38 (1)  $h_0^2 d_0 P^7 d_0 = h_0^2 P d_0 P^6 d_0 = h_0^2 P^2 d_0 P^5 d_0 = h_0^2 P^3 d_0 P^4 d_0 = h_0 h_2 P^8 e_0 = h_0 e_0 P^8 h_2 = h_0 P h_2 P^7 e_0 = h_0 P e_0 P^7 h_2 = h_0 P^2 h_2 P^6 e_0 = h_0 P^2 e_0 P^6 h_2 = h_0 P^3 h_2 P^5 e_0 = h_0 P^3 e_0 P^5 h_2 = h_0 P^4 h_2 P^4 e_0 = h_2^2 P^8 d_0 = h_2 d_0 P^8 h_2 = h_2 P h_2 P^7 d_0 = h_2 P d_0 P^7 h_2 = h_2 P^2 h_2 P^6 d_0 = h_2 P^2 d_0 P^6 h_2 = h_2 P^3 h_2 P^5 d_0 = h_2 P^3 d_0 P^5 h_2 = h_2 P^4 h_2 P^4 d_0 = d_0 P h_2 P^7 h_2 = d_0 P^2 h_2 P^6 h_2 = d_0 P^3 h_2 P^5 h_2 = d_0 P^4 h_2^2 = P h_2^2 P^6 d_0 = P h_2 P d_0 P^6 h_2 = P h_2 P^2 h_2 P^5 d_0 = P h_2 P^2 d_0 P^5 h_2 = P h_2 P^3 h_2 P^4 d_0 = P h_2 P^3 d_0 P^4 h_2 = P d_0 P^2 h_2 P^5 h_2 = P d_0 P^3 h_2 P^4 h_2 = P^2 h_2^2 P^4 d_0 = P^2 h_2 P^2 d_0 P^4 h_2 = P^2 h_2 P^3 h_2 P^3 d_0 = P^2 d_0 P^3 h_2^2$

Stem 85

- 3 (1)  $c_3$
- 4 (1)  $h_0c_3$
- 5 (010)  $h_1f_2 = h_4p_1$   
 (110)  $h_2h_6c_1$   
 (001)  $h_0^2c_3$
- 6 (10)  $x_{6,68}$   
 (01)  $h_0^3c_3$
- 7 (1)  $h_0^4c_3 = h_0x_{6,68} = h_2h_4Q_3 = h_3t_1 = c_2g_2$
- 8 (1)  $h_0^5c_3 = h_0^2x_{6,68} = h_0h_2h_4Q_3 = h_0h_3t_1 = h_0c_2g_2 = h_3^2x_{6,47} = e_0d_2$
- 9 (1)  $h_6Pd_0$
- 10 (1)  $h_0h_6Pd_0$
- 11 (10)  $h_1Px_{6,53} = h_5R_1 = Ph_1x_{6,53}$   
 (01)  $h_0^2h_6Pd_0 = h_2h_6P^2h_2 = h_6Ph_2^2$
- 13 (1)  $x_{13,46}$
- 14 (10)  $gB_{23}$   
 (01)  $h_0x_{13,46}$
- 15 (10)  $h_1x_{14,46} = h_2^2x_{13,42} = f_0x_{11,35} = nR_1$   
 (01)  $h_0^2x_{13,46}$
- 16 (100)  $x_{16,42}$   
 (001)  $h_0^3x_{13,46}$   
 (011)  $h_1x_{15,42} = h_1x_{15,43} = qx' = B_1u$
- 17 (100)  $g^2w = grm$   
 (010)  $d_0x_{13,35} = ix_{10,28} = jB_{21} = kQ_1 = lx' = Pe_0B_4$   
 (001)  $h_0^4x_{13,46} = h_2x_{16,38} = d_0x_{13,34}$   
 (011)  $e_0P^2D_1 = gR_2 = ix_{10,27}$
- 18 (10)  $h_0d_0x_{13,35} = h_0ix_{10,28} = h_0jB_{21} = h_0kQ_1 = h_0lx' = h_0Pe_0B_4 =$   
 $h_2iB_{21} = h_2jQ_1 = h_2kx' = h_2Pd_0B_4 = h_4R_1 = d_0f_0x' =$   
 $d_0Ph_2B_4 = d_0iB_2$   
 (01)  $h_0^5x_{13,46} = h_0h_2x_{16,38} = h_0d_0x_{13,34} = h_2^2x_{16,35}$   
 (11)  $h_0e_0P^2D_1 = h_0gR_2 = h_0ix_{10,27} = h_2d_0P^2D_1 = h_2e_0R_2 = d_0e_0R_1$
- 19 (1)  $h_0^2d_0x_{13,35} = h_0^2e_0P^2D_1 = h_0^2gR_2 = h_0^2ix_{10,27} = h_0^2ix_{10,28} =$   
 $h_0^2jB_{21} = h_0^2kQ_1 = h_0^2lx' = h_0^2Pe_0B_4 = h_0h_2d_0P^2D_1 =$   
 $h_0h_2e_0R_2 = h_0h_2iB_{21} = h_0h_2jQ_1 = h_0h_2kx' = h_0h_2Pd_0B_4 =$   
 $h_0h_4R_1 = h_0d_0e_0R_1 = h_0d_0f_0x' = h_0d_0Ph_2B_4 = h_0d_0iB_2 =$   
 $h_1d_0^2Q_1 = h_1d_0e_0x' = h_1gPQ_1 = h_1Pd_0x_{10,27} = h_1Pd_0x_{10,28} =$   
 $h_1Pe_0B_{21} = h_2^2d_0R_2 = h_2^2iQ_1 = h_2^2jx' = h_2d_0^2R_1 =$   
 $h_2f_0PQ_1 = h_2Ph_2x_{13,35} = h_2B_2Pj = c_0x_{16,33} = d_0Ph_1x_{10,27} =$   
 $d_0Ph_1x_{10,28} = d_0B_1Pe_0 = e_0Ph_1B_{21} = e_0B_1Pd_0 = f_0Ph_2Q_1 =$   
 $gPh_1Q_1 = gPh_2R_1 = Ph_2jB_2 = D_2P^3h_2 = P^2h_2B_5 =$   
 $P^2h_2PD_2$

continued

Stem 85continued

- 20 (1)  $d_0^2 e_0 g^2 = d_0 e_0^3 g = d_0 r z = d_0 j w = d_0 k v = d_0 l u = e_0^5 = e_0 i w = e_0 j v = e_0 k u = g^3 P e_0 = g i v = g j u = r^2 P e_0 = r i l = r j k = m P v$
- 21 (1)  $Ph_1 x_{16,32}$
- 23 (1)  $d_0^4 k = d_0^3 e_0 j = d_0^3 g i = d_0^2 e_0^2 i = d_0^2 l P e_0 = d_0^2 m P d_0 = d_0 e_0 g P j = d_0 e_0 k P e_0 = d_0 e_0 l P d_0 = d_0 g j P e_0 = d_0 g k P d_0 = e_0^3 P j = e_0^2 j P e_0 = e_0^2 k P d_0 = e_0 g i P e_0 = e_0 g j P d_0 = e_0 m P^2 e_0 = g^2 i P d_0 = g l P^2 e_0 = g m P^2 d_0 = r P^2 u = i^2 u = m P e_0^2$
- 26 (10)  $P^4 x'$
- (01)  $d_0^2 i P j = d_0 r P^3 e_0 = d_0 i^2 P e_0 = d_0 i j P d_0 = d_0 k P^2 j = d_0 l P^2 i = d_0 z P^2 d_0 = e_0 r P^3 d_0 = e_0 i^2 P d_0 = e_0 j P^2 j = e_0 k P^2 i = e_0 P j^2 = g i P^2 j = g j P^2 i = r P d_0 P^2 e_0 = r P e_0 P^2 d_0 = i k P^2 e_0 = i l P^2 d_0 = j^2 P^2 e_0 = j k P^2 d_0 = j P e_0 P j = k P d_0 P j = m P^3 j = P d_0^2 z$
- 27 (1)  $h_0 P^4 x'$
- 28 (1)  $h_0^2 P^4 x'$
- 29 (10)  $d_0 P^4 u = P d_0 P^3 u = u P^4 d_0 = P^2 d_0 P^2 u = P u P^3 d_0$
- (01)  $h_0^3 P^4 x'$
- (11)  $r P^4 i = i^2 P^2 i$
- 30 (1)  $h_0^4 P^4 x' = h_0 r P^4 i = h_0 i^2 P^2 i$
- 31 (1)  $h_0^5 P^4 x' = h_0^2 r P^4 i = h_0^2 i^2 P^2 i = h_3 i P^4 i = h_3 P^2 i^2$
- 32 (01)  $h_0^6 P^4 x' = h_0^3 r P^4 i = h_0^3 i^2 P^2 i = h_0 h_3 i P^4 i = h_0 h_3 P^2 i^2$
- (11)  $d_0^2 P^5 e_0 = d_0 e_0 P^5 d_0 = d_0 P d_0 P^4 e_0 = d_0 P e_0 P^4 d_0 = d_0 P^2 d_0 P^3 e_0 = d_0 P^2 e_0 P^3 d_0 = e_0 P d_0 P^4 d_0 = e_0 P^2 d_0 P^3 d_0 = g P^6 e_0 = P d_0^2 P^3 e_0 = P d_0 P e_0 P^3 d_0 = P d_0 P^2 d_0 P^2 e_0 = P e_0 P^2 d_0^2$
- 33 (1)  $h_0^7 P^4 x' = h_0^4 r P^4 i = h_0^4 i^2 P^2 i = h_0^2 h_3 i P^4 i = h_0^2 h_3 P^2 i^2 = h_0 d_0^2 P^5 e_0 = h_0 d_0 e_0 P^5 d_0 = h_0 d_0 P d_0 P^4 e_0 = h_0 d_0 P e_0 P^4 d_0 = h_0 d_0 P^2 d_0 P^3 e_0 = h_0 d_0 P^2 e_0 P^3 d_0 = h_0 e_0 P d_0 P^4 d_0 = h_0 e_0 P^2 d_0 P^3 d_0 = h_0 g P^6 e_0 = h_0 P d_0^2 P^3 e_0 = h_0 P d_0 P e_0 P^3 d_0 = h_0 P d_0 P^2 d_0 P^2 e_0 = h_0 P e_0 P^2 d_0^2 = h_2 d_0^2 P^5 d_0 = h_2 d_0 P d_0 P^4 d_0 = h_2 d_0 P^2 d_0 P^3 d_0 = h_2 e_0 P^6 e_0 = h_2 g P^6 d_0 = h_2 P d_0^2 P^3 d_0 = h_2 P d_0 P^2 d_0^2 = h_2 P e_0 P^5 e_0 = h_2 P^2 e_0 P^4 e_0 = h_2 P^3 e_0^2 = h_2^3 P^6 i = h_4 P^7 d_0 = d_0^3 P^5 h_2 = d_0^2 P h_2 P^4 d_0 = d_0^2 P d_0 P^4 h_2 = d_0^2 P^2 h_2 P^3 d_0 = d_0^2 P^2 d_0 P^3 h_2 = d_0 g P^6 h_2 = d_0 P h_2 P d_0 P^3 d_0 = d_0 P h_2 P^2 d_0^2 = d_0 P d_0^2 P^3 h_2 = d_0 P d_0 P^2 h_2 P^2 d_0 = e_0^2 P^6 h_2 = e_0 P h_2 P^5 e_0 = e_0 P e_0 P^5 h_2 = e_0 P^2 h_2 P^4 e_0 = e_0 P^2 e_0 P^4 h_2 = e_0 P^3 h_2 P^3 e_0 = g P h_2 P^5 d_0 = g P d_0 P^5 h_2 = g P^2 h_2 P^4 d_0 = g P^2 d_0 P^4 h_2 = g P^3 h_2 P^3 d_0 = P h_2 P d_0^2 P^2 d_0 = P h_2 P e_0 P^4 e_0 = P h_2 P^2 e_0 P^3 e_0 = P d_0^3 P^2 h_2 = P e_0^2 P^4 h_2 = P e_0 P^2 h_2 P^3 e_0 = P e_0 P^2 e_0 P^3 h_2 = P^2 h_2 P^2 e_0^2$

continued

Stem 85  
34 (1)

continued

$$\begin{aligned}
& h_0^8 P^4 x' = h_0^5 r P^4 i = h_0^5 i^2 P^2 i = h_0^3 h_3 i P^4 i = h_0^3 h_3 P^2 i^2 = \\
& h_0^2 d_0^2 P^5 e_0 = h_0^2 d_0 e_0 P^5 d_0 = h_0^2 d_0 P d_0 P^4 e_0 = h_0^2 d_0 P e_0 P^4 d_0 = \\
& h_0^2 d_0 P^2 d_0 P^3 e_0 = h_0^2 d_0 P^2 e_0 P^3 d_0 = h_0^2 e_0 P d_0 P^4 d_0 = \\
& h_0^2 e_0 P^2 d_0 P^3 d_0 = h_0^2 g P^6 e_0 = h_0^2 P d_0^2 P^3 e_0 = h_0^2 P d_0 P e_0 P^3 d_0 = \\
& h_0^2 P d_0 P^2 d_0 P^2 e_0 = h_0^2 P e_0 P^2 d_0^2 = h_0 h_2 d_0^2 P^5 d_0 = \\
& h_0 h_2 d_0 P d_0 P^4 d_0 = h_0 h_2 d_0 P^2 d_0 P^3 d_0 = h_0 h_2 e_0 P^6 e_0 = \\
& h_0 h_2 g P^6 d_0 = h_0 h_2 P d_0^2 P^3 d_0 = h_0 h_2 P d_0 P^2 d_0^2 = h_0 h_2 P e_0 P^5 e_0 = \\
& h_0 h_2 P^2 e_0 P^4 e_0 = h_0 h_2 P^3 e_0^2 = h_0 h_3^2 P^6 i = h_0 h_4 P^7 d_0 = \\
& h_0 d_0^3 P^5 h_2 = h_0 d_0^2 P h_2 P^4 d_0 = h_0 d_0^2 P d_0 P^4 h_2 = h_0 d_0^2 P^2 h_2 P^3 d_0 = \\
& h_0 d_0^2 P^2 d_0 P^3 h_2 = h_0 d_0 g P^6 h_2 = h_0 d_0 P h_2 P d_0 P^3 d_0 = \\
& h_0 d_0 P h_2 P^2 d_0^2 = h_0 d_0 P d_0^2 P^3 h_2 = h_0 d_0 P d_0 P^2 h_2 P^2 d_0 = \\
& h_0 e_0^2 P^6 h_2 = h_0 e_0 P h_2 P^5 e_0 = h_0 e_0 P e_0 P^5 h_2 = h_0 e_0 P^2 h_2 P^4 e_0 = \\
& h_0 e_0 P^2 e_0 P^4 h_2 = h_0 e_0 P^3 h_2 P^3 e_0 = h_0 g P h_2 P^5 d_0 = \\
& h_0 g P d_0 P^5 h_2 = h_0 g P^2 h_2 P^4 d_0 = h_0 g P^2 d_0 P^4 h_2 = h_0 g P^3 h_2 P^3 d_0 = \\
& h_0 P h_2 P d_0^2 P^2 d_0 = h_0 P h_2 P e_0 P^4 e_0 = h_0 P h_2 P^2 e_0 P^3 e_0 = \\
& h_0 P e_0 P^2 e_0 P^3 h_2 = h_0 P e_0^2 P^4 h_2 = h_0 P e_0 P^2 h_2 P^3 e_0 = \\
& h_0 P e_0 P^2 e_0 P^3 h_2 = h_0 P^2 h_2 P^2 e_0^2 = h_2^2 d_0 P^6 e_0 = h_2^2 e_0 P^6 d_0 = \\
& h_2^2 P d_0 P^5 e_0 = h_2^2 P e_0 P^5 d_0 = h_2^2 P^2 d_0 P^4 e_0 = h_2^2 P^2 e_0 P^4 d_0 = \\
& h_2^2 P^3 d_0 P^3 e_0 = h_2 d_0 e_0 P^6 h_2 = h_2 d_0 P h_2 P^5 e_0 = h_2 d_0 P e_0 P^5 h_2 = \\
& h_2 d_0 P^2 h_2 P^4 e_0 = h_2 d_0 P^2 e_0 P^4 h_2 = h_2 d_0 P^3 h_2 P^3 e_0 = \\
& h_2 e_0 P h_2 P^5 d_0 = h_2 e_0 P d_0 P^5 h_2 = h_2 e_0 P^2 h_2 P^4 d_0 = \\
& h_2 e_0 P^2 d_0 P^4 h_2 = h_2 e_0 P^3 h_2 P^3 d_0 = h_2 P h_2 P d_0 P^4 e_0 = \\
& h_2 P h_2 P e_0 P^4 d_0 = h_2 P h_2 P^2 d_0 P^3 e_0 = h_2 P h_2 P^2 e_0 P^3 d_0 = \\
& h_2 P d_0 P e_0 P^4 h_2 = h_2 P d_0 P^2 h_2 P^3 e_0 = h_2 P d_0 P^2 e_0 P^3 h_2 = \\
& h_2 P e_0 P^2 h_2 P^3 d_0 = h_2 P e_0 P^2 d_0 P^3 h_2 = h_2 P^2 h_2 P^2 d_0 P^2 e_0 = \\
& c_0 i P^5 d_0 = c_0 P d_0 P^4 i = c_0 P^2 i P^3 d_0 = d_0 e_0 P h_2 P^5 h_2 = \\
& d_0 e_0 P^2 h_2 P^4 h_2 = d_0 e_0 P^3 h_2^2 = d_0 P h_2^2 P^4 e_0 = d_0 P h_2 P e_0 P^4 h_2 = \\
& d_0 P h_2 P^2 h_2 P^3 e_0 = d_0 P h_2 P^2 e_0 P^3 h_2 = d_0 P c_0 P^4 i = d_0 i P^5 c_0 = \\
& d_0 P e_0 P^2 h_2 P^3 h_2 = d_0 P^2 h_2^2 P^2 e_0 = d_0 P^3 c_0 P^2 i = e_0 P h_2^2 P^4 d_0 = \\
& e_0 P h_2 P d_0 P^4 h_2 = e_0 P h_2 P^2 h_2 P^3 d_0 = e_0 P h_2 P^2 d_0 P^3 h_2 = \\
& e_0 P d_0 P^2 h_2 P^3 h_2 = e_0 P^2 h_2^2 P^2 d_0 = P h_2^2 P d_0 P^3 e_0 = \\
& P h_2^2 P e_0 P^3 d_0 = P h_2^2 P^2 d_0 P^2 e_0 = P h_2 P d_0 P e_0 P^3 h_2 = \\
& P h_2 P d_0 P^2 h_2 P^2 e_0 = P h_2 P e_0 P^2 h_2 P^2 d_0 = P c_0 i P^4 d_0 = \\
& P c_0 P^2 d_0 P^2 i = i P d_0 P^4 c_0 = i P^2 c_0 P^3 d_0 = i P^2 d_0 P^3 c_0 = k P^6 c_0 = \\
& P d_0 P e_0 P^2 h_2^2 = P d_0 P^2 c_0 P^2 i
\end{aligned}$$

continued

Stem 85 continued

- 35 (1)  $d_0 P^6 i = i P^6 d_0 = P^2 d_0 P^4 i = P^2 i P^4 d_0$
- 36 (1)  $h_0 d_0 P^6 i = h_0 i P^6 d_0 = h_0 P^2 d_0 P^4 i = h_0 P^2 i P^4 d_0 = h_2 P^7 j =$   
 $Ph_2 P^6 j = j P^7 h_2 = P^2 h_2 P^5 j = P j P^6 h_2 = P^3 h_2 P^4 j =$   
 $P^2 j P^5 h_2 = P^4 h_2 P^3 j$
- 37 (1)  $h_0^2 d_0 P^6 i = h_0^2 i P^6 d_0 = h_0^2 P^2 d_0 P^4 i = h_0^2 P^2 i P^4 d_0 =$   
 $h_0 h_2 P^7 j = h_0 P h_2 P^6 j = h_0 j P^7 h_2 = h_0 P^2 h_2 P^5 j =$   
 $h_0 P j P^6 h_2 = h_0 P^3 h_2 P^4 j = h_0 P^2 j P^5 h_2 = h_0 P^4 h_2 P^3 j =$   
 $h_1 d_0 P^7 d_0 = h_1 P d_0 P^6 d_0 = h_1 P^2 d_0 P^5 d_0 = h_1 P^3 d_0 P^4 d_0 =$   
 $h_2 P h_2 P^6 i = h_2 i P^7 h_2 = h_2 P^3 h_2 P^4 i = h_2 P^2 i P^5 h_2 =$   
 $d_0^2 P^7 h_1 = d_0 P h_1 P^6 d_0 = d_0 P d_0 P^6 h_1 = d_0 P^2 h_1 P^5 d_0 =$   
 $d_0 P^2 d_0 P^5 h_1 = d_0 P^3 h_1 P^4 d_0 = d_0 P^3 d_0 P^4 h_1 = f_0 P^8 h_2 = g P^8 h_1 =$   
 $Ph_1 P d_0 P^5 d_0 = Ph_1 P^2 d_0 P^4 d_0 = Ph_1 P^3 d_0^2 = Ph_2 i P^6 h_2 =$   
 $Ph_2 P^2 h_2 P^4 i = Ph_2 P^2 i P^4 h_2 = i P^2 h_2 P^5 h_2 = i P^3 h_2 P^4 h_2 =$   
 $P d_0^2 P^5 h_1 = P d_0 P^2 h_1 P^4 d_0 = P d_0 P^2 d_0 P^4 h_1 = P d_0 P^3 h_1 P^3 d_0 =$   
 $P^2 h_1 P^2 d_0 P^3 d_0 = P^2 h_2 P^3 h_2 P^2 i = P^2 d_0^2 P^3 h_1$

Stem 86

- 4 (1)  $h_1c_3$
- 5 (1)  $h_4h_6c_0$
- 6 (10)  $h_2h_6g$   
 (01)  $h_1^2f_2 = h_1h_4p_1 = h_2^2e_2 = h_2h_4d_2$
- 7 (10)  $h_1x_{6,68} = h_4x_{6,47}$   
 (01)  $h_0h_2h_6g = h_2^2h_6e_0$
- 8 (1)  $h_6i$
- 9 (1)  $h_0h_6i$
- 10 (10)  $h_1h_6Pd_0 = h_6d_0Ph_1$   
 (01)  $h_0^2h_6i$
- 11 (10)  $gx_{7,40}$   
 (01)  $h_0^3h_6i$
- 12 (10)  $x_{12,48}$   
 (01)  $h_0^4h_6i$
- 13 (1)  $h_0^5h_6i$
- 14 (10)  $P^3h_5^2$   
 (01)  $h_1x_{13,46} = h_2^2x_{12,44} = h_3x_{13,42} = h_4x_{13,34} = c_1x_{11,35} = gB_5 = d_1R_1$
- 15 (1)  $h_0P^3h_5^2$
- 16 (100)  $g^2N = gnm = grt$   
 (010)  $rQ_1 = jB_4$   
 (001)  $h_0^2P^3h_5^2 = h_2x_{15,41}$
- 17 (10)  $h_1x_{16,42} = f_0P^2D_1 = lR_1$   
 (01)  $h_0^3P^3h_5^2 = h_0h_2x_{15,41} = e_0W_1$   
 (11)  $h_0rQ_1 = h_0jB_4 = h_1^2x_{15,42} = h_1^2x_{15,43} = h_1qx' = h_1B_1u = h_2rx' = h_2iB_4 = h_3x_{16,35} = D_3P^3h_1 = Ph_1P^2D_3 = Pe_0X_1 = PD_3P^2h_1$
- 19 (1)  $d_0e_0gm = d_0g^2l = d_0rv = e_0^3m = e_0^2gl = e_0g^2k = e_0ru = g^3j = r^2j = wz$
- 22 (100)  $d_0P^2Q_1 = Pd_0PQ_1 = Q_1P^2d_0$   
 (010)  $uPu$   
 (110)  $e_0x_{18,20}$   
 (001)  $h_1Ph_1x_{16,32} = P^2h_1W_1 = uQ = X_1P^3h_1$   
 (101)  $x'P^2e_0$   
 (011)  $d_0^4r = d_0^2e_0z = d_0^2im = d_0^2jl = d_0^2k^2 = d_0e_0rPe_0 = d_0e_0il = d_0e_0jk = d_0grPd_0 = d_0gik = d_0gj^2 = e_0^2rPd_0 = e_0^2ik = e_0^2j^2 = e_0gij = e_0mPj = g^2i^2 = glPj = gPe_0z = jmPe_0 = klPe_0 = kmPd_0 = l^2Pd_0$

continued



- Stem 86 continued
- 23 (1)  $h_0 d_0 P^2 Q_1 = h_0 e_0 x_{18,20} = h_0 P d_0 P Q_1 = h_0 x' P^2 e_0 =$   
 $h_0 Q_1 P^2 d_0 = h_2 d_0 x_{18,20} = h_2 x' P^2 d_0 = d_0 P^2 h_2 x' = P h_2 P d_0 x' =$   
 $B_2 P^3 d_0 = B_{21} P^3 h_2$
- 24 (1)  $h_0^2 d_0 P^2 Q_1 = h_0^2 e_0 x_{18,20} = h_0^2 P d_0 P Q_1 = h_0^2 x' P^2 e_0 =$   
 $h_0^2 Q_1 P^2 d_0 = h_0 h_2 d_0 x_{18,20} = h_0 h_2 x' P^2 d_0 = h_0 d_0 P^2 h_2 x' =$   
 $h_0 P h_2 P d_0 x' = h_0 B_2 P^3 d_0 = h_0 B_{21} P^3 h_2 = h_2^2 P^3 Q_1 =$   
 $h_2 P h_2 P^2 Q_1 = h_2 P^2 h_2 P Q_1 = h_2 Q_1 P^3 h_2 = P h_2^2 P Q_1 =$   
 $P h_2 P^2 h_2 Q_1 = P c_0 R_1$
- 25 (10)  $x_{25,24}$   
(01)  $d_0^2 P^2 v = d_0 e_0 P^2 u = d_0 r P^2 j = d_0 i^2 j = d_0 P d_0 P v = d_0 P e_0 P u =$   
 $d_0 u P^2 e_0 = d_0 v P^2 d_0 = e_0 r P^2 i = e_0 i^3 = e_0 P d_0 P u = e_0 u P^2 d_0 =$   
 $g P^3 v = r i P^2 e_0 = r j P^2 d_0 = r P d_0 P j = i k P j = i P d_0 z = j^2 P j =$   
 $P d_0^2 v = P d_0 P e_0 u = w P^3 e_0$
- 26 (1)  $h_0 x_{25,24}$
- 27 (01)  $h_0^2 x_{25,24}$   
(11)  $h_1 P^4 x' = P^2 h_1 x_{18,20} = x' P^4 h_1$
- 28 (10)  $d_0^4 P^2 d_0 = d_0^3 P d_0^2 = d_0^2 e_0 P^3 e_0 = d_0^2 g P^3 d_0 = d_0^2 P e_0 P^2 e_0 =$   
 $d_0 e_0^2 P^3 d_0 = d_0 e_0 P d_0 P^2 e_0 = d_0 e_0 P e_0 P^2 d_0 = d_0 g P d_0 P^2 d_0 =$   
 $d_0 P d_0 P e_0^2 = e_0^2 P d_0 P^2 d_0 = e_0 g P^4 e_0 = e_0 P d_0^2 P e_0 = g^2 P^4 d_0 =$   
 $g P d_0^3 = g P e_0 P^3 e_0 = g P^2 e_0^2 = i P^3 u = P u P^2 i$   
(01)  $h_0^3 x_{25,24} = Q P^2 i$
- 29 (1)  $h_0^4 x_{25,24} = h_0 Q P^2 i$
- 30 (1)  $h_0^5 x_{25,24} = h_0^2 Q P^2 i = h_3 P^4 Q$
- 31 (01)  $h_0^6 x_{25,24} = h_0^3 Q P^2 i = h_0 h_3 P^4 Q$   
(11)  $d_0^2 P^4 j = d_0 e_0 P^4 i = d_0 i P^4 e_0 = d_0 j P^4 d_0 = d_0 P d_0 P^3 j =$   
 $d_0 P j P^3 d_0 = d_0 P^2 d_0 P^2 j = d_0 P^2 e_0 P^2 i = e_0 i P^4 d_0 = e_0 P^2 d_0 P^2 i =$   
 $g P^5 j = i P d_0 P^3 e_0 = i P e_0 P^3 d_0 = i P^2 d_0 P^2 e_0 = j P d_0 P^3 d_0 =$   
 $j P^2 d_0^2 = k P^5 e_0 = l P^5 d_0 = P d_0^2 P^2 j = P d_0 P e_0 P^2 i = P d_0 P j P^2 d_0$
- 32 (1)  $h_0^7 x_{25,24} = h_0^4 Q P^2 i = h_0^2 h_3 P^4 Q = h_0 d_0^2 P^4 j = h_0 d_0 e_0 P^4 i =$   
 $h_0 d_0 i P^4 e_0 = h_0 d_0 j P^4 d_0 = h_0 d_0 P d_0 P^3 j = h_0 d_0 P j P^3 d_0 =$   
 $h_0 d_0 P^2 d_0 P^2 j = h_0 d_0 P^2 e_0 P^2 i = h_0 e_0 i P^4 d_0 = h_0 e_0 P^2 d_0 P^2 i =$   
 $h_0 g P^5 j = h_0 i P d_0 P^3 e_0 = h_0 i P e_0 P^3 d_0 = h_0 i P^2 d_0 P^2 e_0 =$   
 $h_0 j P d_0 P^3 d_0 = h_0 j P^2 d_0^2 = h_0 k P^5 e_0 = h_0 l P^5 d_0 = h_0 P d_0^2 P^2 j =$   
 $h_0 P d_0 P e_0 P^2 i = h_0 P d_0 P j P^2 d_0 = h_2 d_0^2 P^4 i = h_2 d_0 i P^4 d_0 =$   
 $h_2 d_0 P^2 d_0 P^2 i = h_2 e_0 P^5 j = h_2 i P d_0 P^3 d_0 = h_2 i P^2 d_0^2 =$   
 $h_2 j P^5 e_0 = h_2 k P^5 d_0 = h_2 P d_0^2 P^2 i = h_2 P e_0 P^4 j = h_2 P j P^4 e_0 =$   
 $h_2 P^2 e_0 P^3 j = h_2 P^2 j P^3 e_0 = d_0^2 i P^4 h_2 = d_0^2 P^2 h_2 P^2 i = d_0 f_0 P^5 d_0 =$   
 $d_0 P h_2 i P^3 d_0 = d_0 P h_2 P d_0 P^2 i = d_0 i P d_0 P^3 h_2 = d_0 i P^2 h_2 P^2 d_0 =$   
 $d_0 k P^5 h_2 = e_0 P h_2 P^4 j = e_0 j P^5 h_2 = e_0 P^2 h_2 P^3 j = e_0 P j P^4 h_2 =$   
(continued)

Stem 86 continued

$$\begin{aligned}
32 \quad (1) \quad & (\text{continued}) = e_0P^3h_2P^2j = f_0Pd_0P^4d_0 = f_0P^2d_0P^3d_0 = \\
& gPh_2P^4i = giP^5h_2 = gP^3h_2P^2i = Ph_2iPd_0P^2d_0 = Ph_2jP^4e_0 = \\
& Ph_2kP^4d_0 = Ph_2Pe_0P^3j = Ph_2PjP^3e_0 = Ph_2P^2e_0P^2j = \\
& iPd_0^2P^2h_2 = jPe_0P^4h_2 = jP^2h_2P^3e_0 = jP^2e_0P^3h_2 = \\
& kPd_0P^4h_2 = kP^2h_2P^3d_0 = kP^2d_0P^3h_2 = mP^6h_2 = \\
& Pe_0P^2h_2P^2j = Pe_0PjP^3h_2 = P^2h_2PjP^2e_0 \\
33 \quad (1) \quad & h_0^8x_{25,24} = h_0^5QP^2i = h_0^3h_3P^4Q = h_0^2d_0^2P^4j = h_0^2d_0e_0P^4i = \\
& h_0^2d_0iP^4e_0 = h_0^2d_0jP^4d_0 = h_0^2d_0Pd_0P^3j = h_0^2d_0PjP^3d_0 = \\
& h_0^2d_0P^2d_0P^2j = h_0^2d_0P^2e_0P^2i = h_0^2e_0iP^4d_0 = h_0^2e_0P^2d_0P^2i = \\
& h_0^2gP^5j = h_0^2iPd_0P^3e_0 = h_0^2iPe_0P^3d_0 = h_0^2iP^2d_0P^2e_0 = \\
& h_0^2jPd_0P^3d_0 = h_0^2jP^2d_0^2 = h_0^2kP^5e_0 = h_0^2lP^5d_0 = \\
& h_0^2Pd_0^2P^2j = h_0^2Pd_0Pe_0P^2i = h_0^2Pd_0PjP^2d_0 = h_0h_2d_0^2P^4i = \\
& h_0h_2d_0iP^4d_0 = h_0h_2d_0P^2d_0P^2i = h_0h_2e_0P^5j = h_0h_2iPd_0P^3d_0 = \\
& h_0h_2iP^2d_0^2 = h_0h_2jP^5e_0 = h_0h_2kP^5d_0 = h_0h_2Pd_0^2P^2i = \\
& h_0h_2Pe_0P^4j = h_0h_2PjP^4e_0 = h_0h_2P^2e_0P^3j = h_0h_2P^2jP^3e_0 = \\
& h_0d_0^2iP^4h_2 = h_0d_0^2P^2h_2P^2i = h_0d_0f_0P^5d_0 = h_0d_0Ph_2iP^3d_0 = \\
& h_0d_0Ph_2Pd_0P^2i = h_0d_0iPd_0P^3h_2 = h_0d_0iP^2h_2P^2d_0 = \\
& h_0d_0kP^5h_2 = h_0e_0Ph_2P^4j = h_0e_0jP^5h_2 = h_0e_0P^2h_2P^3j = \\
& h_0e_0PjP^4h_2 = h_0e_0P^3h_2P^2j = h_0f_0Pd_0P^4d_0 = h_0f_0P^2d_0P^3d_0 = \\
& h_0gPh_2P^4i = h_0giP^5h_2 = h_0gP^3h_2P^2i = h_0Ph_2iPd_0P^2d_0 = \\
& h_0Ph_2jP^4e_0 = h_0Ph_2kP^4d_0 = h_0Ph_2Pe_0P^3j = h_0Ph_2PjP^3e_0 = \\
& h_0Ph_2P^2e_0P^2j = h_0iPd_0^2P^2h_2 = h_0jPe_0P^4h_2 = h_0jP^2h_2P^3e_0 = \\
& h_0jP^2e_0P^3h_2 = h_0kPd_0P^4h_2 = h_0kP^2h_2P^3d_0 = h_0kP^2d_0P^3h_2 = \\
& h_0mP^6h_2 = h_0Pe_0P^2h_2P^2j = h_0Pe_0PjP^3h_2 = h_0P^2h_2PjP^2e_0 = \\
& h_1d_0^2P^5e_0 = h_1d_0e_0P^5d_0 = h_1d_0Pd_0P^4e_0 = h_1d_0Pe_0P^4d_0 = \\
& h_1d_0P^2d_0P^3e_0 = h_1d_0P^2e_0P^3d_0 = h_1e_0Pd_0P^4d_0 = \\
& h_1e_0P^2d_0P^3d_0 = h_1gP^6e_0 = h_1Pd_0^2P^3e_0 = h_1Pd_0Pe_0P^3d_0 = \\
& h_1Pd_0P^2d_0P^2e_0 = h_1Pe_0P^2d_0^2 = h_2^2d_0P^5j = h_2^2iP^5e_0 = \\
& h_2^2jP^5d_0 = h_2^2Pd_0P^4j = h_2^2Pe_0P^4i = h_2^2PjP^4d_0 = \\
& h_2^2P^2d_0P^3j = h_2^2P^2iP^3e_0 = h_2^2P^2jP^3d_0 = h_2d_0Ph_2P^4j = \\
& h_2d_0jP^5h_2 = h_2d_0P^2h_2P^3j = h_2d_0PjP^4h_2 = h_2d_0P^3h_2P^2j = \\
& h_2e_0Ph_2P^4i = h_2e_0iP^5h_2 = h_2e_0P^3h_2P^2i = h_2f_0P^6e_0 = \\
& h_2Ph_2iP^4e_0 = h_2Ph_2jP^4d_0 = h_2Ph_2Pd_0P^3j = h_2Ph_2PjP^3d_0 = \\
& h_2Ph_2P^2d_0P^2j = h_2Ph_2P^2e_0P^2i = h_2iPe_0P^4h_2 = \\
& h_2iP^2h_2P^3e_0 = h_2iP^2e_0P^3h_2 = h_2jPd_0P^4h_2 = h_2jP^2h_2P^3d_0 = \\
& h_2jP^2d_0P^3h_2 = h_2lP^6h_2 = h_2Pd_0P^2h_2P^2j = h_2Pd_0PjP^3h_2 = \\
& h_2Pe_0P^2h_2P^2i = h_2P^2h_2PjP^2d_0 = c_0iP^4i = c_0P^2i^2 = \\
& d_0^2e_0P^5h_1 = d_0^2Ph_1P^4e_0 = d_0^2Pe_0P^4h_1 = d_0^2P^2h_1P^3e_0 = \\
& d_0^2P^2e_0P^3h_1 = d_0e_0Ph_1P^4d_0 = d_0e_0Pd_0P^4h_1 = d_0e_0P^2h_1P^3d_0 = \\
& d_0e_0P^2d_0P^3h_1 = d_0Ph_1Pd_0P^3e_0 = (\text{continued})
\end{aligned}$$

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$$\begin{aligned}
33 \quad (1) \quad & \text{(continued)} = d_0 P h_1 P e_0 P^3 d_0 = d_0 P h_1 P^2 d_0 P^2 e_0 = \\
& d_0 P h_2^2 P^3 j = d_0 P h_2 j P^4 h_2 = d_0 P h_2 P^2 h_2 P^2 j = d_0 P h_2 P j P^3 h_2 = \\
& d_0 j P^2 h_2 P^3 h_2 = d_0 P d_0 P e_0 P^3 h_1 = d_0 P d_0 P^2 h_1 P^2 e_0 = \\
& d_0 P e_0 P^2 h_1 P^2 d_0 = d_0 P^2 h_2^2 P j = e_0 f_0 P^6 h_2 = e_0 g P^6 h_1 = \\
& e_0 P h_1 P d_0 P^3 d_0 = e_0 P h_1 P^2 d_0^2 = e_0 P h_2 i P^4 h_2 = e_0 P h_2 P^2 h_2 P^2 i = \\
& e_0 i P^2 h_2 P^3 h_2 = e_0 P d_0^2 P^3 h_1 = e_0 P d_0 P^2 h_1 P^2 d_0 = f_0 P h_2 P^5 e_0 = \\
& f_0 P e_0 P^5 h_2 = f_0 P^2 h_2 P^4 e_0 = f_0 P^2 e_0 P^4 h_2 = f_0 P^3 h_2 P^3 e_0 = \\
& g P h_1 P^5 e_0 = g P e_0 P^5 h_1 = g P^2 h_1 P^4 e_0 = g P^2 e_0 P^4 h_1 = \\
& g P^3 h_1 P^3 e_0 = P h_1 P d_0^2 P^2 e_0 = P h_1 P d_0 P e_0 P^2 d_0 = P h_2^2 i P^3 e_0 = \\
& P h_2^2 j P^3 d_0 = P h_2^2 P d_0 P^2 j = P h_2^2 P e_0 P^2 i = P h_2^2 P j P^2 d_0 = \\
& P h_2 i P e_0 P^3 h_2 = P h_2 i P^2 h_2 P^2 e_0 = P h_2 j P d_0 P^3 h_2 = \\
& P h_2 j P^2 h_2 P^2 d_0 = P h_2 l P^5 h_2 = P h_2 P d_0 P^2 h_2 P j = r P^6 c_0 = \\
& i^2 P^4 c_0 = i P e_0 P^2 h_2^2 = i P^2 c_0 P^2 i = j P d_0 P^2 h_2^2 = l P^2 h_2 P^4 h_2 = \\
& l P^3 h_2^2 = P d_0^2 P e_0 P^2 h_1
\end{aligned}$$

Stem 87

- 5 (1)  $h_1^2 c_3 = h_2 f_2 = h_3 e_2$   
6 (1)  $h_1 h_4 h_6 c_0 = h_3 h_6 e_0$   
7 (1)  $x_{7,74}$   
9 (1)  $h_4^2 Q_2 = g Q_3$   
10 (1)  $x_{10,60}$   
11 (1)  $h_1^2 h_6 P d_0 = h_1 h_6 d_0 P h_1 = h_3 h_6 P^2 h_1 = h_6 c_0 P c_0$   
12 (1)  $h_6 P^2 c_0$   
13 (10)  $g x_{9,39} = r Q_2$   
(01)  $h_1 x_{12,48} = h_3 x_{12,44}$   
15 (10)  $x_{15,47}$   
(01)  $h_1 P^3 h_5^2 = h_2 x_{14,46} = h_3 x_{14,42} = g x_{11,35}$   
17 (1)  $x_{17,50}$   
18 (10)  $e_0 g^2 r = e_0 m^2 = g l m = v w$   
(01)  $d_0^2 B_{21} = d_0 e_0 Q_1 = d_0 g x' = e_0^2 x' = P d_0 B_{23} = P e_0 x_{10,27} = P e_0 x_{10,28}$   
19 (1)  $h_0 d_0^2 B_{21} = h_0 d_0 e_0 Q_1 = h_0 d_0 g x' = h_0 e_0^2 x' = h_0 P d_0 B_{23} = h_0 P e_0 x_{10,27} = h_0 P e_0 x_{10,28} = h_2 d_0^2 Q_1 = h_2 d_0 e_0 x' = h_2 g P Q_1 = h_2 P d_0 x_{10,27} = h_2 P d_0 x_{10,28} = h_2 P e_0 B_{21} = h_4 P^2 Q_1 = c_0 x_{16,35} = d_0 P h_2 x_{10,27} = d_0 P h_2 x_{10,28} = d_0 B_2 P e_0 = e_0 P h_2 B_{21} = e_0 B_2 P d_0 = g P h_2 Q_1 = Q_2 P^2 d_0$   
20 (1)  $P x_{16,35}$   
21 (100)  $d_0 P R_2 = e_0 R_1 = P d_0 R_2$   
(010)  $d_0^3 w = d_0^2 e_0 v = d_0^2 g u = d_0^2 r k = d_0 e_0^2 u = d_0 e_0 r j = d_0 g r i = d_0 l z = e_0^2 r i = e_0 g P v = e_0 k z = e_0 P e_0 w = g^2 P u = g j z = g P d_0 w = g P e_0 v = r l P e_0 = r m P d_0 = i k m = i l^2 = j^2 m = j k l = k^3$   
(001)  $h_0 P x_{16,35} = P h_2 x_{16,32}$   
(101)  $i P Q_1 = x' P j$   
22 (10)  $h_0 i P Q_1 = h_0 x' P j = f_0 x_{18,20} = P h_2 i x' = B_2 P^2 i = B_4 P^3 h_2$   
(01)  $h_0^2 P x_{16,35} = h_0 P h_2 x_{16,32}$   
(11)  $h_0 d_0 P R_2 = h_0 e_0 R_1 = h_0 P d_0 R_2 = h_2 d_0 R_1 = P^2 h_2 P^2 D_1 = R_1 P^2 e_0$

continued

Stem 87continued

$$\begin{aligned}
23 \quad (10) \quad & h_0^2 i P Q_1 = h_0^2 x' P j = h_0 f_0 x_{18,20} = h_0 P h_2 i x' = h_0 B_2 P^2 i = \\
& h_0 B_4 P^3 h_2 = h_1 e_0 x_{18,20} = h_1 x' P^2 e_0 = e_0 P^2 h_1 x' = P h_1 P e_0 x' = \\
& B_1 P^3 e_0 = x_{10,28} P^3 h_1 \\
(01) \quad & h_0^3 P x_{16,35} = h_0^2 P h_2 x_{16,32} = h_1^2 P h_1 x_{16,32} = h_1 P^2 h_1 W_1 = h_1 u Q = \\
& h_1 u P u = h_1 X_1 P^3 h_1 = h_3 P^3 Q_1 = P h_1^2 W_1 = P h_1 P^2 h_1 X_1 = \\
& P h_1 u^2 = q P^2 u = G P^4 h_1 \\
(11) \quad & h_0^2 d_0 P R_2 = h_0^2 e_0 R_1 = h_0^2 P d_0 R_2 = h_0 h_2 d_0 R_1 = h_0 P^2 h_2 P^2 D_1 = \\
& h_0 R_1 P^2 e_0 = h_1 d_0 P^2 Q_1 = h_1 P d_0 P Q_1 = h_1 Q_1 P^2 d_0 = h_2^2 P^2 R_2 = \\
& h_2 P h_2 P R_2 = h_2 P^2 h_2 R_2 = h_2 R_1 P^2 d_0 = d_0 P h_1 P Q_1 = \\
& d_0 P^2 h_1 Q_1 = d_0 P^2 h_2 R_1 = P h_1 P d_0 Q_1 = P h_2^2 R_2 = P h_2 P d_0 R_1 = \\
& x_{10,27} P^3 h_1 \\
24 \quad (1) \quad & d_0^5 e_0 = d_0^3 g P e_0 = d_0^2 e_0^2 P e_0 = d_0^2 e_0 g P d_0 = d_0 e_0^3 P d_0 = d_0 g^2 P^2 e_0 = \\
& d_0 i P v = d_0 j P u = d_0 u P j = e_0^2 g P^2 e_0 = e_0 g^2 P^2 d_0 = e_0 g P e_0^2 = \\
& e_0 i P u = g^2 P d_0 P e_0 = r i P j = i^2 z = i P d_0 v = i P e_0 u = j P d_0 u = \\
& k P^2 v = l P^2 u = w P^2 j \\
27 \quad (1) \quad & d_0^3 i P d_0 = d_0^2 e_0 P^2 j = d_0^2 g P^2 i = d_0^2 j P^2 e_0 = d_0^2 k P^2 d_0 = d_0^2 P e_0 P j = \\
& d_0 e_0^2 P^2 i = d_0 e_0 i P^2 e_0 = d_0 e_0 j P^2 d_0 = d_0 e_0 P d_0 P j = d_0 g i P^2 d_0 = \\
& d_0 i P e_0^2 = d_0 j P d_0 P e_0 = d_0 k P d_0^2 = d_0 l P^3 e_0 = d_0 m P^3 d_0 = \\
& e_0^2 i P^2 d_0 = e_0 g P^3 j = e_0 i P d_0 P e_0 = e_0 j P d_0^2 = e_0 k P^3 e_0 = \\
& e_0 l P^3 d_0 = g i P d_0^2 = g j P^3 e_0 = g k P^3 d_0 = g P e_0 P^2 j = g P j P^2 e_0 = \\
& k P e_0 P^2 e_0 = l P d_0 P^2 e_0 = l P e_0 P^2 d_0 = m P d_0 P^2 d_0 \\
28 \quad (1) \quad & h_1^2 P^4 x' = h_1 P^2 h_1 x_{18,20} = h_1 x' P^4 h_1 = P h_1^2 x_{18,20} = P h_1 x' P^3 h_1 = \\
& B_1 P^5 h_1 = P^2 h_1^2 x' \\
30 \quad (1) \quad & d_0 i P^3 j = d_0 P j P^2 i = r P^5 e_0 = i^2 P^3 e_0 = i j P^3 d_0 = i P d_0 P^2 j = \\
& i P e_0 P^2 i = i P j P^2 d_0 = j P d_0 P^2 i = k P^4 j = l P^4 i = z P^4 d_0 \\
33 \quad (1) \quad & P^6 u \\
36 \quad (1) \quad & d_0 P^7 e_0 = e_0 P^7 d_0 = P d_0 P^6 e_0 = P e_0 P^6 d_0 = P^2 d_0 P^5 e_0 = \\
& P^2 e_0 P^5 d_0 = P^3 d_0 P^4 e_0 = P^3 e_0 P^4 d_0 \\
37 \quad (1) \quad & h_0 d_0 P^7 e_0 = h_0 e_0 P^7 d_0 = h_0 P d_0 P^6 e_0 = h_0 P e_0 P^6 d_0 = \\
& h_0 P^2 d_0 P^5 e_0 = h_0 P^2 e_0 P^5 d_0 = h_0 P^3 d_0 P^4 e_0 = h_0 P^3 e_0 P^4 d_0 = \\
& h_2 d_0 P^7 d_0 = h_2 P d_0 P^6 d_0 = h_2 P^2 d_0 P^5 d_0 = h_2 P^3 d_0 P^4 d_0 = \\
& d_0^2 P^7 h_2 = d_0 P h_2 P^6 d_0 = d_0 P d_0 P^6 h_2 = d_0 P^2 h_2 P^5 d_0 = \\
& d_0 P^2 d_0 P^5 h_2 = d_0 P^3 h_2 P^4 d_0 = d_0 P^3 d_0 P^4 h_2 = g P^8 h_2 = \\
& P h_2 P d_0 P^5 d_0 = P h_2 P^2 d_0 P^4 d_0 = P h_2 P^3 d_0^2 = P d_0^2 P^5 h_2 = \\
& P d_0 P^2 h_2 P^4 d_0 = P d_0 P^2 d_0 P^4 h_2 = P d_0 P^3 h_2 P^3 d_0 = \\
& P^2 h_2 P^2 d_0 P^3 d_0 = P^2 d_0^2 P^3 h_2
\end{aligned}$$

continued

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$$\begin{aligned}
38 \quad (1) \quad & h_0^2 d_0 P^7 e_0 = h_0^2 e_0 P^7 d_0 = h_0^2 P d_0 P^6 e_0 = h_0^2 P e_0 P^6 d_0 = \\
& h_0^2 P^2 d_0 P^5 e_0 = h_0^2 P^2 e_0 P^5 d_0 = h_0^2 P^3 d_0 P^4 e_0 = h_0^2 P^3 e_0 P^4 d_0 = \\
& h_0 h_2 d_0 P^7 d_0 = h_0 h_2 P d_0 P^6 d_0 = h_0 h_2 P^2 d_0 P^5 d_0 = \\
& h_0 h_2 P^3 d_0 P^4 d_0 = h_0 d_0^2 P^7 h_2 = h_0 d_0 P h_2 P^6 d_0 = h_0 d_0 P d_0 P^6 h_2 = \\
& h_0 d_0 P^2 h_2 P^5 d_0 = h_0 d_0 P^2 d_0 P^5 h_2 = h_0 d_0 P^3 h_2 P^4 d_0 = \\
& h_0 d_0 P^3 d_0 P^4 h_2 = h_0 g P^8 h_2 = h_0 P h_2 P d_0 P^5 d_0 = \\
& h_0 P h_2 P^2 d_0 P^4 d_0 = h_0 P h_2 P^3 d_0^2 = h_0 P d_0^2 P^5 h_2 = \\
& h_0 P d_0 P^2 h_2 P^4 d_0 = h_0 P d_0 P^2 d_0 P^4 h_2 = h_0 P d_0 P^3 h_2 P^3 d_0 = \\
& h_0 P^2 h_2 P^2 d_0 P^3 d_0 = h_0 P^2 d_0^2 P^3 h_2 = h_2^2 P^8 e_0 = h_2 e_0 P^8 h_2 = \\
& h_2 P h_2 P^7 e_0 = h_2 P e_0 P^7 h_2 = h_2 P^2 h_2 P^6 e_0 = h_2 P^2 e_0 P^6 h_2 = \\
& h_2 P^3 h_2 P^5 e_0 = h_2 P^3 e_0 P^5 h_2 = h_2 P^4 h_2 P^4 e_0 = e_0 P h_2 P^7 h_2 = \\
& e_0 P^2 h_2 P^6 h_2 = e_0 P^3 h_2 P^5 h_2 = e_0 P^4 h_2^2 = P h_2^2 P^6 e_0 = \\
& P h_2 P e_0 P^6 h_2 = P h_2 P^2 h_2 P^5 e_0 = P h_2 P^2 e_0 P^5 h_2 = \\
& P h_2 P^3 h_2 P^4 e_0 = P h_2 P^3 e_0 P^4 h_2 = P c_0 P^6 i = i P^7 c_0 = \\
& P e_0 P^2 h_2 P^5 h_2 = P e_0 P^3 h_2 P^4 h_2 = P^2 h_2^2 P^4 e_0 = P^2 h_2 P^2 e_0 P^4 h_2 = \\
& P^2 h_2 P^3 h_2 P^3 e_0 = P^2 e_0 P^3 h_2^2 = P^3 c_0 P^4 i = P^2 i P^5 c_0 \\
39 \quad (1) \quad & P^8 i
\end{aligned}$$

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- 8 (10)  $g_2^2$   
 (01)  $h_1x_{7,74}$   
 (11)  $h_4^2D_2 = h_5Q_2$
- 9 (10)  $h_6Pe_0$   
 (01)  $h_0h_4^2D_2 = h_0h_5Q_2 = h_0g_2^2$
- 10 (1)  $h_0h_6Pe_0 = h_2h_6Pd_0 = h_6d_0Ph_2$
- 11 (1)  $h_0^2h_6Pe_0 = h_0h_2h_6Pd_0 = h_0h_6d_0Ph_2$
- 12 (100)  $x_{12,51}$   
 (001)  $h_0^3h_6Pe_0 = h_0^2h_2h_6Pd_0 = h_0^2h_6d_0Ph_2 = h_1^3h_6Pd_0 = h_1^2h_6d_0Ph_1 =$   
 $h_1h_3h_6P^2h_1 = h_1h_6c_0Pc_0 = h_2^2h_6P^2h_2 = h_2h_6Ph_2^2 = h_3h_6Ph_1^2 =$   
 $h_6c_0^2Ph_1 = d_0x_{8,51}$   
 (011)  $gG_{21} = nQ_2 = rD_2$
- 13 (10)  $h_1h_6P^2c_0 = h_6c_0P^2h_1 = h_6Ph_1Pc_0$   
 (01)  $h_0x_{12,51} = h_3x_{12,45}$
- 14 (10)  $h_6P^3h_1$   
 (01)  $h_0^2x_{12,51} = h_0h_3x_{12,45} = h_1^2x_{12,48} = h_1h_3x_{12,44} = d_1Q_1$
- 16 (1)  $x_{16,48}$
- 17 (1)  $d_0^2B_4 = e_0x_{13,35} = gP^2D_1 = iB_{23} = jx_{10,27} = jx_{10,28} = kB_{21} =$   
 $lQ_1 = mx'$
- 18 (10)  $h_1x_{17,50}$   
 (01)  $h_0d_0^2B_4 = h_0e_0x_{13,35} = h_0gP^2D_1 = h_0iB_{23} = h_0jx_{10,27} =$   
 $h_0jx_{10,28} = h_0kB_{21} = h_0lQ_1 = h_0mx' = h_2d_0x_{13,35} =$   
 $h_2e_0P^2D_1 = h_2gR_2 = h_2ix_{10,27} = h_2ix_{10,28} = h_2jB_{21} =$   
 $h_2kQ_1 = h_2lx' = h_2Pe_0B_4 = h_4PR_2 = d_0f_0Q_1 = d_0gR_1 =$   
 $d_0jB_2 = e_0^2R_1 = e_0f_0x' = e_0Ph_2B_4 = e_0iB_2 = D_2P^2d_0 =$   
 $Pd_0B_5 = Pd_0PD_2$
- 19 (1)  $h_0^2d_0^2B_4 = h_0^2e_0x_{13,35} = h_0^2gP^2D_1 = h_0^2iB_{23} = h_0^2jx_{10,27} =$   
 $h_0^2jx_{10,28} = h_0^2kB_{21} = h_0^2lQ_1 = h_0^2mx' = h_0h_2d_0x_{13,35} =$   
 $h_0h_2e_0P^2D_1 = h_0h_2gR_2 = h_0h_2ix_{10,27} = h_0h_2ix_{10,28} =$   
 $h_0h_2jB_{21} = h_0h_2kQ_1 = h_0h_2lx' = h_0h_2Pe_0B_4 = h_0h_4PR_2 =$   
 $h_0d_0f_0Q_1 = h_0d_0gR_1 = h_0d_0jB_2 = h_0e_0^2R_1 = h_0e_0f_0x' =$   
 $h_0e_0Ph_2B_4 = h_0e_0iB_2 = h_0D_2P^2d_0 = h_0Pd_0B_5 = h_0Pd_0PD_2 =$   
 $h_1d_0^2B_{21} = h_1d_0e_0Q_1 = h_1d_0gx' = h_1e_0^2x' = h_1Pd_0B_{23} =$   
 $h_1Pe_0x_{10,27} = h_1Pe_0x_{10,28} = h_2^2d_0P^2D_1 = h_2^2e_0R_2 = h_2^2iB_{21} =$   
 $h_2^2jQ_1 = h_2^2kx' = h_2^2Pd_0B_4 = h_2h_4R_1 = h_2d_0e_0R_1 = h_2d_0f_0x' =$   
 $h_2d_0Ph_2B_4 = h_2d_0iB_2 = c_0x_{16,37} = d_0^3B_1 = d_0Ph_1B_{23} =$   
 $e_0Ph_1x_{10,27} = e_0Ph_1x_{10,28} = e_0B_1Pe_0 = f_0Ph_2B_{21} = f_0B_2Pd_0 =$   
 $gPh_1B_{21} = gB_1Pd_0 = Ph_2kB_2 = AP^3h_2 = P^2h_2PA$

continued

- Stem 88      continued
- 20 (10)  $iR_2$   
 (01)  $d_0^2g^3 = d_0^2r^2 = d_0e_0^2g^2 = d_0kw = d_0lv = d_0mu = e_0^4g = e_0rz = e_0jw = e_0kv = e_0lu = giw = gjv = gku = rim = rjl = rk^2$
- 21 (1)  $h_0iR_2 = h_1Px_{16,35} = f_0R_1 = Ph_1x_{16,35} = Ph_2x_{16,33} = R_1Pj$
- 23 (1)  $d_0^4l = d_0^3e_0k = d_0^3gj = d_0^2e_0^2j = d_0^2e_0gi = d_0^2mPe_0 = d_0e_0^3i = d_0e_0lPe_0 = d_0e_0mPd_0 = d_0g^2Pj = d_0gkPe_0 = d_0glPd_0 = e_0^2gPj = e_0^2kPe_0 = e_0^2lPd_0 = e_0gjPe_0 = e_0gkPd_0 = g^2iPe_0 = g^2jPd_0 = gmP^2e_0 = rP^2v = i^2v = iju = zPu$
- 26 (01)  $d_0^3i^2 = d_0^2rP^2d_0 = d_0^2jPj = d_0e_0iPj = d_0rPd_0^2 = d_0ijPe_0 = d_0ikPd_0 = d_0j^2Pd_0 = d_0lP^2j = d_0mP^2i = d_0zP^2e_0 = e_0rP^3e_0 = e_0i^2Pe_0 = e_0ijPd_0 = e_0kP^2j = e_0lP^2i = e_0zP^2d_0 = grP^3d_0 = gi^2Pd_0 = gjP^2j = gkP^2i = gPj^2 = rPe_0P^2e_0 = ilP^2e_0 = imP^2d_0 = jkP^2e_0 = jlP^2d_0 = k^2P^2d_0 = kPe_0Pj = lPd_0Pj = Pd_0Pe_0z$
- (11)  $P^4Q_1$
- 27 (1)  $h_0P^4Q_1 = h_2P^4x' = P^2h_2x_{18,20} = x'P^4h_2$
- 28 (1)  $h_0^2P^4Q_1 = h_0h_2P^4x' = h_0P^2h_2x_{18,20} = h_0x'P^4h_2$
- 29 (10)  $d_0P^4v = Pd_0P^3v = vP^4d_0 = P^2d_0P^2v = PvP^3d_0$   
 (01)  $h_0^3P^4Q_1 = h_0^2h_2P^4x' = h_0^2P^2h_2x_{18,20} = h_0^2x'P^4h_2 = h_1^3P^4x' = h_1^2P^2h_1x_{18,20} = h_1^2x'P^4h_1 = h_1Ph_1^2x_{18,20} = h_1Ph_1x^2P^3h_1 = h_1B_1P^5h_1 = h_1P^2h_1^2x' = Ph_1^2P^2h_1x' = Ph_1B_1P^4h_1 = B_1P^2h_1P^3h_1 = QP^3e_0$
- (11)  $e_0P^4u = rP^4j = i^2P^2j = ijP^2i = Pe_0P^3u = uP^4e_0 = P^2e_0P^2u = PuP^3e_0$
- 32 (1)  $d_0^3P^4d_0 = d_0^2Pd_0P^3d_0 = d_0^2P^2d_0^2 = d_0e_0P^5e_0 = d_0gP^5d_0 = d_0Pd_0^2P^2d_0 = d_0Pe_0P^4e_0 = d_0P^2e_0P^3e_0 = e_0^2P^5d_0 = e_0Pd_0P^4e_0 = e_0Pe_0P^4d_0 = e_0P^2d_0P^3e_0 = e_0P^2e_0P^3d_0 = gPd_0P^4d_0 = gP^2d_0P^3d_0 = Pd_0^4 = Pd_0Pe_0P^3e_0 = Pd_0P^2e_0^2 = Pe_0^2P^3d_0 = Pe_0P^2d_0P^2e_0$
- 34 (1)  $h_1P^6u = Ph_1P^4Q = Ph_1P^5u = P^2h_1P^4u = uP^6h_1 = P^3h_1P^3u = QP^5h_1 = PuP^5h_1 = P^4h_1P^2u$
- 35 (1)  $d_0P^6j = e_0P^6i = iP^6e_0 = jP^6d_0 = Pd_0P^5j = PjP^5d_0 = P^2d_0P^4j = P^2e_0P^4i = P^2iP^4e_0 = P^2jP^4d_0 = P^3d_0P^3j$
- 36 (1)  $h_0d_0P^6j = h_0e_0P^6i = h_0iP^6e_0 = h_0jP^6d_0 = h_0Pd_0P^5j = h_0PjP^5d_0 = h_0P^2d_0P^4j = h_0P^2e_0P^4i = h_0P^2iP^4e_0 = h_0P^2jP^4d_0 = h_0P^3d_0P^3j = h_2d_0P^6i = h_2iP^6d_0 = h_2P^2d_0P^4i = h_2P^2iP^4d_0 = d_0iP^6h_2 = d_0P^2h_2P^4i = d_0P^2iP^4h_2 = f_0P^7d_0 = Ph_2iP^5d_0 = Ph_2Pd_0P^4i = Ph_2P^2iP^3d_0 = iPd_0P^5h_2 = iP^2h_2P^4d_0 = iP^2d_0P^4h_2 = iP^3h_2P^3d_0 = kP^7h_2 = Pd_0P^3h_2P^2i = P^2h_2P^2d_0P^2i$

continued



Stem 88 continued

$$\begin{aligned}
37 \quad (1) \quad & h_0^2 d_0 P^6 j = h_0^2 e_0 P^6 i = h_0^2 i P^6 e_0 = h_0^2 j P^6 d_0 = h_0^2 P d_0 P^5 j = \\
& h_0^2 P j P^5 d_0 = h_0^2 P^2 d_0 P^4 j = h_0^2 P^2 e_0 P^4 i = h_0^2 P^2 i P^4 e_0 = \\
& h_0^2 P^2 j P^4 d_0 = h_0^2 P^3 d_0 P^3 j = h_0 h_2 d_0 P^6 i = h_0 h_2 i P^6 d_0 = \\
& h_0 h_2 P^2 d_0 P^4 i = h_0 h_2 P^2 i P^4 d_0 = h_0 d_0 i P^6 h_2 = h_0 d_0 P^2 h_2 P^4 i = \\
& h_0 d_0 P^2 i P^4 h_2 = h_0 f_0 P^7 d_0 = h_0 P h_2 i P^5 d_0 = h_0 P h_2 P d_0 P^4 i = \\
& h_0 P h_2 P^2 i P^3 d_0 = h_0 i P d_0 P^5 h_2 = h_0 i P^2 h_2 P^4 d_0 = h_0 i P^2 d_0 P^4 h_2 = \\
& h_0 i P^3 h_2 P^3 d_0 = h_0 k P^7 h_2 = h_0 P d_0 P^3 h_2 P^2 i = h_0 P^2 h_2 P^2 d_0 P^2 i = \\
& h_1 d_0 P^7 e_0 = h_1 e_0 P^7 d_0 = h_1 P d_0 P^6 e_0 = h_1 P e_0 P^6 d_0 = \\
& h_1 P^2 d_0 P^5 e_0 = h_1 P^2 e_0 P^5 d_0 = h_1 P^3 d_0 P^4 e_0 = h_1 P^3 e_0 P^4 d_0 = \\
& h_2^2 P^7 j = h_2 P h_2 P^6 j = h_2 j P^7 h_2 = h_2 P^2 h_2 P^5 j = h_2 P j P^6 h_2 = \\
& h_2 P^3 h_2 P^4 j = h_2 P^2 j P^5 h_2 = h_2 P^4 h_2 P^3 j = d_0 e_0 P^7 h_1 = \\
& d_0 P h_1 P^6 e_0 = d_0 P e_0 P^6 h_1 = d_0 P^2 h_1 P^5 e_0 = d_0 P^2 e_0 P^5 h_1 = \\
& d_0 P^3 h_1 P^4 e_0 = d_0 P^3 e_0 P^4 h_1 = e_0 P h_1 P^6 d_0 = e_0 P d_0 P^6 h_1 = \\
& e_0 P^2 h_1 P^5 d_0 = e_0 P^2 d_0 P^5 h_1 = e_0 P^3 h_1 P^4 d_0 = e_0 P^3 d_0 P^4 h_1 = \\
& P h_1 P d_0 P^5 e_0 = P h_1 P e_0 P^5 d_0 = P h_1 P^2 d_0 P^4 e_0 = P h_1 P^2 e_0 P^4 d_0 = \\
& P h_1 P^3 d_0 P^3 e_0 = P h_2^2 P^5 j = P h_2 j P^6 h_2 = P h_2 P^2 h_2 P^4 j = \\
& P h_2 P j P^5 h_2 = P h_2 P^3 h_2 P^3 j = P h_2 P^2 j P^4 h_2 = j P^2 h_2 P^5 h_2 = \\
& j P^3 h_2 P^4 h_2 = P d_0 P e_0 P^5 h_1 = P d_0 P^2 h_1 P^4 e_0 = P d_0 P^2 e_0 P^4 h_1 = \\
& P d_0 P^3 h_1 P^3 e_0 = P e_0 P^2 h_1 P^4 d_0 = P e_0 P^2 d_0 P^4 h_1 = \\
& P e_0 P^3 h_1 P^3 d_0 = P^2 h_1 P^2 d_0 P^3 e_0 = P^2 h_1 P^2 e_0 P^3 d_0 = P^2 h_2^2 P^3 j = \\
& P^2 h_2 P j P^4 h_2 = P^2 h_2 P^3 h_2 P^2 j = P j P^3 h_2^2 = P^2 d_0 P^2 e_0 P^3 h_1
\end{aligned}$$

Stem 89

- 7 (1)  $h_2^2 h_6 g = h_4 h_6 P h_2 = h_5 D_2$
- 8 (1)  $h_6 j$
- 9 (1)  $h_0 h_6 j = h_2 h_6 i$
- 10 (1)  $h_0^2 h_6 j = h_0 h_2 h_6 i = h_1 h_6 P e_0 = h_6 e_0 P h_1$
- 11 (1)  $x_{11,59}$
- 12 (1)  $h_0 x_{11,59}$
- 13 (1)  $h_0^2 x_{11,59} = h_1 x_{12,51} = h_2 x_{12,48} = q Q_2$
- 15 (1)  $h_1 h_6 P^3 h_1 = h_6 P h_1 P^2 h_1$
- 16 (1)  $r B_{21} = k B_4$
- 18 (1)  $x_{18,50}$
- 19 (10)  $d_0 g^2 m = d_0 r w = e_0^2 g m = e_0 g^2 l = e_0 r v = g^3 k = g r u = r^2 k$
- (01)  $h_0 x_{18,50} = h_1^2 x_{17,50} = P h_1 x_{14,42}$
- 22 (10)  $d_0 P d_0 x' = e_0 P^2 Q_1 = P e_0 P Q_1 = Q_1 P^2 e_0 = B_{21} P^2 d_0$
- (01)  $d_0^3 e_0 r = d_0^2 g z = d_0^2 j m = d_0^2 k l = d_0 e_0^2 z = d_0 e_0 i m = d_0 e_0 j l =$   
 $d_0 e_0 k^2 = d_0 g r P e_0 = d_0 g i l = d_0 g j k = e_0^2 r P e_0 = e_0^2 i l = e_0^2 j k =$   
 $e_0 g r P d_0 = e_0 g i k = e_0 g j^2 = g^2 i j = g m P j = k m P e_0 = l^2 P e_0 =$   
 $l m P d_0 = u P v = v P u$
- (11)  $g x_{18,20}$
- 23 (1)  $h_0 d_0 P d_0 x' = h_0 e_0 P^2 Q_1 = h_0 g x_{18,20} = h_0 P e_0 P Q_1 =$   
 $h_0 Q_1 P^2 e_0 = h_0 B_{21} P^2 d_0 = h_2 d_0 P^2 Q_1 = h_2 e_0 x_{18,20} =$   
 $h_2 P d_0 P Q_1 = h_2 x' P^2 e_0 = h_2 Q_1 P^2 d_0 = d_0 P h_2 P Q_1 =$   
 $d_0 P^2 h_2 Q_1 = e_0 P^2 h_2 x' = P h_2 P d_0 Q_1 = P h_2 P e_0 x' = B_2 P^3 e_0 =$   
 $x_{10,27} P^3 h_2 = x_{10,28} P^3 h_2$
- 24 (1)  $h_0^2 d_0 P d_0 x' = h_0^2 e_0 P^2 Q_1 = h_0^2 g x_{18,20} = h_0^2 P e_0 P Q_1 =$   
 $h_0^2 Q_1 P^2 e_0 = h_0^2 B_{21} P^2 d_0 = h_0 h_2 d_0 P^2 Q_1 = h_0 h_2 e_0 x_{18,20} =$   
 $h_0 h_2 P d_0 P Q_1 = h_0 h_2 x' P^2 e_0 = h_0 h_2 Q_1 P^2 d_0 = h_0 d_0 P h_2 P Q_1 =$   
 $h_0 d_0 P^2 h_2 Q_1 = h_0 e_0 P^2 h_2 x' = h_0 P h_2 P d_0 Q_1 = h_0 P h_2 P e_0 x' =$   
 $h_0 B_2 P^3 e_0 = h_0 x_{10,27} P^3 h_2 = h_0 x_{10,28} P^3 h_2 = h_2^2 d_0 x_{18,20} =$   
 $h_2^2 x' P^2 d_0 = h_2 d_0 P^2 h_2 x' = h_2 P h_2 P d_0 x' = h_2 B_2 P^3 d_0 =$   
 $h_2 B_{21} P^3 h_2 = c_0 P^2 R_2 = d_0 P h_2^2 x' = d_0 B_2 P^3 h_2 = P h_2 B_2 P^2 d_0 =$   
 $P h_2 P^2 h_2 B_{21} = P c_0 P R_2 = B_2 P d_0 P^2 h_2 = P^2 c_0 R_2$
- 25 (01)  $d_0^3 P u = d_0^2 P d_0 u = d_0 e_0 P^2 v = d_0 g P^2 u = d_0 r i P d_0 = d_0 i^2 k =$   
 $d_0 i j^2 = d_0 P e_0 P v = d_0 v P^2 e_0 = d_0 w P^2 d_0 = d_0 z P j = e_0^2 P^2 u =$   
 $e_0 r P^2 j = e_0 i^2 j = e_0 P d_0 P v = e_0 P e_0 P u = e_0 u P^2 e_0 = e_0 v P^2 d_0 =$   
 $g r P^2 i = g i^3 = g P d_0 P u = g u P^2 d_0 = r j P^2 e_0 = r k P^2 d_0 =$   
 $r P e_0 P j = i l P j = i P e_0 z = j k P j = j P d_0 z = P d_0^2 w = P d_0 P e_0 v =$   
 $P e_0^2 u$
- (11)  $P^3 R_2$
- 26 (1)  $h_0 P^3 R_2 = h_2 x_{25,24} = P^2 h_2 R_1$

continued

Stem 89 continued

- 27 (1)  $h_0^2 P^3 R_2 = h_0 h_2 x_{25,24} = h_0 P^2 h_2 R_1 = h_1 P^4 Q_1 = Ph_1 P^3 Q_1 = P^2 h_1 P^2 Q_1 = R_1 P^4 h_2 = Q_1 P^4 h_1 = P^3 h_1 P Q_1$
- 28 (1)  $d_0^4 P^2 e_0 = d_0^3 e_0 P^2 d_0 = d_0^3 P d_0 P e_0 = d_0^2 e_0 P d_0^2 = d_0^2 g P^3 e_0 = d_0 e_0^2 P^3 e_0 = d_0 e_0 g P^3 d_0 = d_0 e_0 P e_0 P^2 e_0 = d_0 g P d_0 P^2 e_0 = d_0 g P e_0 P^2 d_0 = d_0 P e_0^3 = e_0^3 P^3 d_0 = e_0^2 P d_0 P^2 e_0 = e_0^2 P e_0 P^2 d_0 = e_0 g P d_0 P^2 d_0 = e_0 P d_0 P e_0^2 = g^2 P^4 e_0 = g P d_0^2 P e_0 = iP^3 v = jP^3 u = uP^3 j = PjP^2 u = PuP^2 j = PvP^2 i$
- 31 (1)  $d_0^2 iP^3 d_0 = d_0^2 P d_0 P^2 i = d_0 e_0 P^4 j = d_0 g P^4 i = d_0 i P d_0 P^2 d_0 = d_0 j P^4 e_0 = d_0 k P^4 d_0 = d_0 P e_0 P^3 j = d_0 P j P^3 e_0 = d_0 P^2 e_0 P^2 j = e_0^2 P^4 i = e_0 i P^4 e_0 = e_0 j P^4 d_0 = e_0 P d_0 P^3 j = e_0 P j P^3 d_0 = e_0 P^2 d_0 P^2 j = e_0 P^2 e_0 P^2 i = g i P^4 d_0 = g P^2 d_0 P^2 i = i P d_0^3 = i P e_0 P^3 e_0 = i P^2 e_0^2 = j P d_0 P^3 e_0 = j P e_0 P^3 d_0 = j P^2 d_0 P^2 e_0 = k P d_0 P^3 d_0 = k P^2 d_0^2 = l P^5 e_0 = m P^5 d_0 = P d_0 P e_0 P^2 j = P d_0 P j P^2 e_0 = P e_0^2 P^2 i = P e_0 P j P^2 d_0$
- 34 (1)  $iP^5 j = PjP^4 i = P^2 iP^3 j$
- 35 (1)  $h_0 iP^5 j = h_0 PjP^4 i = h_0 P^2 iP^3 j = h_1^2 P^6 u = h_1 P h_1 P^4 Q = h_1 P h_1 P^5 u = h_1 P^2 h_1 P^4 u = h_1 u P^6 h_1 = h_1 P^3 h_1 P^3 u = h_1 Q P^5 h_1 = h_1 P u P^5 h_1 = h_1 P^4 h_1 P^2 u = f_0 P^6 i = P h_1^2 P^4 u = P h_1 P^2 h_1 P^3 u = P h_1 u P^5 h_1 = P h_1 P^3 h_1 P^2 u = P h_1 Q P^4 h_1 = P h_1 P u P^4 h_1 = P h_2 iP^4 i = P h_2 P^2 i^2 = r P^7 h_2 = q P^7 h_1 = i^2 P^5 h_2 = iP^3 h_2 P^2 i = P^2 h_1^2 P^2 u = P^2 h_1 u P^4 h_1 = P^2 h_1 P^3 h_1 Q = P^2 h_1 P^3 h_1 P u = u P^3 h_1^2$

Stem 90

- 10 (1)  $x_{10,63}$   
11 (1)  $h_0x_{10,63} = pQ_2$   
12 (1)  $x_{12,55}$   
13 (1)  $h_0x_{12,55}$   
14 (10)  $h_6P^3h_2$   
(01)  $h_0^2x_{12,55}$   
15 (010)  $h_0h_6P^3h_2$   
(001)  $h_0^3x_{12,55} = xx'$   
(101)  $rB_4$   
16 (01)  $h_0^4x_{12,55} = h_0xx' = h_0rB_4 = h_3x_{15,41} = ix_{9,40}$   
(11)  $h_0^2h_6P^3h_2 = h_1^2h_6P^3h_1 = h_1h_6Ph_1P^2h_1 = h_6Ph_1^3$   
17 (10)  $x_{17,52}$   
(01)  $h_0^5x_{12,55} = h_0^2xx' = h_0^2rB_4 = h_0h_3x_{15,41} = h_0ix_{9,40} = h_3rx' = h_3iB_4$   
18 (100)  $g^3r = gm^2 = w^2$   
(001)  $h_0^6x_{12,55} = h_0^3xx' = h_0^3rB_4 = h_0^2h_3x_{15,41} = h_0^2ix_{9,40} = h_0h_3rx' = h_0h_3iB_4 = h_3^2x_{16,32} = g_2i^2 = xri = ix_{11,35}$   
(101)  $r^3$   
(011)  $d_0^2x_{10,27} = d_0^2x_{10,28} = d_0e_0B_{21} = d_0gQ_1 = e_0^2Q_1 = e_0gx' = Pe_0B_{23}$   
19 (1)  $h_0^7x_{12,55} = h_0^4xx' = h_0^4rB_4 = h_0^3h_3x_{15,41} = h_0^3ix_{9,40} = h_0^2h_3rx' = h_0^2h_3iB_4 = h_0h_3^2x_{16,32} = h_0d_0^2x_{10,27} = h_0d_0^2x_{10,28} = h_0d_0e_0B_{21} = h_0d_0gQ_1 = h_0e_0^2Q_1 = h_0e_0gx' = h_0g_2i^2 = h_0xri = h_0r^3 = h_0ix_{11,35} = h_0Pe_0B_{23} = h_1x_{18,50} = h_2d_0^2B_{21} = h_2d_0e_0Q_1 = h_2d_0gx' = h_2e_0^2x' = h_2Pd_0B_{23} = h_2Pe_0x_{10,27} = h_2Pe_0x_{10,28} = h_3^2ix' = h_4Pd_0x' = c_0x_{16,38} = d_0^3B_2 = d_0Ph_2B_{23} = e_0Ph_2x_{10,27} = e_0Ph_2x_{10,28} = e_0B_2Pe_0 = gPh_2B_{21} = gB_2Pd_0 = Q_2P^2e_0 = B_3P^2d_0$   
20 (1)  $d_0x_{16,32}$   
21 (100)  $e_0PR_2 = gR_1 = Pd_0P^2D_1 = Pe_0R_2$   
(010)  $d_0^2e_0w = d_0^2gv = d_0^2rl = d_0e_0^2v = d_0e_0gu = d_0e_0rk = d_0grj = d_0mz = e_0^3u = e_0^2rj = e_0gri = e_0lz = g^2Pv = gkz = gPe_0w = rmPe_0 = ilm = jkm = jl^2 = k^2l$   
(001)  $h_0d_0x_{16,32} = h_2Px_{16,35} = Ph_2x_{16,35}$   
(101)  $d_0ix' = jPQ_1 = B_4P^2d_0 = Q_1Pj$   
22 (10)  $h_0d_0ix' = h_0jPQ_1 = h_0B_4P^2d_0 = h_0Q_1Pj = h_2iPQ_1 = h_2x'Pj = f_0P^2Q_1 = Ph_2iQ_1 = Ph_2jx' = B_2P^2j = P^2h_2x_{13,35}$   
(01)  $h_0^2d_0x_{16,32} = h_0h_2Px_{16,35} = h_0Ph_2x_{16,35} = h_2Ph_2x_{16,32} = P^2h_2x_{13,34}$   
(11)  $h_0e_0PR_2 = h_0gR_1 = h_0Pd_0P^2D_1 = h_0Pe_0R_2 = h_2d_0PR_2 = h_2e_0R_1 = h_2Pd_0R_2 = d_0Ph_2R_2 = d_0Pd_0R_1$

continued

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- 23 (1)  $h_0^2 d_0 i x' = h_0^2 e_0 P R_2 = h_0^2 g R_1 = h_0^2 j P Q_1 = h_0^2 P d_0 P^2 D_1 =$   
 $h_0^2 P e_0 R_2 = h_0^2 B_4 P^2 d_0 = h_0^2 Q_1 P j = h_0 h_2 d_0 P R_2 = h_0 h_2 e_0 R_1 =$   
 $h_0 h_2 i P Q_1 = h_0 h_2 P d_0 R_2 = h_0 h_2 x' P j = h_0 d_0 P h_2 R_2 =$   
 $h_0 d_0 P d_0 R_1 = h_0 f_0 P^2 Q_1 = h_0 P h_2 i Q_1 = h_0 P h_2 j x' = h_0 B_2 P^2 j =$   
 $h_0 P^2 h_2 x_{13,35} = h_1 d_0 P d_0 x' = h_1 e_0 P^2 Q_1 = h_1 g x_{18,20} =$   
 $h_1 P e_0 P Q_1 = h_1 Q_1 P^2 e_0 = h_1 B_{21} P^2 d_0 = h_2^2 d_0 R_1 = h_2 f_0 x_{18,20} =$   
 $h_2 P h_2 i x' = h_2 B_2 P^2 i = h_2 P^2 h_2 P^2 D_1 = h_2 B_4 P^3 h_2 = h_2 R_1 P^2 e_0 =$   
 $d_0^2 P h_1 x' = d_0 B_1 P^2 d_0 = d_0 P^2 h_1 B_{21} = e_0 P h_1 P Q_1 = e_0 P^2 h_1 Q_1 =$   
 $e_0 P^2 h_2 R_1 = f_0 P^2 h_2 x' = g P^2 h_1 x' = P h_1 P d_0 B_{21} = P h_1 P e_0 Q_1 =$   
 $P h_2^2 P^2 D_1 = P h_2 P e_0 R_1 = P h_2 P^2 h_2 B_4 = i B_2 P^2 h_2 = B_1 P d_0^2 =$   
 $B_{23} P^3 h_1$
- 24 (1)  $d_0^5 g = d_0^4 e_0^2 = d_0^2 e_0 g P e_0 = d_0^2 g^2 P d_0 = d_0^2 i u = d_0 e_0^3 P e_0 =$   
 $d_0 e_0^2 g P d_0 = d_0 r i^2 = d_0 j P v = d_0 k P u = d_0 v P j = e_0^4 P d_0 =$   
 $e_0 g^2 P^2 e_0 = e_0 i P v = e_0 j P u = e_0 u P j = g^3 P^2 d_0 = g^2 P e_0^2 =$   
 $g i P u = r^2 P^2 d_0 = r j P j = i j z = i P d_0 w = i P e_0 v = j P d_0 v =$   
 $j P e_0 u = k P d_0 u = l P^2 v = m P^2 u$
- 27 (1)  $d_0^4 P j = d_0^3 i P e_0 = d_0^3 j P d_0 = d_0^2 e_0 i P d_0 = d_0^2 g P^2 j = d_0^2 k P^2 e_0 =$   
 $d_0^2 l P^2 d_0 = d_0 e_0^2 P^2 j = d_0 e_0 g P^2 i = d_0 e_0 j P^2 e_0 = d_0 e_0 k P^2 d_0 =$   
 $d_0 e_0 P e_0 P j = d_0 g i P^2 e_0 = d_0 g j P^2 d_0 = d_0 g P d_0 P j = d_0 j P e_0^2 =$   
 $d_0 k P d_0 P e_0 = d_0 l P d_0^2 = d_0 m P^3 e_0 = e_0^3 P^2 i = e_0^2 i P^2 e_0 =$   
 $e_0^2 j P^2 d_0 = e_0^2 P d_0 P j = e_0 g i P^2 d_0 = e_0 i P e_0^2 = e_0 j P d_0 P e_0 =$   
 $e_0 k P d_0^2 = e_0 l P^3 e_0 = e_0 m P^3 d_0 = g^2 P^3 j = g i P d_0 P e_0 = g j P d_0^2 =$   
 $g k P^3 e_0 = g l P^3 d_0 = l P e_0 P^2 e_0 = m P d_0 P^2 e_0 = m P e_0 P^2 d_0$
- 30 (1)  $d_0^2 i P^2 i = d_0 r P^4 d_0 = d_0 i^2 P^2 d_0 = d_0 j P^3 j = d_0 P j P^2 j = e_0 i P^3 j =$   
 $e_0 P j P^2 i = r P d_0 P^3 d_0 = r P^2 d_0^2 = i^2 P d_0^2 = i j P^3 e_0 = i k P^3 d_0 =$   
 $i P e_0 P^2 j = i P j P^2 e_0 = j^2 P^3 d_0 = j P d_0 P^2 j = j P e_0 P^2 i =$   
 $j P j P^2 d_0 = k P d_0 P^2 i = l P^4 j = m P^4 i = P d_0 P j^2 = z P^4 e_0$
- 33 (1)  $P^6 v$
- 36 (1)  $d_0^2 P^6 d_0 = d_0 P d_0 P^5 d_0 = d_0 P^2 d_0 P^4 d_0 = d_0 P^3 d_0^2 = e_0 P^7 e_0 =$   
 $g P^7 d_0 = P d_0^2 P^4 d_0 = P d_0 P^2 d_0 P^3 d_0 = P e_0 P^6 e_0 = P^2 d_0^3 =$   
 $P^2 e_0 P^5 e_0 = P^3 e_0 P^4 e_0$

continued

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$$\begin{aligned}
37 \quad (1) \quad & h_0 d_0^2 P^6 d_0 = h_0 d_0 P d_0 P^5 d_0 = h_0 d_0 P^2 d_0 P^4 d_0 = h_0 d_0 P^3 d_0^2 = \\
& h_0 e_0 P^7 e_0 = h_0 g P^7 d_0 = h_0 P d_0^2 P^4 d_0 = h_0 P d_0 P^2 d_0 P^3 d_0 = \\
& h_0 P e_0 P^6 e_0 = h_0 P^2 d_0^3 = h_0 P^2 e_0 P^5 e_0 = h_0 P^3 e_0 P^4 e_0 = \\
& h_2 d_0 P^7 e_0 = h_2 e_0 P^7 d_0 = h_2 P d_0 P^6 e_0 = h_2 P e_0 P^6 d_0 = \\
& h_2 P^2 d_0 P^5 e_0 = h_2 P^2 e_0 P^5 d_0 = h_2 P^3 d_0 P^4 e_0 = h_2 P^3 e_0 P^4 d_0 = \\
& d_0 e_0 P^7 h_2 = d_0 P h_2 P^6 e_0 = d_0 P e_0 P^6 h_2 = d_0 P^2 h_2 P^5 e_0 = \\
& d_0 P^2 e_0 P^5 h_2 = d_0 P^3 h_2 P^4 e_0 = d_0 P^3 e_0 P^4 h_2 = e_0 P h_2 P^6 d_0 = \\
& e_0 P d_0 P^6 h_2 = e_0 P^2 h_2 P^5 d_0 = e_0 P^2 d_0 P^5 h_2 = e_0 P^3 h_2 P^4 d_0 = \\
& e_0 P^3 d_0 P^4 h_2 = P h_2 P d_0 P^5 e_0 = P h_2 P e_0 P^5 d_0 = P h_2 P^2 d_0 P^4 e_0 = \\
& P h_2 P^2 e_0 P^4 d_0 = P h_2 P^3 d_0 P^3 e_0 = P d_0 P e_0 P^5 h_2 = \\
& P d_0 P^2 h_2 P^4 e_0 = P d_0 P^2 e_0 P^4 h_2 = P d_0 P^3 h_2 P^3 e_0 = \\
& P e_0 P^2 h_2 P^4 d_0 = P e_0 P^2 d_0 P^4 h_2 = P e_0 P^3 h_2 P^3 d_0 = \\
& P^2 h_2 P^2 d_0 P^3 e_0 = P^2 h_2 P^2 e_0 P^3 d_0 = P^2 d_0 P^2 e_0 P^3 h_2 \\
38 \quad (1) \quad & h_0^2 d_0^2 P^6 d_0 = h_0^2 d_0 P d_0 P^5 d_0 = h_0^2 d_0 P^2 d_0 P^4 d_0 = h_0^2 d_0 P^3 d_0^2 = \\
& h_0^2 e_0 P^7 e_0 = h_0^2 g P^7 d_0 = h_0^2 P d_0^2 P^4 d_0 = h_0^2 P d_0 P^2 d_0 P^3 d_0 = \\
& h_0^2 P e_0 P^6 e_0 = h_0^2 P^2 d_0^3 = h_0^2 P^2 e_0 P^5 e_0 = h_0^2 P^3 e_0 P^4 e_0 = \\
& h_0 h_2 d_0 P^7 e_0 = h_0 h_2 e_0 P^7 d_0 = h_0 h_2 P d_0 P^6 e_0 = h_0 h_2 P e_0 P^6 d_0 = \\
& h_0 h_2 P^2 d_0 P^5 e_0 = h_0 h_2 P^2 e_0 P^5 d_0 = h_0 h_2 P^3 d_0 P^4 e_0 = \\
& h_0 h_2 P^3 e_0 P^4 d_0 = h_0 d_0 e_0 P^7 h_2 = h_0 d_0 P h_2 P^6 e_0 = \\
& h_0 d_0 P e_0 P^6 h_2 = h_0 d_0 P^2 h_2 P^5 e_0 = h_0 d_0 P^2 e_0 P^5 h_2 = \\
& h_0 d_0 P^3 h_2 P^4 e_0 = h_0 d_0 P^3 e_0 P^4 h_2 = h_0 e_0 P h_2 P^6 d_0 = \\
& h_0 e_0 P d_0 P^6 h_2 = h_0 e_0 P^2 h_2 P^5 d_0 = h_0 e_0 P^2 d_0 P^5 h_2 = \\
& h_0 e_0 P^3 h_2 P^4 d_0 = h_0 e_0 P^3 d_0 P^4 h_2 = h_0 P h_2 P d_0 P^5 e_0 = \\
& h_0 P h_2 P e_0 P^5 d_0 = h_0 P h_2 P^2 d_0 P^4 e_0 = h_0 P h_2 P^2 e_0 P^4 d_0 = \\
& h_0 P h_2 P^3 d_0 P^3 e_0 = h_0 P d_0 P e_0 P^5 h_2 = h_0 P d_0 P^2 h_2 P^4 e_0 = \\
& h_0 P d_0 P^2 e_0 P^4 h_2 = h_0 P d_0 P^3 h_2 P^3 e_0 = h_0 P e_0 P^2 h_2 P^4 d_0 = \\
& h_0 P e_0 P^2 d_0 P^4 h_2 = h_0 P e_0 P^3 h_2 P^3 d_0 = h_0 P^2 h_2 P^2 d_0 P^3 e_0 = \\
& h_0 P^2 h_2 P^2 e_0 P^3 d_0 = h_0 P^2 d_0 P^2 e_0 P^3 h_2 = h_2^2 d_0 P^7 d_0 = \\
& h_2^2 P d_0 P^6 d_0 = h_2^2 P^2 d_0 P^5 d_0 = h_2^2 P^3 d_0 P^4 d_0 = h_2^2 d_0^2 P^7 h_2 = \\
& h_2 d_0 P h_2 P^6 d_0 = h_2 d_0 P d_0 P^6 h_2 = h_2 d_0 P^2 h_2 P^5 d_0 = \\
& h_2 d_0 P^2 d_0 P^5 h_2 = h_2 d_0 P^3 h_2 P^4 d_0 = h_2 d_0 P^3 d_0 P^4 h_2 = \\
& h_2 g P^8 h_2 = h_2 P h_2 P d_0 P^5 d_0 = h_2 P h_2 P^2 d_0 P^4 d_0 = h_2 P h_2 P^3 d_0^2 = \\
& h_2 P d_0^2 P^5 h_2 = h_2 P d_0 P^2 h_2 P^4 d_0 = h_2 P d_0 P^2 d_0 P^4 h_2 = \\
& h_2 P d_0 P^3 h_2 P^3 d_0 = h_2 P^2 h_2 P^2 d_0 P^3 d_0 = h_2 P^2 d_0^2 P^3 h_2 = h_4 P^9 h_2 = \\
& c_0 P^7 j = d_0^2 P h_2 P^6 h_2 = d_0^2 P^2 h_2 P^5 h_2 = d_0^2 P^3 h_2 P^4 h_2 = \\
& d_0 P h_2^2 P^5 d_0 = d_0 P h_2 P d_0 P^5 h_2 = d_0 P h_2 P^2 h_2 P^4 d_0 = \\
& d_0 P h_2 P^2 d_0 P^4 h_2 = d_0 P h_2 P^3 h_2 P^3 d_0 = d_0 P d_0 P^2 h_2 P^4 h_2 = \\
& d_0 P d_0 P^3 h_2^2 = d_0 P^2 h_2^2 P^3 d_0 = d_0 P^2 h_2 P^2 d_0 P^3 h_2 = g P h_2 P^7 h_2 = \\
& g P^2 h_2 P^6 h_2 = g P^3 h_2 P^5 h_2 = g P^4 h_2^2 = P h_2^2 P d_0 P^4 d_0 = \\
& P h_2^2 P^2 d_0 P^3 d_0 = P h_2 P d_0^2 P^4 h_2 = P h_2 P d_0 P^2 h_2 P^3 d_0 = \\
& P h_2 P d_0 P^2 d_0 P^3 h_2 = P h_2 P^2 h_2 P^2 d_0^2 = P c_0 P^6 j = j P^7 c_0 = \\
& P d_0^2 P^2 h_2 P^3 h_2 = P d_0 P^2 h_2^2 P^2 d_0 = P^2 c_0 P^5 j = P j P^6 c_0 = \\
& P^3 c_0 P^4 j = P^2 j P^5 c_0 = P^4 c_0 P^3 j \\
39 \quad (1) \quad & P^8 j
\end{aligned}$$

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- 6 (1)  $h_4^2 D_3$
- 8 (1)  $x_{8,75}$
- 9 (10)  $h_6 d_0^2$
- (01)  $h_0 x_{8,75}$
- 10 (1)  $h_0 h_6 d_0^2 = h_2 h_6 P e_0 = h_6 e_0 P h_2$
- 11 (10)  $x_{11,61}$
- (01)  $h_0^2 h_6 d_0^2 = h_0 h_2 h_6 P e_0 = h_0 h_6 e_0 P h_2 = h_2^2 h_6 P d_0 = h_2 h_6 d_0 P h_2$
- 12 (01)  $h_0 x_{11,61}$
- (11)  $r A' = r A$
- 13 (10)  $h_1 x_{12,55}$
- (01)  $h_0^2 x_{11,61}$
- 14 (1)  $h_0^3 x_{11,61}$
- 15 (1)  $h_0^4 x_{11,61} = x R_1 = r X_1 = i G_{21}$
- 16 (1)  $h_0^5 x_{11,61} = h_0 x R_1 = h_0 r X_1 = h_0 i G_{21} = h_3 x_{15,42} = y x'$
- 17 (100)  $g^3 n = g t m = n r^2 = N w$
- (001)  $h_0^6 x_{11,61} = h_0^2 x R_1 = h_0^2 r X_1 = h_0^2 i G_{21} = h_0 h_3 x_{15,42} = h_0 y x' =$   
 $h_3 r R_1 = h_3 i X_1 = h_4 x_{16,32} = g_2 Q$
- (011)  $d_0 e_0 B_4 = g x_{13,35} = j B_{23} = k x_{10,27} = k x_{10,28} = l B_{21} = m Q_1$
- 18 (1)  $h_0^7 x_{11,61} = h_0^3 x R_1 = h_0^3 r X_1 = h_0^3 i G_{21} = h_0^2 h_3 x_{15,42} = h_0^2 y x' =$   
 $h_0 h_3 r R_1 = h_0 h_3 i X_1 = h_0 h_4 x_{16,32} = h_0 d_0 e_0 B_4 = h_0 g x_{13,35} =$   
 $h_0 g_2 Q = h_0 j B_{23} = h_0 k x_{10,27} = h_0 k x_{10,28} = h_0 l B_{21} = h_0 m Q_1 =$   
 $h_2 d_0^2 B_4 = h_2 e_0 x_{13,35} = h_2 g P^2 D_1 = h_2 i B_{23} = h_2 j x_{10,27} =$   
 $h_2 j x_{10,28} = h_2 k B_{21} = h_2 l Q_1 = h_2 m x' = h_2^3 x_{16,33} = d_0 f_0 B_{21} =$   
 $d_0 k B_2 = e_0 f_0 Q_1 = e_0 g R_1 = e_0 j B_2 = f_0 g x' = g P h_2 B_4 = g i B_2 =$   
 $D_2 P^2 e_0 = A P^2 d_0 = Q_2 P j = P d_0 P A = P e_0 B_5 = P e_0 P D_2$

continued

Stem 91continued

$$\begin{aligned}
19 \quad (1) \quad & h_0^8 x_{11,61} = h_0^4 x R_1 = h_0^4 r X_1 = h_0^4 i G_{21} = h_0^3 h_3 x_{15,42} = \\
& h_0^3 y x' = h_0^2 h_3 r R_1 = h_0^2 h_3 i X_1 = h_0^2 h_4 x_{16,32} = h_0^2 d_0 e_0 B_4 = \\
& h_0^2 g x_{13,35} = h_0^2 g_2 Q = h_0^2 j B_{23} = h_0^2 k x_{10,27} = h_0^2 k x_{10,28} = \\
& h_0^2 l B_{21} = h_0^2 m Q_1 = h_0 h_2 d_0^2 B_4 = h_0 h_2 e_0 x_{13,35} = h_0 h_2 g P^2 D_1 = \\
& h_0 h_2 i B_{23} = h_0 h_2 j x_{10,27} = h_0 h_2 j x_{10,28} = h_0 h_2 k B_{21} = h_0 h_2 l Q_1 = \\
& h_0 h_2 m x' = h_0 h_2^3 x_{16,33} = h_0 d_0 f_0 B_{21} = h_0 d_0 k B_2 = h_0 e_0 f_0 Q_1 = \\
& h_0 e_0 g R_1 = h_0 e_0 j B_2 = h_0 f_0 g x' = h_0 g P h_2 B_4 = h_0 g i B_2 = \\
& h_0 D_2 P^2 e_0 = h_0 A P^2 d_0 = h_0 Q_2 P j = h_0 P d_0 P A = h_0 P e_0 B_5 = \\
& h_0 P e_0 P D_2 = h_1 d_0^2 x_{10,27} = h_1 d_0^2 x_{10,28} = h_1 d_0 e_0 B_{21} = h_1 d_0 g Q_1 = \\
& h_1 e_0^2 Q_1 = h_1 e_0 g x' = h_1 P e_0 B_{23} = h_2^2 d_0 x_{13,35} = h_2^2 e_0 P^2 D_1 = \\
& h_2^2 g R_2 = h_2^2 i x_{10,27} = h_2^2 i x_{10,28} = h_2^2 j B_{21} = h_2^2 k Q_1 = h_2^2 l x' = \\
& h_2^2 P e_0 B_4 = h_2 h_4 P R_2 = h_2 d_0 f_0 Q_1 = h_2 d_0 g R_1 = h_2 d_0 j B_2 = \\
& h_2 e_0^2 R_1 = h_2 e_0 f_0 x' = h_2 e_0 P h_2 B_4 = h_2 e_0 i B_2 = h_2 D_2 P^2 d_0 = \\
& h_2 P d_0 B_5 = h_2 P d_0 P D_2 = h_2^3 i R_1 = h_3 x Q = h_4 P h_2 R_2 = \\
& h_4 P d_0 R_1 = c_0 r x' = c_0 i B_4 = d_0^2 e_0 B_1 = d_0 P h_2 B_5 = d_0 P h_2 P D_2 = \\
& d_0 D_2 P^2 h_2 = e_0 P h_1 B_{23} = f_0 P h_2 x_{10,27} = f_0 P h_2 x_{10,28} = \\
& f_0 B_2 P e_0 = g P h_1 x_{10,27} = g P h_1 x_{10,28} = g B_1 P e_0 = P h_2 D_2 P d_0 = \\
& P h_2 i Q_2 = P h_2 l B_2 = r y i = A'' P^3 h_2 \\
20 \quad (10) \quad & d_0 x_{16,33} = i P^2 D_1 = j R_2 \\
(01) \quad & d_0 e_0 g^3 = d_0 e_0 r^2 = d_0 l w = d_0 m v = e_0^3 g^2 = e_0 k w = e_0 l v = e_0 m u = \\
& g r z = g j w = g k v = g l u = r j m = r k l \\
21 \quad (1) \quad & h_0 d_0 x_{16,33} = h_0 i P^2 D_1 = h_0 j R_2 = h_1 d_0 x_{16,32} = h_2 i R_2 = d_0 i R_1 = \\
& f_0 P R_2 = P h_1 x_{16,38} = P h_2 x_{16,37} = P d_0 W_1 \\
23 \quad (1) \quad & d_0^4 m = d_0^3 e_0 l = d_0^3 g k = d_0^2 e_0^2 k = d_0^2 e_0 g j = d_0^2 g^2 i = d_0 e_0^3 j = \\
& d_0 e_0^2 g i = d_0 e_0 m P e_0 = d_0 g l P e_0 = d_0 g m P d_0 = d_0 r P u = e_0^4 i = \\
& e_0^2 l P e_0 = e_0^2 m P d_0 = e_0 g^2 P j = e_0 g k P e_0 = e_0 g l P d_0 = g^2 j P e_0 = \\
& g^2 k P d_0 = r P d_0 u = i^2 w = i j v = i k u = j^2 u = z P v \\
26 \quad (10) \quad & P d_0 x_{18,20} \\
(01) \quad & d_0^3 i j = d_0^2 e_0 i^2 = d_0^2 r P^2 e_0 = d_0^2 k P j = d_0^2 P d_0 z = d_0 e_0 r P^2 d_0 = \\
& d_0 e_0 j P j = d_0 g i P j = d_0 r P d_0 P e_0 = d_0 i k P e_0 = d_0 i l P d_0 = \\
& d_0 j^2 P e_0 = d_0 j k P d_0 = d_0 m P^2 j = e_0^2 i P j = e_0 r P d_0^2 = e_0 i j P e_0 = \\
& e_0 i k P d_0 = e_0 j^2 P d_0 = e_0 l P^2 j = e_0 m P^2 i = e_0 z P^2 e_0 = g r P^3 e_0 = \\
& g i^2 P e_0 = g i j P d_0 = g k P^2 j = g l P^2 i = g z P^2 d_0 = i m P^2 e_0 = \\
& j l P^2 e_0 = j m P^2 d_0 = k^2 P^2 e_0 = k l P^2 d_0 = l P e_0 P j = m P d_0 P j = \\
& P e_0^2 z \\
(11) \quad & x' P^3 d_0 \\
27 \quad (1) \quad & h_0 P d_0 x_{18,20} = h_0 x' P^3 d_0 = h_2 P^4 Q_1 = P h_2 P^3 Q_1 = P^2 h_2 P^2 Q_1 = \\
& Q_1 P^4 h_2 = P^3 h_2 P Q_1
\end{aligned}$$

continued



Stem 91continued

$$\begin{aligned}
28 \quad (1) \quad & h_0^2 P d_0 x_{18,20} = h_0^2 x' P^3 d_0 = h_0 h_2 P^4 Q_1 = h_0 P h_2 P^3 Q_1 = \\
& h_0 P^2 h_2 P^2 Q_1 = h_0 Q_1 P^4 h_2 = h_0 P^3 h_2 P Q_1 = h_2^2 P^4 x' = \\
& h_2 P^2 h_2 x_{18,20} = h_2 x' P^4 h_2 = P h_2^2 x_{18,20} = P h_2 x' P^3 h_2 = B_2 P^5 h_2 = \\
& P^2 h_2^2 x' \\
29 \quad (1) \quad & d_0^2 P^3 u = d_0 P d_0 P^2 u = d_0 u P^3 d_0 = d_0 P^2 d_0 P u = e_0 P^4 v = g P^4 u = \\
& r i P^3 d_0 = r P d_0 P^2 i = i^3 P d_0 = i j P^2 j = i k P^2 i = i P j^2 = j^2 P^2 i = \\
& P d_0^2 P u = P d_0 u P^2 d_0 = P e_0 P^3 v = v P^4 e_0 = w P^4 d_0 = z P^3 j = \\
& P^2 e_0 P^2 v = P v P^3 e_0 \\
32 \quad (1) \quad & d_0^3 P^4 e_0 = d_0^2 e_0 P^4 d_0 = d_0^2 P d_0 P^3 e_0 = d_0^2 P e_0 P^3 d_0 = d_0^2 P^2 d_0 P^2 e_0 = \\
& d_0 e_0 P d_0 P^3 d_0 = d_0 e_0 P^2 d_0^2 = d_0 g P^5 e_0 = d_0 P d_0^2 P^2 e_0 = \\
& d_0 P d_0 P e_0 P^2 d_0 = e_0^2 P^5 e_0 = e_0 g P^5 d_0 = e_0 P d_0^2 P^2 d_0 = \\
& e_0 P e_0 P^4 e_0 = e_0 P^2 e_0 P^3 e_0 = g P d_0 P^4 e_0 = g P e_0 P^4 d_0 = \\
& g P^2 d_0 P^3 e_0 = g P^2 e_0 P^3 d_0 = P d_0^3 P e_0 = P e_0^2 P^3 e_0 = P e_0 P^2 e_0^2 \\
35 \quad (1) \quad & d_0 i P^5 d_0 = d_0 P d_0 P^4 i = d_0 P^2 i P^3 d_0 = e_0 P^6 j = g P^6 i = \\
& i P d_0 P^4 d_0 = i P^2 d_0 P^3 d_0 = j P^6 e_0 = k P^6 d_0 = P d_0 P^2 d_0 P^2 i = \\
& P e_0 P^5 j = P j P^5 e_0 = P^2 e_0 P^4 j = P^2 j P^4 e_0 = P^3 e_0 P^3 j \\
36 \quad (1) \quad & h_0 d_0 i P^5 d_0 = h_0 d_0 P d_0 P^4 i = h_0 d_0 P^2 i P^3 d_0 = h_0 e_0 P^6 j = \\
& h_0 g P^6 i = h_0 i P d_0 P^4 d_0 = h_0 i P^2 d_0 P^3 d_0 = h_0 j P^6 e_0 = h_0 k P^6 d_0 = \\
& h_0 P d_0 P^2 d_0 P^2 i = h_0 P e_0 P^5 j = h_0 P j P^5 e_0 = h_0 P^2 e_0 P^4 j = \\
& h_0 P^2 j P^4 e_0 = h_0 P^3 e_0 P^3 j = h_2 d_0 P^6 j = h_2 e_0 P^6 i = h_2 i P^6 e_0 = \\
& h_2 j P^6 d_0 = h_2 P d_0 P^5 j = h_2 P j P^5 d_0 = h_2 P^2 d_0 P^4 j = h_2 P^2 e_0 P^4 i = \\
& h_2 P^2 i P^4 e_0 = h_2 P^2 j P^4 d_0 = h_2 P^3 d_0 P^3 j = d_0 P h_2 P^5 j = \\
& d_0 j P^6 h_2 = d_0 P^2 h_2 P^4 j = d_0 P j P^5 h_2 = d_0 P^3 h_2 P^3 j = \\
& d_0 P^2 j P^4 h_2 = e_0 i P^6 h_2 = e_0 P^2 h_2 P^4 i = e_0 P^2 i P^4 h_2 = f_0 P^7 e_0 = \\
& P h_2 i P^5 e_0 = P h_2 j P^5 d_0 = P h_2 P d_0 P^4 j = P h_2 P e_0 P^4 i = \\
& P h_2 P j P^4 d_0 = P h_2 P^2 d_0 P^3 j = P h_2 P^2 i P^3 e_0 = P h_2 P^2 j P^3 d_0 = \\
& i P e_0 P^5 h_2 = i P^2 h_2 P^4 e_0 = i P^2 e_0 P^4 h_2 = i P^3 h_2 P^3 e_0 = \\
& j P d_0 P^5 h_2 = j P^2 h_2 P^4 d_0 = j P^2 d_0 P^4 h_2 = j P^3 h_2 P^3 d_0 = l P^7 h_2 = \\
& P d_0 P^2 h_2 P^3 j = P d_0 P j P^4 h_2 = P d_0 P^3 h_2 P^2 j = P e_0 P^3 h_2 P^2 i = \\
& P^2 h_2 P j P^3 d_0 = P^2 h_2 P^2 d_0 P^2 j = P^2 h_2 P^2 e_0 P^2 i = P j P^2 d_0 P^3 h_2
\end{aligned}$$

continued

Stem 91 continued

$$\begin{aligned}
37 \quad (1) \quad & h_0^2 d_0 i P^5 d_0 = h_0^2 d_0 P d_0 P^4 i = h_0^2 d_0 P^2 i P^3 d_0 = h_0^2 e_0 P^6 j = \\
& h_0^2 g P^6 i = h_0^2 i P d_0 P^4 d_0 = h_0^2 i P^2 d_0 P^3 d_0 = h_0^2 j P^6 e_0 = \\
& h_0^2 k P^6 d_0 = h_0^2 P d_0 P^2 d_0 P^2 i = h_0^2 P e_0 P^5 j = h_0^2 P j P^5 e_0 = \\
& h_0^2 P^2 e_0 P^4 j = h_0^2 P^2 j P^4 e_0 = h_0^2 P^3 e_0 P^3 j = h_0 h_2 d_0 P^6 j = \\
& h_0 h_2 e_0 P^6 i = h_0 h_2 i P^6 e_0 = h_0 h_2 j P^6 d_0 = h_0 h_2 P d_0 P^5 j = \\
& h_0 h_2 P j P^5 d_0 = h_0 h_2 P^2 d_0 P^4 j = h_0 h_2 P^2 e_0 P^4 i = h_0 h_2 P^2 i P^4 e_0 = \\
& h_0 h_2 P^2 j P^4 d_0 = h_0 h_2 P^3 d_0 P^3 j = h_0 d_0 P h_2 P^5 j = h_0 d_0 j P^6 h_2 = \\
& h_0 d_0 P^2 h_2 P^4 j = h_0 d_0 P j P^5 h_2 = h_0 d_0 P^3 h_2 P^3 j = h_0 d_0 P^2 j P^4 h_2 = \\
& h_0 e_0 i P^6 h_2 = h_0 e_0 P^2 h_2 P^4 i = h_0 e_0 P^2 i P^4 h_2 = h_0 f_0 P^7 e_0 = \\
& h_0 P h_2 i P^5 e_0 = h_0 P h_2 j P^5 d_0 = h_0 P h_2 P d_0 P^4 j = h_0 P h_2 P e_0 P^4 i = \\
& h_0 P h_2 P j P^4 d_0 = h_0 P h_2 P^2 d_0 P^3 j = h_0 P h_2 P^2 i P^3 e_0 = \\
& h_0 P h_2 P^2 j P^3 d_0 = h_0 i P e_0 P^5 h_2 = h_0 i P^2 h_2 P^4 e_0 = h_0 i P^2 e_0 P^4 h_2 = \\
& h_0 i P^3 h_2 P^3 e_0 = h_0 j P d_0 P^5 h_2 = h_0 j P^2 h_2 P^4 d_0 = h_0 j P^2 d_0 P^4 h_2 = \\
& h_0 j P^3 h_2 P^3 d_0 = h_0 l P^7 h_2 = h_0 P d_0 P^2 h_2 P^3 j = h_0 P d_0 P j P^4 h_2 = \\
& h_0 P d_0 P^3 h_2 P^2 j = h_0 P e_0 P^3 h_2 P^2 i = h_0 P^2 h_2 P j P^3 d_0 = \\
& h_0 P^2 h_2 P^2 d_0 P^2 j = h_0 P^2 h_2 P^2 e_0 P^2 i = h_0 P j P^2 d_0 P^3 h_2 = \\
& h_1 d_0^2 P^6 d_0 = h_1 d_0 P d_0 P^5 d_0 = h_1 d_0 P^2 d_0 P^4 d_0 = h_1 d_0 P^3 d_0^2 = \\
& h_1 e_0 P^7 e_0 = h_1 g P^7 d_0 = h_1 P d_0^2 P^4 d_0 = h_1 P d_0 P^2 d_0 P^3 d_0 = \\
& h_1 P e_0 P^6 e_0 = h_1 P^2 d_0^3 = h_1 P^2 e_0 P^5 e_0 = h_1 P^3 e_0 P^4 e_0 = \\
& h_2^2 d_0 P^6 i = h_2^2 i P^6 d_0 = h_2^2 P^2 d_0 P^4 i = h_2^2 P^2 i P^4 d_0 = \\
& h_2 d_0 i P^6 h_2 = h_2 d_0 P^2 h_2 P^4 i = h_2 d_0 P^2 i P^4 h_2 = h_2 f_0 P^7 d_0 = \\
& h_2 P h_2 i P^5 d_0 = h_2 P h_2 P d_0 P^4 i = h_2 P h_2 P^2 i P^3 d_0 = h_2 i P d_0 P^5 h_2 = \\
& h_2 i P^2 h_2 P^4 d_0 = h_2 i P^2 d_0 P^4 h_2 = h_2 i P^3 h_2 P^3 d_0 = h_2 k P^7 h_2 = \\
& h_2 P d_0 P^3 h_2 P^2 i = h_2 P^2 h_2 P^2 d_0 P^2 i = d_0^3 P^6 h_1 = d_0^2 P h_1 P^5 d_0 = \\
& d_0^2 P d_0 P^5 h_1 = d_0^2 P^2 h_1 P^4 d_0 = d_0^2 P^2 d_0 P^4 h_1 = d_0^2 P^3 h_1 P^3 d_0 = \\
& d_0 f_0 P^7 h_2 = d_0 g P^7 h_1 = d_0 P h_1 P d_0 P^4 d_0 = d_0 P h_1 P^2 d_0 P^3 d_0 = \\
& d_0 P h_2^2 P^4 i = d_0 P h_2 i P^5 h_2 = d_0 P h_2 P^3 h_2 P^2 i = d_0 i P^2 h_2 P^4 h_2 = \\
& d_0 i P^3 h_2^2 = d_0 P d_0^2 P^4 h_1 = d_0 P d_0 P^2 h_1 P^3 d_0 = d_0 P d_0 P^2 d_0 P^3 h_1 = \\
& d_0 P^2 h_1 P^2 d_0^2 = d_0 P^2 h_2^2 P^2 i = e_0^2 P^7 h_1 = e_0 P h_1 P^6 e_0 = \\
& e_0 P e_0 P^6 h_1 = e_0 P^2 h_1 P^5 e_0 = e_0 P^2 e_0 P^5 h_1 = e_0 P^3 h_1 P^4 e_0 = \\
& e_0 P^3 e_0 P^4 h_1 = f_0 P h_2 P^6 d_0 = f_0 P d_0 P^6 h_2 = f_0 P^2 h_2 P^5 d_0 = \\
& f_0 P^2 d_0 P^5 h_2 = f_0 P^3 h_2 P^4 d_0 = f_0 P^3 d_0 P^4 h_2 = g P h_1 P^6 d_0 = \\
& g P d_0 P^6 h_1 = g P^2 h_1 P^5 d_0 = g P^2 d_0 P^5 h_1 = g P^3 h_1 P^4 d_0 = \\
& g P^3 d_0 P^4 h_1 = P h_1 P d_0^2 P^3 d_0 = P h_1 P d_0 P^2 d_0^2 = P h_1 P e_0 P^5 e_0 = \\
& P h_1 P^2 e_0 P^4 e_0 = P h_1 P^3 e_0^2 = P h_2^2 i P^4 d_0 = P h_2^2 P^2 d_0 P^2 i = \\
& P h_2 i P d_0 P^4 h_2 = P h_2 i P^2 h_2 P^3 d_0 = P h_2 i P^2 d_0 P^3 h_2 = \\
& P h_2 k P^6 h_2 = P h_2 P d_0 P^2 h_2 P^2 i = i P d_0 P^2 h_2 P^3 h_2 = i P^2 h_2^2 P^2 d_0 = \\
& k P^2 h_2 P^5 h_2 = k P^3 h_2 P^4 h_2 = P d_0^3 P^3 h_1 = P d_0^2 P^2 h_1 P^2 d_0 = \\
& P e_0^2 P^5 h_1 = P e_0 P^2 h_1 P^4 e_0 = P e_0 P^2 e_0 P^4 h_1 = P e_0 P^3 h_1 P^3 e_0 = \\
& P^2 h_1 P^2 e_0 P^3 e_0 = P^2 e_0^2 P^3 h_1
\end{aligned}$$

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- 4 (1)  $g_3$   
5 (1)  $h_0g_3$   
6 (1)  $h_0^2g_3$   
7 (10)  $h_1h_4^2D_3 = h_3x_{6,68} = h_5A' = c_0f_2$   
(01)  $h_0^3g_3$   
8 (10)  $h_6k$   
(01)  $h_0^4g_3 = h_4x_{7,57}$   
9 (100)  $h_1x_{8,75}$   
(010)  $h_0h_6k = h_2h_6j$   
(001)  $h_0^5g_3 = h_0h_4x_{7,57}$   
10 (10)  $x_{10,65}$   
(01)  $h_0^2h_6k = h_0h_2h_6j = h_1h_6d_0^2 = h_2^2h_6i = h_6f_0Ph_2 = h_6gPh_1$   
11 (10)  $nA' = nA = H_1r$   
(01)  $h_0x_{10,65}$   
12 (10)  $x_{12,58}$   
(01)  $h_0^2x_{10,65} = h_1x_{11,61}$   
13 (1)  $h_0x_{12,58}$   
14 (100)  $rx_{8,33} = mQ_2$   
(010)  $h_1^2x_{12,55} = B_1^2$   
(001)  $h_0^2x_{12,58} = h_3x_{13,46}$   
16 (1)  $rx_{10,27} = rx_{10,28} = lB_4$   
18 (1)  $x_{18,55}$   
19 (10)  $e_0g^2m = e_0rw = g^3l = grv = r^2l$   
(01)  $ux'$   
22 (01)  $d_0^3gr = d_0^2e_0^2r = d_0^2km = d_0^2l^2 = d_0e_0gz = d_0e_0jm = d_0e_0kl =$   
 $d_0gim = d_0gjl = d_0gk^2 = d_0u^2 = e_0^3z = e_0^2im = e_0^2jl = e_0^2k^2 =$   
 $e_0grPe_0 = e_0gil = e_0gjk = g^2rPd_0 = g^2ik = g^2j^2 = riu =$   
 $lmPe_0 = m^2Pd_0 = vPv = wPu$   
(11)  $d_0^2PQ_1 = d_0Pd_0Q_1 = d_0Pe_0x' = e_0Pd_0x' = gP^2Q_1 =$   
 $B_{21}P^2e_0 = x_{10,27}P^2d_0 = x_{10,28}P^2d_0$   
23 (1)  $h_0d_0^2PQ_1 = h_0d_0Pd_0Q_1 = h_0d_0Pe_0x' = h_0e_0Pd_0x' =$   
 $h_0gP^2Q_1 = h_0B_{21}P^2e_0 = h_0x_{10,27}P^2d_0 = h_0x_{10,28}P^2d_0 =$   
 $h_2d_0Pd_0x' = h_2e_0P^2Q_1 = h_2gx_{18,20} = h_2Pe_0PQ_1 =$   
 $h_2Q_1P^2e_0 = h_2B_{21}P^2d_0 = d_0^2Ph_2x' = d_0B_2P^2d_0 = d_0P^2h_2B_{21} =$   
 $e_0Ph_2PQ_1 = e_0P^2h_2Q_1 = gP^2h_2x' = Ph_2Pd_0B_{21} =$   
 $Ph_2Pe_0Q_1 = Pc_0x_{16,32} = B_2Pd_0^2 = B_{23}P^3h_2$   
24 (1)  $P^2x_{16,32}$

continued

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- 25 (100)  $x'P^2i$   
(001)  $h_0P^2x_{16,32}$   
(101)  $Pd_0R_1$   
(011)  $d_0^3Pv = d_0^2e_0Pu = d_0^2rPj = d_0^2iz = d_0^2Pd_0v = d_0^2Pe_0u =$   
 $d_0e_0Pd_0u = d_0gP^2v = d_0riPe_0 = d_0rjPd_0 = d_0i^2l = d_0ijk =$   
 $d_0j^3 = d_0wP^2e_0 = e_0^2P^2v = e_0gP^2u = e_0riPd_0 = e_0i^2k = e_0ij^2 =$   
 $e_0Pe_0Pv = e_0vP^2e_0 = e_0wP^2d_0 = e_0zPj = grP^2j = gi^2j =$   
 $gPd_0Pv = gPe_0Pu = guP^2e_0 = gvP^2d_0 = rkP^2e_0 = rlP^2d_0 =$   
 $imPj = jlPj = jPe_0z = k^2Pj = kPd_0z = Pd_0Pe_0w = Pe_0^2v$   
(111)  $ix_{18,20}$
- 26 (10)  $h_0ix_{18,20} = h_0x'P^2i$   
(01)  $h_0^2P^2x_{16,32}$   
(11)  $h_0Pd_0R_1 = h_2P^3R_2 = Ph_2P^2R_2 = P^2h_2PR_2 = R_1P^3d_0 =$   
 $P^3h_2R_2$
- 27 (10)  $h_0^2Pd_0R_1 = h_0h_2P^3R_2 = h_0Ph_2P^2R_2 = h_0P^2h_2PR_2 =$   
 $h_0R_1P^3d_0 = h_0P^3h_2R_2 = h_1Pd_0x_{18,20} = h_1x'P^3d_0 = h_2^2x_{25,24} =$   
 $h_2P^2h_2R_1 = d_0Ph_1x_{18,20} = d_0x'P^3h_1 = Ph_1x'P^2d_0 = Ph_2^2R_1 =$   
 $B_1P^4d_0 = Pd_0P^2h_1x' = B_{21}P^4h_1$   
(01)  $h_0^3P^2x_{16,32} = h_3P^4x'$   
(11)  $h_0^2ix_{18,20} = h_0^2x'P^2i$
- 28 (10)  $d_0^5Pd_0 = d_0^3e_0P^2e_0 = d_0^3gP^2d_0 = d_0^3Pe_0^2 = d_0^2e_0^2P^2d_0 =$   
 $d_0^2e_0Pd_0Pe_0 = d_0^2gPd_0^2 = d_0e_0^2Pd_0^2 = d_0e_0gP^3e_0 = d_0g^2P^3d_0 =$   
 $d_0gPe_0P^2e_0 = d_0iP^2u = d_0uP^2i = e_0^3P^3e_0 = e_0^2gP^3d_0 =$   
 $e_0^2Pe_0P^2e_0 = e_0gPd_0P^2e_0 = e_0gPe_0P^2d_0 = e_0Pe_0^3 =$   
 $g^2Pd_0P^2d_0 = gPd_0Pe_0^2 = iPd_0Pu = iuP^2d_0 = jP^3v = kP^3u =$   
 $vP^3j = PjP^2v = PvP^2j$   
(01)  $h_0^4P^2x_{16,32} = h_0^3ix_{18,20} = h_0^3x'P^2i = h_0h_3P^4x' = xP^4i$   
(11)  $riP^2i = i^4$
- 29 (1)  $h_0^5P^2x_{16,32} = h_0^4ix_{18,20} = h_0^4x'P^2i = h_0^2h_3P^4x' = h_0xP^4i =$   
 $h_0riP^2i = h_0i^4$
- 30 (1)  $h_0^6P^2x_{16,32} = h_0^5ix_{18,20} = h_0^5x'P^2i = h_0^3h_3P^4x' = h_0^2xP^4i =$   
 $h_0^2riP^2i = h_0^2i^4 = h_3rP^4i = h_3i^2P^2i$
- 31 (1)  $d_0^3P^3j = d_0^2iP^3e_0 = d_0^2jP^3d_0 = d_0^2Pd_0P^2j = d_0^2Pe_0P^2i =$   
 $d_0^2PjP^2d_0 = d_0e_0iP^3d_0 = d_0e_0Pd_0P^2i = d_0gP^4j = d_0iPd_0P^2e_0 =$   
 $d_0iPe_0P^2d_0 = d_0jPd_0P^2d_0 = d_0kP^4e_0 = d_0lP^4d_0 = d_0Pd_0^2Pj =$   
 $e_0^2P^4j = e_0gP^4i = e_0iPd_0P^2d_0 = e_0jP^4e_0 = e_0kP^4d_0 =$   
 $e_0Pe_0P^3j = e_0PjP^3e_0 = e_0P^2e_0P^2j = giP^4e_0 = gjP^4d_0 =$   
 $gPd_0P^3j = gPjP^3d_0 = gP^2d_0P^2j = gP^2e_0P^2i = iPd_0^2Pe_0 =$   
 $jPd_0^3 = jPe_0P^3e_0 = jP^2e_0^2 = kPd_0P^3e_0 = kPe_0P^3d_0 =$   
 $kP^2d_0P^2e_0 = lPd_0P^3d_0 = lP^2d_0^2 = mP^5e_0 = Pe_0^2P^2j =$   
 $Pe_0PjP^2e_0$
- 34 (1)  $d_0iP^4i = d_0P^2i^2 = rP^6d_0 = i^2P^4d_0 = iP^2d_0P^2i = jP^5j =$   
 $PjP^4j = P^2jP^3j$

Stem 93

- 3 (1)  $h_4^2 h_6 = h_5^3$
- 4 (1)  $h_0 h_4^2 h_6 = h_0 h_5^3$
- 5 (01)  $h_0^2 h_4^2 h_6 = h_0^2 h_5^3$
- (11)  $h_1 g_3$
- 6 (1)  $h_0^3 h_4^2 h_6 = h_0^3 h_5^3$
- 7 (1)  $h_6 r$
- 8 (10)  $x_{8,78}$
- (01)  $h_0 h_6 r$
- 9 (1)  $h_0^2 h_6 r = h_0 x_{8,78} = h_3 h_6 i$
- 10 (100)  $x_{10,67}$
- (010)  $h_1^2 x_{8,75} = h_4 x_{9,55} = d_1 A' = d_1 A = D_3 q = n H_1$
- (001)  $h_0^3 h_6 r = h_0^2 x_{8,78} = h_0 h_3 h_6 i$
- 11 (10)  $h_1 x_{10,65}$
- (01)  $h_4 h_6 r = h_0^3 x_{8,78} = h_0^2 h_3 h_6 i = h_0 x_{10,67} = h_4 P^2 h_5^2$
- 12 (10)  $x_{12,60}$
- (01)  $h_0^5 h_6 r = h_0^4 x_{8,78} = h_0^3 h_3 h_6 i = h_0^2 x_{10,67} = h_0 h_4 P^2 h_5^2 = h_6 c_0 P d_0 = h_6 d_0 P c_0$
- 13 (0010)  $h_1 x_{12,58} = h_3 x_{12,48}$
- (0110)  $e_0 x_{9,51} = n x_{8,33} = r x_{7,34} = t Q_2 = D_2 m = A' l = A l$
- (0001)  $h_0 x_{12,60} = h_2 x_{12,55}$
- (1001)  $h_6 P^2 d_0$
- 14 (01)  $h_0^2 x_{12,60} = h_0 h_2 x_{12,55}$
- (11)  $h_0 h_6 P^2 d_0$
- 15 (10)  $h_3 P^3 h_5^2$
- (01)  $h_0^3 x_{12,60} = h_0^2 h_2 x_{12,55} = h_1^3 x_{12,55} = h_1 B_1^2 = P h_1 P x_{6,53} = x Q_1 = q X_1 = G u = x_{6,53} P^2 h_1$
- (11)  $h_0^2 h_6 P^2 d_0 = h_2 h_6 P^3 h_2 = h_6 P h_2 P^2 h_2$
- 17 (1)  $x_{17,57}$
- 18 (1)  $d_0^2 B_{23} = d_0 e_0 x_{10,27} = d_0 e_0 x_{10,28} = d_0 g B_{21} = e_0^2 B_{21} = e_0 g Q_1 = g^2 x'$
- 20 (10)  $d_0 x_{16,35}$
- (01)  $h_1 u x' = P h_1 x_{15,42} = P h_1 x_{15,43} = B_1 Q = B_1 P u$
- (11)  $e_0 x_{16,32}$
- 21 (10)  $d_0^2 R_2 = d_0 i Q_1 = d_0 j x' = e_0 i x' = g P R_2 = k P Q_1 = P d_0 x_{13,35} = P e_0 P^2 D_1 = B_4 P^2 e_0 = B_{21} P j$
- (01)  $d_0^2 g w = d_0^2 r m = d_0 e_0^2 w = d_0 e_0 g v = d_0 e_0 r l = d_0 g^2 u = d_0 g r k = e_0^3 v = e_0^2 g u = e_0^2 r k = e_0 g r j = e_0 m z = g^2 r i = g l z = i m^2 = j l m = k^2 m = k l^2$

continued

- Stem 93      continued
- 22 (1)  $h_0d_0^2R_2 = h_0d_0iQ_1 = h_0d_0jx' = h_0e_0ix' = h_0gPR_2 =$   
 $h_0kPQ_1 = h_0Pd_0x_{13,35} = h_0Pe_0P^2D_1 = h_0B_4P^2e_0 =$   
 $h_0B_{21}Pj = h_2d_0ix' = h_2e_0PR_2 = h_2gR_1 = h_2jPQ_1 =$   
 $h_2Pd_0P^2D_1 = h_2Pe_0R_2 = h_2B_4P^2d_0 = h_2Q_1 Pj =$   
 $d_0Ph_2P^2D_1 = d_0Pe_0R_1 = d_0P^2h_2B_4 = e_0Ph_2R_2 = e_0Pd_0R_1 =$   
 $f_0Pd_0x' = Ph_2iB_{21} = Ph_2jQ_1 = Ph_2kx' = Ph_2Pd_0B_4 =$   
 $iB_2Pd_0$
- 23 (1)  $h_0^2d_0^2R_2 = h_0^2d_0iQ_1 = h_0^2d_0jx' = h_0^2e_0ix' = h_0^2gPR_2 =$   
 $h_0^2kPQ_1 = h_0^2Pd_0x_{13,35} = h_0^2Pe_0P^2D_1 = h_0^2B_4P^2e_0 =$   
 $h_0^2B_{21}Pj = h_0h_2d_0ix' = h_0h_2e_0PR_2 = h_0h_2gR_1 = h_0h_2jPQ_1 =$   
 $h_0h_2Pd_0P^2D_1 = h_0h_2Pe_0R_2 = h_0h_2B_4P^2d_0 = h_0h_2Q_1 Pj =$   
 $h_0d_0Ph_2P^2D_1 = h_0d_0Pe_0R_1 = h_0d_0P^2h_2B_4 = h_0e_0Ph_2R_2 =$   
 $h_0e_0Pd_0R_1 = h_0f_0Pd_0x' = h_0Ph_2iB_{21} = h_0Ph_2jQ_1 =$   
 $h_0Ph_2kx' = h_0Ph_2Pd_0B_4 = h_0iB_2Pd_0 = h_1d_0^2PQ_1 =$   
 $h_1d_0Pd_0Q_1 = h_1d_0Pe_0x' = h_1e_0Pd_0x' = h_1gP^2Q_1 =$   
 $h_1B_{21}P^2e_0 = h_1x_{10,27}P^2d_0 = h_1x_{10,28}P^2d_0 = h_2^2d_0PR_2 =$   
 $h_2^2e_0R_1 = h_2^2iPQ_1 = h_2^2Pd_0R_2 = h_2^2x'Pj = h_2d_0Ph_2R_2 =$   
 $h_2d_0Pd_0R_1 = h_2f_0P^2Q_1 = h_2Ph_2iQ_1 = h_2Ph_2jx' =$   
 $h_2B_2P^2j = h_2P^2h_2x_{13,35} = d_0^2Ph_1Q_1 = d_0^2Ph_2R_1 = d_0e_0Ph_1x' =$   
 $d_0B_1P^2e_0 = d_0P^2h_1x_{10,27} = d_0P^2h_1x_{10,28} = e_0B_1P^2d_0 =$   
 $e_0P^2h_1B_{21} = f_0Ph_2PQ_1 = f_0P^2h_2Q_1 = gPh_1PQ_1 =$   
 $gP^2h_1Q_1 = gP^2h_2R_1 = Ph_1Pd_0x_{10,27} = Ph_1Pd_0x_{10,28} =$   
 $Ph_1Pe_0B_{21} = Ph_2^2x_{13,35} = Ph_2B_2Pj = D_2P^4h_2 = Pc_0x_{16,33} =$   
 $jB_2P^2h_2 = B_1Pd_0Pe_0 = B_5 P^3h_2 = PD_2P^3h_2$
- 24 (10)  $iR_1$
- (01)  $d_0^4e_0g = d_0^3e_0^3 = d_0^2g^2Pe_0 = d_0^2iv = d_0^2ju = d_0e_0^2gPe_0 =$   
 $d_0e_0g^2Pd_0 = d_0e_0iu = d_0rij = d_0kPv = d_0lPu = d_0wPj =$   
 $e_0^4Pe_0 = e_0^3gPd_0 = e_0ri^2 = e_0jPv = e_0kPu = e_0vPj = g^3P^2e_0 =$   
 $giPv = gjPu = guPj = r^2P^2e_0 = rkPj = rPd_0z = ikz =$   
 $iPe_0w = j^2z = jPd_0w = jPe_0v = kPd_0v = kPe_0u = lPd_0u =$   
 $mP^2v$
- 25 (01)  $h_0iR_1 = R_1P^2i$
- (11)  $h_1P^2x_{16,32} = P^2h_1x_{16,32}$
- 26 (1)  $h_0^2iR_1 = h_0R_1P^2i = h_3x_{25,24}$
- continued

Stem 93 continued

- 27 (10)  $d_0^5 i = d_0^3 e_0 P j = d_0^3 j P e_0 = d_0^3 k P d_0 = d_0^2 e_0 i P e_0 = d_0^2 e_0 j P d_0 =$   
 $d_0^2 g i P d_0 = d_0^2 l P^2 e_0 = d_0^2 m P^2 d_0 = d_0 e_0^2 i P d_0 = d_0 e_0 g P^2 j =$   
 $d_0 e_0 k P^2 e_0 = d_0 e_0 l P^2 d_0 = d_0 g^2 P^2 i = d_0 g j P^2 e_0 = d_0 g k P^2 d_0 =$   
 $d_0 g P e_0 P j = d_0 k P e_0^2 = d_0 l P d_0 P e_0 = d_0 m P d_0^2 = e_0^3 P^2 j =$   
 $e_0^2 g P^2 i = e_0^2 j P^2 e_0 = e_0^2 k P^2 d_0 = e_0^2 P e_0 P j = e_0 g i P^2 e_0 =$   
 $e_0 g j P^2 d_0 = e_0 g P d_0 P j = e_0 j P e_0^2 = e_0 k P d_0 P e_0 = e_0 l P d_0^2 =$   
 $e_0 m P^3 e_0 = g^2 i P^2 d_0 = g i P e_0^2 = g j P d_0 P e_0 = g k P d_0^2 = g l P^3 e_0 =$   
 $g m P^3 d_0 = r P^3 u = i^2 P u = m P e_0 P^2 e_0$
- (01)  $h_0^3 i R_1 = h_0^2 R_1 P^2 i = h_0 h_3 x_{25,24} = i^2 Q$
- 28 (1)  $h_0^4 i R_1 = h_0^3 R_1 P^2 i = h_0^2 h_3 x_{25,24} = h_0 i^2 Q$
- 29 (1)  $h_0^5 i R_1 = h_0^4 R_1 P^2 i = h_0^3 h_3 x_{25,24} = h_0^2 i^2 Q = h_3 Q P^2 i = c_0 P^4 x' =$   
 $y P^4 i = x' P^4 c_0 = P^2 c_0 x_{18,20}$
- 30 (1)  $d_0^2 i P^2 j = d_0^2 j P^2 i = d_0 e_0 i P^2 i = d_0 r P^4 e_0 = d_0 i^2 P^2 e_0 =$   
 $d_0 i j P^2 d_0 = d_0 i P d_0 P j = d_0 k P^3 j = d_0 z P^3 d_0 = e_0 r P^4 d_0 =$   
 $e_0 i^2 P^2 d_0 = e_0 j P^3 j = e_0 P j P^2 j = g i P^3 j = g P j P^2 i = r P d_0 P^3 e_0 =$   
 $r P e_0 P^3 d_0 = r P^2 d_0 P^2 e_0 = i^2 P d_0 P e_0 = i j P d_0^2 = i k P^3 e_0 =$   
 $i l P^3 d_0 = j^2 P^3 e_0 = j k P^3 d_0 = j P e_0 P^2 j = j P j P^2 e_0 = k P d_0 P^2 j =$   
 $k P e_0 P^2 i = k P j P^2 d_0 = l P d_0 P^2 i = m P^4 j = P d_0 z P^2 d_0 = P e_0 P j^2$
- 33 (1)  $d_0 P^5 u = P d_0 P^4 u = u P^5 d_0 = P^2 d_0 P^3 u = P u P^4 d_0 = P^3 d_0 P^2 u$
- 36 (1)  $d_0^2 P^6 e_0 = d_0 e_0 P^6 d_0 = d_0 P d_0 P^5 e_0 = d_0 P e_0 P^5 d_0 = d_0 P^2 d_0 P^4 e_0 =$   
 $d_0 P^2 e_0 P^4 d_0 = d_0 P^3 d_0 P^3 e_0 = e_0 P d_0 P^5 d_0 = e_0 P^2 d_0 P^4 d_0 =$   
 $e_0 P^3 d_0^2 = g P^7 e_0 = P d_0^2 P^4 e_0 = P d_0 P e_0 P^4 d_0 = P d_0 P^2 d_0 P^3 e_0 =$   
 $P d_0 P^2 e_0 P^3 d_0 = P e_0 P^2 d_0 P^3 d_0 = P^2 d_0^2 P^2 e_0$
- 39 (1)  $i P^7 d_0 = P d_0 P^6 i = P^2 i P^5 d_0 = P^3 d_0 P^4 i$

Stem 94

- 4 (1)  $h_1h_4^2h_6 = h_1h_5^3$
- 6 (10)  $h_6n$   
(01)  $h_1^2g_3 = h_4x_1$
- 8 (1)  $x_{8,80}$
- 9 (001)  $h_0x_{8,80}$   
(101)  $h_6d_0e_0$   
(011)  $h_1x_{8,78} = h_2x_{8,75} = d_1H_1$
- 10 (100)  $x_{10,70}$   
(001)  $h_0^2x_{8,80} = pA'$   
(011)  $h_0h_6d_0e_0 = h_2h_6d_0^2 = h_6gPh_2$
- 11 (10)  $h_1x_{10,67} = h_3x_{10,60} = H_1q$   
(01)  $h_0^2h_6d_0e_0 = h_0h_2h_6d_0^2 = h_0h_6gPh_2 = h_2^2h_6Pe_0 = h_2h_6e_0Ph_2 = h_6c_0i$
- 12 (01)  $h_1^2x_{10,65} = d_1x_{8,32} = xQ_2$   
(11)  $h_2x_{11,61}$
- 13 (1)  $h_0h_2x_{11,61} = h_1x_{12,60}$
- 14 (1)  $h_1h_6P^2d_0 = h_6d_0P^2h_1 = h_6Ph_1Pd_0$
- 15 (1)  $x_{15,56}$
- 16 (1)  $x_{16,54}$
- 17 (1)  $d_0gB_4 = e_0^2B_4 = kB_{23} = lx_{10,27} = lx_{10,28} = mB_{21}$
- 19 (1)  $x_{19,49}$
- 20 (10)  $d_0g^4 = d_0gr^2 = d_0mw = e_0^2g^3 = e_0^2r^2 = e_0lw = e_0mv = gkw = glv = gmu = rkm = rl^2$   
(01)  $d_0x_{16,37} = e_0x_{16,33} = rPQ_1 = ix_{13,35} = jP^2D_1 = kR_2 = B_4Pj = zx'$
- 21 (1)  $h_0d_0x_{16,37} = h_0e_0x_{16,33} = h_0rPQ_1 = h_0ix_{13,35} = h_0jP^2D_1 = h_0kR_2 = h_0B_4Pj = h_0zx' = h_1^2ux' = h_1d_0x_{16,35} = h_1Ph_1x_{15,42} = h_1Ph_1x_{15,43} = h_1B_1Q = h_1B_1Pu = h_2d_0x_{16,33} = h_2iP^2D_1 = h_2jR_2 = h_3Px_{16,35} = d_0jR_1 = e_0iR_1 = f_0ix' = D_3P^4h_1 = Ph_1qx' = Ph_1B_1u = Ph_1x_{16,42} = Ph_2rx' = Ph_2iB_4 = i^2B_2 = PD_3P^3h_1 = P^2h_1P^2D_3 = X_1P^2e_0$
- 22 (1)  $x_{22,39}$
- 23 (10)  $d_0^3e_0m = d_0^3gl = d_0^2e_0^2l = d_0^2e_0gk = d_0^2g^2j = d_0e_0^3k = d_0e_0^2gj = d_0e_0g^2i = d_0gmPe_0 = d_0rPv = d_0uz = e_0^4j = e_0^3gi = e_0^2mPe_0 = e_0glPe_0 = e_0gmPd_0 = e_0rPu = g^3Pj = g^2kPe_0 = g^2lPd_0 = r^2Pj = riz = rPd_0v = rPe_0u = ijw = ikv = ilu = j^2v = jku$   
(01)  $h_0x_{22,39}$
- 24 (1)  $h_0^2x_{22,39}$
- 25 (1)  $h_0^3x_{22,39}$

continued



- Stem 94      continued
- 26 (0011)  $Q^2$   
(1011)  $d_0P^3Q_1 = Pd_0P^2Q_1 = Q_1P^3d_0 = P^2d_0PQ_1$   
(0100)  $uP^2u = Pu^2$   
(0010)  $h_1^2P^2x_{16,32} = h_1P^2h_1x_{16,32} = Ph_1^2x_{16,32} = X_1P^4h_1 = P^3h_1W_1 = QPu$   
(1111)  $Pe_0x_{18,20}$   
(0110)  $d_0^3rPd_0 = d_0^3ik = d_0^3j^2 = d_0^2e_0ij = d_0^2gi^2 = d_0^2lPj = d_0^2Pe_0z = d_0e_0^2i^2 = d_0e_0rP^2e_0 = d_0e_0kPj = d_0e_0Pd_0z = d_0grP^2d_0 = d_0gjPj = d_0rPe_0^2 = d_0ilPe_0 = d_0imPd_0 = d_0jkPe_0 = d_0jlpd_0 = d_0k^2Pd_0 = e_0^2rP^2d_0 = e_0^2jPj = e_0giPj = e_0rPd_0Pe_0 = e_0ikPe_0 = e_0ilPd_0 = e_0j^2Pe_0 = e_0jkPd_0 = e_0mP^2j = grPd_0^2 = gijPe_0 = gikPd_0 = gj^2Pd_0 = glP^2j = gmP^2i = gzP^2e_0 = jmP^2e_0 = klP^2e_0 = kmP^2d_0 = l^2P^2d_0 = mPe_0Pj$   
(0001)  $h_0^4x_{22,39}$   
(1001)  $x'P^3e_0$
- 27 (01)  $h_0^5x_{22,39} = h_0Q^2$   
(11)  $h_0d_0P^3Q_1 = h_0Pd_0P^2Q_1 = h_0Pe_0x_{18,20} = h_0x'P^3e_0 = h_0Q_1P^3d_0 = h_0P^2d_0PQ_1 = h_2Pd_0x_{18,20} = h_2x'P^3d_0 = d_0Ph_2x_{18,20} = d_0x'P^3h_2 = Ph_2x'P^2d_0 = B_2P^4d_0 = Pd_0P^2h_2x' = B_{21}P^4h_2$
- 28 (10)  $h_0^2d_0P^3Q_1 = h_0^2Pd_0P^2Q_1 = h_0^2Pe_0x_{18,20} = h_0^2x'P^3e_0 = h_0^2Q_1P^3d_0 = h_0^2P^2d_0PQ_1 = h_0h_2Pd_0x_{18,20} = h_0h_2x'P^3d_0 = h_0d_0Ph_2x_{18,20} = h_0d_0x'P^3h_2 = h_0Ph_2x'P^2d_0 = h_0B_2P^4d_0 = h_0Pd_0P^2h_2x' = h_0B_{21}P^4h_2 = h_2^2P^4Q_1 = h_2Ph_2P^3Q_1 = h_2P^2h_2P^2Q_1 = h_2Q_1P^4h_2 = h_2P^3h_2PQ_1 = c_0x_{25,24} = Ph_2^2P^2Q_1 = Ph_2P^2h_2PQ_1 = Ph_2Q_1P^3h_2 = P^2h_2^2Q_1 = P^2c_0R_1$   
(01)  $h_0^6x_{22,39} = h_0^2Q^2$
- 29 (10)  $d_0^2P^3v = d_0e_0P^3u = d_0rP^3j = d_0i^2Pj = d_0Pd_0P^2v = d_0Pe_0P^2u = d_0uP^3e_0 = d_0vP^3d_0 = d_0zP^2i = d_0P^2d_0Pv = d_0P^2e_0Pu = e_0Pd_0P^2u = e_0uP^3d_0 = e_0P^2d_0Pu = gP^4v = riP^3e_0 = rjP^3d_0 = rPd_0P^2j = rPe_0P^2i = rPjP^2d_0 = i^3Pe_0 = i^2jPd_0 = ikP^2j = ilP^2i = izP^2d_0 = j^2P^2j = jkP^2i = jPj^2 = Pd_0^2Pv = Pd_0Pe_0Pu = Pd_0uP^2e_0 = Pd_0vP^2d_0 = Pe_0uP^2d_0 = wP^4e_0$   
(01)  $h_0^7x_{22,39} = h_0^3Q^2$
- 30 (1)  $h_0^8x_{22,39} = h_0^4Q^2 = h_4P^4Q$
- 31 (10)  $Ph_1P^4x' = x'P^5h_1 = P^3h_1x_{18,20}$   
(01)  $h_0^9x_{22,39} = h_0^5Q^2 = h_0h_4P^4Q$
- continued

Stem 94continued

$$\begin{aligned}
32 \quad (10) \quad & d_0^4 P^3 d_0 = d_0^3 P d_0 P^2 d_0 = d_0^2 e_0 P^4 e_0 = d_0^2 g P^4 d_0 = d_0^2 P d_0^3 = \\
& d_0^2 P e_0 P^3 e_0 = d_0^2 P^2 e_0^2 = d_0 e_0^2 P^4 d_0 = d_0 e_0 P d_0 P^3 e_0 = \\
& d_0 e_0 P e_0 P^3 d_0 = d_0 e_0 P^2 d_0 P^2 e_0 = d_0 g P d_0 P^3 d_0 = d_0 g P^2 d_0^2 = \\
& d_0 P d_0 P e_0 P^2 e_0 = d_0 P e_0^2 P^2 d_0 = e_0^2 P d_0 P^3 d_0 = e_0^2 P^2 d_0^2 = \\
& e_0 g P^5 e_0 = e_0 P d_0^2 P^2 e_0 = e_0 P d_0 P e_0 P^2 d_0 = g^2 P^5 d_0 = \\
& g P d_0^2 P^2 d_0 = g P e_0 P^4 e_0 = g P^2 e_0 P^3 e_0 = i P^4 u = P d_0^2 P e_0^2 = \\
& u P^4 i = P^2 i P^2 u \\
(01) \quad & h_0^{10} x_{22,39} = h_0^6 Q^2 = h_0^2 h_4 P^4 Q \\
33 \quad (1) \quad & h_0^{11} x_{22,39} = h_0^7 Q^2 = h_0^3 h_4 P^4 Q \\
34 \quad (1) \quad & h_0^{12} x_{22,39} = h_0^8 Q^2 = h_0^4 h_4 P^4 Q \\
35 \quad (01) \quad & h_0^{13} x_{22,39} = h_0^9 Q^2 = h_0^5 h_4 P^4 Q \\
(11) \quad & d_0^2 P^5 j = d_0 i P^5 e_0 = d_0 j P^5 d_0 = d_0 P d_0 P^4 j = d_0 P e_0 P^4 i = \\
& d_0 P j P^4 d_0 = d_0 P^2 d_0 P^3 j = d_0 P^2 i P^3 e_0 = d_0 P^2 j P^3 d_0 = e_0 i P^5 d_0 = \\
& e_0 P d_0 P^4 i = e_0 P^2 i P^3 d_0 = g P^6 j = i P d_0 P^4 e_0 = i P e_0 P^4 d_0 = \\
& i P^2 d_0 P^3 e_0 = i P^2 e_0 P^3 d_0 = j P d_0 P^4 d_0 = j P^2 d_0 P^3 d_0 = k P^6 e_0 = \\
& l P^6 d_0 = P d_0^2 P^3 j = P d_0 P j P^3 d_0 = P d_0 P^2 d_0 P^2 j = P d_0 P^2 e_0 P^2 i = \\
& P e_0 P^2 d_0 P^2 i = P j P^2 d_0^2 \\
36 \quad (1) \quad & h_0^{14} x_{22,39} = h_0^{10} Q^2 = h_0^6 h_4 P^4 Q = h_0 d_0^2 P^5 j = h_0 d_0 i P^5 e_0 = \\
& h_0 d_0 j P^5 d_0 = h_0 d_0 P d_0 P^4 j = h_0 d_0 P e_0 P^4 i = h_0 d_0 P j P^4 d_0 = \\
& h_0 d_0 P^2 d_0 P^3 j = h_0 d_0 P^2 i P^3 e_0 = h_0 d_0 P^2 j P^3 d_0 = h_0 e_0 i P^5 d_0 = \\
& h_0 e_0 P d_0 P^4 i = h_0 e_0 P^2 i P^3 d_0 = h_0 g P^6 j = h_0 i P d_0 P^4 e_0 = \\
& h_0 i P e_0 P^4 d_0 = h_0 i P^2 d_0 P^3 e_0 = h_0 i P^2 e_0 P^3 d_0 = h_0 j P d_0 P^4 d_0 = \\
& h_0 j P^2 d_0 P^3 d_0 = h_0 k P^6 e_0 = h_0 l P^6 d_0 = h_0 P d_0^2 P^3 j = \\
& h_0 P d_0 P j P^3 d_0 = h_0 P d_0 P^2 d_0 P^2 j = h_0 P d_0 P^2 e_0 P^2 i = \\
& h_0 P e_0 P^2 d_0 P^2 i = h_0 P j P^2 d_0^2 = h_2 d_0 i P^5 d_0 = h_2 d_0 P d_0 P^4 i = \\
& h_2 d_0 P^2 i P^3 d_0 = h_2 e_0 P^6 j = h_2 g P^6 i = h_2 i P d_0 P^4 d_0 = \\
& h_2 i P^2 d_0 P^3 d_0 = h_2 j P^6 e_0 = h_2 k P^6 d_0 = h_2 P d_0 P^2 d_0 P^2 i = \\
& h_2 P e_0 P^5 j = h_2 P j P^5 e_0 = h_2 P^2 e_0 P^4 j = h_2 P^2 j P^4 e_0 = \\
& h_2 P^3 e_0 P^3 j = d_0^2 P h_2 P^4 i = d_0^2 i P^5 h_2 = d_0^2 P^3 h_2 P^2 i = d_0 f_0 P^6 d_0 = \\
& d_0 P h_2 i P^4 d_0 = d_0 P h_2 P^2 d_0 P^2 i = d_0 i P d_0 P^4 h_2 = d_0 i P^2 h_2 P^3 d_0 = \\
& d_0 i P^2 d_0 P^3 h_2 = d_0 k P^6 h_2 = d_0 P d_0 P^2 h_2 P^2 i = e_0 P h_2 P^5 j = \\
& e_0 j P^6 h_2 = e_0 P^2 h_2 P^4 j = e_0 P j P^5 h_2 = e_0 P^3 h_2 P^3 j = \\
& e_0 P^2 j P^4 h_2 = f_0 P d_0 P^5 d_0 = f_0 P^2 d_0 P^4 d_0 = f_0 P^3 d_0^2 = g i P^6 h_2 = \\
& g P^2 h_2 P^4 i = g P^2 i P^4 h_2 = P h_2 i P d_0 P^3 d_0 = P h_2 i P^2 d_0^2 = \\
& P h_2 j P^5 e_0 = P h_2 k P^5 d_0 = P h_2 P d_0^2 P^2 i = P h_2 P e_0 P^4 j = \\
& P h_2 P j P^4 e_0 = P h_2 P^2 e_0 P^3 j = P h_2 P^2 j P^3 e_0 = i P d_0^2 P^3 h_2 = \\
& i P d_0 P^2 h_2 P^2 d_0 = j P e_0 P^5 h_2 = j P^2 h_2 P^4 e_0 = j P^2 e_0 P^4 h_2 = \\
& j P^3 h_2 P^3 e_0 = k P d_0 P^5 h_2 = k P^2 h_2 P^4 d_0 = k P^2 d_0 P^4 h_2 = \\
& k P^3 h_2 P^3 d_0 = m P^7 h_2 = P e_0 P^2 h_2 P^3 j = P e_0 P j P^4 h_2 = \\
& P e_0 P^3 h_2 P^2 j = P^2 h_2 P j P^3 e_0 = P^2 h_2 P^2 e_0 P^2 j = P j P^2 e_0 P^3 h_2
\end{aligned}$$

continued

Stem 94 continued

$$\begin{aligned}
37 \quad (1) \quad & h_0^{15}x_{22,39} = h_0^{11}Q^2 = h_0^7h_4P^4Q = h_0^2d_0^2P^5j = h_0^2d_0iP^5e_0 = \\
& h_0^2d_0jP^5d_0 = h_0^2d_0Pd_0P^4j = h_0^2d_0Pe_0P^4i = h_0^2d_0PjP^4d_0 = \\
& h_0^2d_0P^2d_0P^3j = h_0^2d_0P^2iP^3e_0 = h_0^2d_0P^2jP^3d_0 = h_0^2e_0iP^5d_0 = \\
& h_0^2e_0Pd_0P^4i = h_0^2e_0P^2iP^3d_0 = h_0^2gP^6j = h_0^2iPd_0P^4e_0 = \\
& h_0^2iPe_0P^4d_0 = h_0^2iP^2d_0P^3e_0 = h_0^2iP^2e_0P^3d_0 = h_0^2jPd_0P^4d_0 = \\
& h_0^2jP^2d_0P^3d_0 = h_0^2kP^6e_0 = h_0^2lP^6d_0 = h_0^2Pd_0^2P^3j = \\
& h_0^2Pd_0PjP^3d_0 = h_0^2Pd_0P^2d_0P^2j = h_0^2Pd_0P^2e_0P^2i = \\
& h_0^2Pe_0P^2d_0P^2i = h_0^2PjP^2d_0^2 = h_0h_2d_0iP^5d_0 = h_0h_2d_0Pd_0P^4i = \\
& h_0h_2d_0P^2iP^3d_0 = h_0h_2e_0P^6j = h_0h_2gP^6i = h_0h_2iPd_0P^4d_0 = \\
& h_0h_2iP^2d_0P^3d_0 = h_0h_2jP^6e_0 = h_0h_2kP^6d_0 = h_0h_2Pd_0P^2d_0P^2i = \\
& h_0h_2Pe_0P^5j = h_0h_2PjP^5e_0 = h_0h_2P^2e_0P^4j = h_0h_2P^2jP^4e_0 = \\
& h_0h_2P^3e_0P^3j = h_0d_0^2Ph_2P^4i = h_0d_0^2iP^5h_2 = h_0d_0^2P^3h_2P^2i = \\
& h_0d_0f_0P^6d_0 = h_0d_0Ph_2iP^4d_0 = h_0d_0Ph_2P^2d_0P^2i = \\
& h_0d_0iPd_0P^4h_2 = h_0d_0iP^2h_2P^3d_0 = h_0d_0iP^2d_0P^3h_2 = \\
& h_0d_0kP^6h_2 = h_0d_0Pd_0P^2h_2P^2i = h_0e_0Ph_2P^5j = h_0e_0jP^6h_2 = \\
& h_0e_0P^2h_2P^4j = h_0e_0PjP^5h_2 = h_0e_0P^3h_2P^3j = h_0e_0P^2jP^4h_2 = \\
& h_0f_0Pd_0P^5d_0 = h_0f_0P^2d_0P^4d_0 = h_0f_0P^3d_0^2 = h_0giP^6h_2 = \\
& h_0gP^2h_2P^4i = h_0gP^2iP^4h_2 = h_0Ph_2iPd_0P^3d_0 = h_0Ph_2iP^2d_0^2 = \\
& h_0Ph_2jP^5e_0 = h_0Ph_2kP^5d_0 = h_0Ph_2Pd_0^2P^2i = h_0Ph_2Pe_0P^4j = \\
& h_0Ph_2PjP^4e_0 = h_0Ph_2P^2e_0P^3j = h_0Ph_2P^2jP^3e_0 = \\
& h_0iPd_0^2P^3h_2 = h_0iPd_0P^2h_2P^2d_0 = h_0jPe_0P^5h_2 = \\
& h_0jP^2h_2P^4e_0 = h_0jP^2e_0P^4h_2 = h_0jP^3h_2P^3e_0 = h_0kPd_0P^5h_2 = \\
& h_0kP^2h_2P^4d_0 = h_0kP^2d_0P^4h_2 = h_0kP^3h_2P^3d_0 = h_0mP^7h_2 = \\
& h_0Pe_0P^2h_2P^3j = h_0Pe_0PjP^4h_2 = h_0Pe_0P^3h_2P^2j = \\
& h_0P^2h_2PjP^3e_0 = h_0P^2h_2P^2e_0P^2j = h_0PjP^2e_0P^3h_2 = \\
& h_1d_0^2P^6e_0 = h_1d_0e_0P^6d_0 = h_1d_0Pd_0P^5e_0 = h_1d_0Pe_0P^5d_0 = \\
& h_1d_0P^2d_0P^4e_0 = h_1d_0P^2e_0P^4d_0 = h_1d_0P^3d_0P^3e_0 = \\
& h_1e_0Pd_0P^5d_0 = h_1e_0P^2d_0P^4d_0 = h_1e_0P^3d_0^2 = h_1gP^7e_0 = \\
& h_1Pd_0^2P^4e_0 = h_1Pd_0Pe_0P^4d_0 = h_1Pd_0P^2d_0P^3e_0 = \\
& h_1Pd_0P^2e_0P^3d_0 = h_1Pe_0P^2d_0P^3d_0 = h_1P^2d_0^2P^2e_0 = \\
& h_2^2d_0P^6j = h_2^2e_0P^6i = h_2^2iP^6e_0 = h_2^2jP^6d_0 = h_2^2Pd_0P^5j = \\
& h_2^2PjP^5d_0 = h_2^2P^2d_0P^4j = h_2^2P^2e_0P^4i = h_2^2P^2iP^4e_0 = \\
& h_2^2P^2jP^4d_0 = h_2^2P^3d_0P^3j = h_2d_0Ph_2P^5j = h_2d_0jP^6h_2 = \\
& h_2d_0P^2h_2P^4j = h_2d_0PjP^5h_2 = h_2d_0P^3h_2P^3j = h_2d_0P^2jP^4h_2 = \\
& h_2e_0iP^6h_2 = h_2e_0P^2h_2P^4i = h_2e_0P^2iP^4h_2 = h_2f_0P^7e_0 = \\
& h_2Ph_2iP^5e_0 = h_2Ph_2jP^5d_0 = h_2Ph_2Pd_0P^4j = h_2Ph_2Pe_0P^4i = \\
& h_2Ph_2PjP^4d_0 = h_2Ph_2P^2d_0P^3j = h_2Ph_2P^2iP^3e_0 = \\
& h_2Ph_2P^2jP^3d_0 = h_2iPe_0P^5h_2 = h_2iP^2h_2P^4e_0 = h_2iP^2e_0P^4h_2 = \\
& h_2iP^3h_2P^3e_0 = h_2jPd_0P^5h_2 = h_2jP^2h_2P^4d_0 = h_2jP^2d_0P^4h_2 = \\
& h_2jP^3h_2P^3d_0 = h_2lP^7h_2 = h_2Pd_0P^2h_2P^3j = h_2Pd_0PjP^4h_2 = \\
& h_2Pd_0P^3h_2P^2j = h_2Pe_0P^3h_2P^2i = (\text{continued})
\end{aligned}$$

Stem 86 continued

$$\begin{aligned}
37 \quad (1) \quad & \text{(continued)} = h_2P^2h_2PjP^3d_0 = h_2P^2h_2P^2d_0P^2j = \\
& h_2P^2h_2P^2e_0P^2i = h_2PjP^2d_0P^3h_2 = d_0^2e_0P^6h_1 = d_0^2Ph_1P^5e_0 = \\
& d_0^2Pe_0P^5h_1 = d_0^2P^2h_1P^4e_0 = d_0^2P^2e_0P^4h_1 = d_0^2P^3h_1P^3e_0 = \\
& d_0e_0Ph_1P^5d_0 = d_0e_0Pd_0P^5h_1 = d_0e_0P^2h_1P^4d_0 = \\
& d_0e_0P^2d_0P^4h_1 = d_0e_0P^3h_1P^3d_0 = d_0Ph_1Pd_0P^4e_0 = \\
& d_0Ph_1Pe_0P^4d_0 = d_0Ph_1P^2d_0P^3e_0 = d_0Ph_1P^2e_0P^3d_0 = \\
& d_0Ph_2^2P^4j = d_0Ph_2jP^5h_2 = d_0Ph_2P^2h_2P^3j = d_0Ph_2PjP^4h_2 = \\
& d_0Ph_2P^3h_2P^2j = d_0jP^2h_2P^4h_2 = d_0jP^3h_2^2 = d_0Pd_0Pe_0P^4h_1 = \\
& d_0Pd_0P^2h_1P^3e_0 = d_0Pd_0P^2e_0P^3h_1 = d_0Pe_0P^2h_1P^3d_0 = \\
& d_0Pe_0P^2d_0P^3h_1 = d_0P^2h_1P^2d_0P^2e_0 = d_0P^2h_2^2P^2j = \\
& d_0P^2h_2PjP^3h_2 = e_0f_0P^7h_2 = e_0gP^7h_1 = e_0Ph_1Pd_0P^4d_0 = \\
& e_0Ph_1P^2d_0P^3d_0 = e_0Ph_2^2P^4i = e_0Ph_2iP^5h_2 = e_0Ph_2P^3h_2P^2i = \\
& e_0iP^2h_2P^4h_2 = e_0iP^3h_2^2 = e_0Pd_0^2P^4h_1 = e_0Pd_0P^2h_1P^3d_0 = \\
& e_0Pd_0P^2d_0P^3h_1 = e_0P^2h_1P^2d_0^2 = e_0P^2h_2^2P^2i = f_0Ph_2P^6e_0 = \\
& f_0Pe_0P^6h_2 = f_0P^2h_2P^5e_0 = f_0P^2e_0P^5h_2 = f_0P^3h_2P^4e_0 = \\
& f_0P^3e_0P^4h_2 = gPh_1P^6e_0 = gPe_0P^6h_1 = gP^2h_1P^5e_0 = \\
& gP^2e_0P^5h_1 = gP^3h_1P^4e_0 = gP^3e_0P^4h_1 = Ph_1Pd_0^2P^3e_0 = \\
& Ph_1Pd_0Pe_0P^3d_0 = Ph_1Pd_0P^2d_0P^2e_0 = Ph_1Pe_0P^2d_0^2 = \\
& Ph_2^2iP^4e_0 = Ph_2^2jP^4d_0 = Ph_2^2Pd_0P^3j = Ph_2^2PjP^3d_0 = \\
& Ph_2^2P^2d_0P^2j = Ph_2^2P^2e_0P^2i = Ph_2iPe_0P^4h_2 = \\
& Ph_2iP^2h_2P^3e_0 = Ph_2iP^2e_0P^3h_2 = Ph_2jPd_0P^4h_2 = \\
& Ph_2jP^2h_2P^3d_0 = Ph_2jP^2d_0P^3h_2 = Ph_2lP^6h_2 = \\
& Ph_2Pd_0P^2h_2P^2j = Ph_2Pd_0PjP^3h_2 = Ph_2Pe_0P^2h_2P^2i = \\
& Ph_2P^2h_2PjP^2d_0 = rP^7c_0 = Pc_0iP^4i = Pc_0P^2i^2 = i^2P^5c_0 = \\
& iPe_0P^2h_2P^3h_2 = iP^2h_2^2P^2e_0 = iP^3c_0P^2i = jPd_0P^2h_2P^3h_2 = \\
& jP^2h_2^2P^2d_0 = lP^2h_2P^5h_2 = lP^3h_2P^4h_2 = Pd_0^2Pe_0P^3h_1 = \\
& Pd_0^2P^2h_1P^2e_0 = Pd_0Pe_0P^2h_1P^2d_0 = Pd_0P^2h_2^2Pj \\
38 \quad (1) \quad & iP^6i = P^2iP^4i \\
39 \quad (1) \quad & h_0iP^6i = h_0P^2iP^4i
\end{aligned}$$

Stem 95

- 5 (10)  $h_6d_1$   
 (01)  $h_2g_3 = h_4e_2$
- 6 (1)  $h_0h_2g_3 = h_0h_4e_2$
- 7 (10)  $x_{7,79}$   
 (01)  $h_6q$
- 8 (10)  $h_6l$   
 (01)  $h_0x_{7,79}$
- 9 (10)  $h_1x_{8,80}$   
 (01)  $h_0h_6l = h_2h_6k = h_6d_0f_0$
- 10 (10)  $x_{10,73}$   
 (01)  $h_0^2h_6l = h_0h_2h_6k = h_0h_6d_0f_0 = h_1h_6d_0e_0 = h_2^2h_6j$
- 11 (10)  $h_2x_{10,65}$   
 (01)  $h_0x_{10,73} = e_1Q_2 = xD_2$
- 13 (1)  $h_2x_{12,58} = h_3x_{12,51} = yQ_2$
- 14 (1)  $h_0h_2x_{12,58} = h_0h_3x_{12,51} = h_0yQ_2 = h_3^2x_{12,45} = px_{10,27}$
- 15 (1)  $h_1^2h_6P^2d_0 = h_1h_6d_0P^2h_1 = h_1h_6Ph_1Pd_0 = h_3h_6P^3h_1 =$   
 $h_4x_{14,42} = h_6c_0P^2c_0 = h_6d_0Ph_1^2 = h_6Pc_0^2$
- 16 (100)  $rB_{23} = mB_4$   
 (010)  $h_6P^3c_0$   
 (001)  $h_1x_{15,56}$
- 18 (1)  $x_{18,57}$
- 19 (10)  $g^3m = grw = r^2m$   
 (01)  $rR_2 = uQ_1 = vx'$
- 21 (10)  $x_{21,43}$   
 (01)  $Px_{17,50}$
- 22 (010)  $d_0^2e_0gr = d_0^2lm = d_0e_0^3r = d_0e_0km = d_0e_0l^2 = d_0g^2z = d_0gjm =$   
 $d_0gkl = d_0uv = e_0^2gz = e_0^2jm = e_0^2kl = e_0gim = e_0gjl = e_0gk^2 =$   
 $e_0u^2 = g^2rPe_0 = g^2il = g^2jk = riv = rju = m^2Pe_0 = wPv$   
 (110)  $d_0^3x' = d_0e_0PQ_1 = d_0Pd_0B_{21} = d_0Pe_0Q_1 = e_0Pd_0Q_1 =$   
 $e_0Pe_0x' = gPd_0x' = x_{10,27}P^2e_0 = x_{10,28}P^2e_0 = B_{23}P^2d_0$   
 (001)  $h_0x_{21,43}$

continued

- Stem 95      continued
- 23 (10)  $h_0 d_0^3 x' = h_0 d_0 e_0 P Q_1 = h_0 d_0 P d_0 B_{21} = h_0 d_0 P e_0 Q_1 =$   
 $h_0 e_0 P d_0 Q_1 = h_0 e_0 P e_0 x' = h_0 g P d_0 x' = h_0 x_{10,27} P^2 e_0 =$   
 $h_0 x_{10,28} P^2 e_0 = h_0 B_{23} P^2 d_0 = h_1 x_{22,39} = h_2 d_0^2 P Q_1 =$   
 $h_2 d_0 P d_0 Q_1 = h_2 d_0 P e_0 x' = h_2 e_0 P d_0 x' = h_2 g P^2 Q_1 =$   
 $h_2 B_{21} P^2 e_0 = h_2 x_{10,27} P^2 d_0 = h_2 x_{10,28} P^2 d_0 = h_4 P^3 Q_1 =$   
 $c_0 P x_{16,35} = d_0^2 P h_2 Q_1 = d_0 e_0 P h_2 x' = d_0 B_2 P^2 e_0 =$   
 $d_0 P^2 h_2 x_{10,27} = d_0 P^2 h_2 x_{10,28} = e_0 B_2 P^2 d_0 = e_0 P^2 h_2 B_{21} =$   
 $g P h_2 P Q_1 = g P^2 h_2 Q_1 = P h_2 P d_0 x_{10,27} = P h_2 P d_0 x_{10,28} =$   
 $P h_2 P e_0 B_{21} = P c_0 x_{16,35} = B_2 P d_0 P e_0 = Q_2 P^3 d_0$
- (01)  $h_0^2 x_{21,43}$
- 24 (01)  $h_0^3 x_{21,43}$
- (11)  $P^2 x_{16,35}$
- 25 (0011)  $h_0 P^2 x_{16,35} = h_2 P^2 x_{16,32} = P^2 h_2 x_{16,32}$
- (1000)  $i P^2 Q_1 = x' P^2 j = Q_1 P^2 i$
- (1011)  $d_0 P^2 R_2 = P d_0 P R_2 = P e_0 R_1 = P^2 d_0 R_2$
- (0100)  $d_0^4 u = d_0^3 r i = d_0^2 e_0 P v = d_0^2 g P u = d_0^2 j z = d_0^2 P d_0 w = d_0^2 P e_0 v =$   
 $d_0 e_0^2 P u = d_0 e_0 r P j = d_0 e_0 i z = d_0 e_0 P d_0 v = d_0 e_0 P e_0 u =$   
 $d_0 g P d_0 u = d_0 r j P e_0 = d_0 r k P d_0 = d_0 i^2 m = d_0 i j l = d_0 i k^2 =$   
 $d_0 j^2 k = e_0^2 P d_0 u = e_0 g P^2 v = e_0 r i P e_0 = e_0 r j P d_0 = e_0 i^2 l =$   
 $e_0 i j k = e_0 j^3 = e_0 w P^2 e_0 = g^2 P^2 u = g r i P d_0 = g i^2 k = g i j^2 =$   
 $g P e_0 P v = g v P^2 e_0 = g w P^2 d_0 = g z P j = r l P^2 e_0 = r m P^2 d_0 =$   
 $j m P j = k l P j = k P e_0 z = l P d_0 z = P e_0^2 w$
- (1100)  $j x_{18,20}$
- (0001)  $h_0^4 x_{21,43}$
- 26 (100)  $h_0 i P^2 Q_1 = h_0 j x_{18,20} = h_0 x' P^2 j = h_0 Q_1 P^2 i = h_2 i x_{18,20} =$   
 $h_2 x' P^2 i = i P^2 h_2 x' = B_4 P^4 h_2$
- (001)  $h_0^5 x_{21,43}$
- (011)  $h_0^2 P^2 x_{16,35} = h_0 h_2 P^2 x_{16,32} = h_0 P^2 h_2 x_{16,32}$
- (111)  $h_0 d_0 P^2 R_2 = h_0 P d_0 P R_2 = h_0 P e_0 R_1 = h_0 P^2 d_0 R_2 =$   
 $h_2 P d_0 R_1 = d_0 P h_2 R_1 = R_1 P^3 e_0 = P^3 h_2 P^2 D_1$

continued

- Stem 95      continued
- 27 (100)  $h_0^2 i P^2 Q_1 = h_0^2 j x_{18,20} = h_0^2 x' P^2 j = h_0^2 Q_1 P^2 i = h_0 h_2 i x_{18,20} =$   
 $h_0 h_2 x' P^2 i = h_0 i P^2 h_2 x' = h_0 B_4 P^4 h_2 = h_1 P e_0 x_{18,20} =$   
 $h_1 x' P^3 e_0 = e_0 P h_1 x_{18,20} = e_0 x' P^3 h_1 = P h_1 x' P^2 e_0 = B_1 P^4 e_0 =$   
 $P e_0 P^2 h_1 x' = x_{10,28} P^4 h_1$
- (001)  $h_0^6 x_{21,43}$
- (011)  $h_0^3 P^2 x_{16,35} = h_0^2 h_2 P^2 x_{16,32} = h_0^2 P^2 h_2 x_{16,32} = h_1^3 P^2 x_{16,32} =$   
 $h_1^2 P^2 h_1 x_{16,32} = h_1 P h_1^2 x_{16,32} = h_1 u P^2 u = h_1 X_1 P^4 h_1 =$   
 $h_1 P^3 h_1 W_1 = h_1 Q^2 = h_1 Q P u = h_1 P u^2 = h_3 P^4 Q_1 =$   
 $P h_1 P^2 h_1 W_1 = P h_1 u Q = P h_1 u P u = P h_1 X_1 P^3 h_1 = q P^3 u =$   
 $G P^5 h_1 = P^2 h_1^2 X_1 = P^2 h_1 u^2$
- (111)  $h_0^2 d_0 P^2 R_2 = h_0^2 P d_0 P R_2 = h_0^2 P e_0 R_1 = h_0^2 P^2 d_0 R_2 =$   
 $h_0 h_2 P d_0 R_1 = h_0 d_0 P h_2 R_1 = h_0 R_1 P^3 e_0 = h_0 P^3 h_2 P^2 D_1 =$   
 $h_1 d_0 P^3 Q_1 = h_1 P d_0 P^2 Q_1 = h_1 Q_1 P^3 d_0 = h_1 P^2 d_0 P Q_1 =$   
 $h_2^2 P^3 R_2 = h_2 P h_2 P^2 R_2 = h_2 P^2 h_2 P R_2 = h_2 R_1 P^3 d_0 =$   
 $h_2 P^3 h_2 R_2 = d_0 P h_1 P^2 Q_1 = d_0 P^2 h_1 P Q_1 = d_0 R_1 P^3 h_2 =$   
 $d_0 Q_1 P^3 h_1 = P h_1 P d_0 P Q_1 = P h_1 Q_1 P^2 d_0 = P h_2^2 P R_2 =$   
 $P h_2 P^2 h_2 R_2 = P h_2 R_1 P^2 d_0 = P d_0 P^2 h_1 Q_1 = P d_0 P^2 h_2 R_1 =$   
 $x_{10,27} P^4 h_1$
- 28 (10)  $d_0^5 P e_0 = d_0^4 e_0 P d_0 = d_0^3 g P^2 e_0 = d_0^2 e_0^2 P^2 e_0 = d_0^2 e_0 g P^2 d_0 =$   
 $d_0^2 e_0 P e_0^2 = d_0^2 g P d_0 P e_0 = d_0 e_0^3 P^2 d_0 = d_0 e_0^2 P d_0 P e_0 = d_0 e_0 g P d_0^2 =$   
 $d_0 g^2 P^3 e_0 = d_0 i P^2 v = d_0 j P^2 u = d_0 u P^2 j = d_0 v P^2 i = d_0 P j P u =$   
 $e_0^3 P d_0^2 = e_0^2 g P^3 e_0 = e_0 g^2 P^3 d_0 = e_0 g P e_0 P^2 e_0 = e_0 i P^2 u =$   
 $e_0 u P^2 i = g^2 P d_0 P^2 e_0 = g^2 P e_0 P^2 d_0 = g P e_0^3 = r i P^2 j = r j P^2 i =$   
 $i^3 j = i P d_0 P v = i P e_0 P u = i u P^2 e_0 = i v P^2 d_0 = j P d_0 P u =$   
 $j u P^2 d_0 = k P^3 v = l P^3 u = P d_0 u P j = w P^3 j$
- (01)  $h_0^7 x_{21,43}$
- 29 (1)  $h_0^8 x_{21,43}$
- 30 (1)  $h_0^9 x_{21,43}$
- 31 (10)  $d_0^4 P^2 i = d_0^3 i P^2 d_0 = d_0^2 e_0 P^3 j = d_0^2 i P d_0^2 = d_0^2 j P^3 e_0 =$   
 $d_0^2 k P^3 d_0 = d_0^2 P e_0 P^2 j = d_0^2 P j P^2 e_0 = d_0 e_0 i P^3 e_0 = d_0 e_0 j P^3 d_0 =$   
 $d_0 e_0 P d_0 P^2 j = d_0 e_0 P e_0 P^2 i = d_0 e_0 P j P^2 d_0 = d_0 g i P^3 d_0 =$   
 $d_0 g P d_0 P^2 i = d_0 i P e_0 P^2 e_0 = d_0 j P d_0 P^2 e_0 = d_0 j P e_0 P^2 d_0 =$   
 $d_0 k P d_0 P^2 d_0 = d_0 l P^4 e_0 = d_0 m P^4 d_0 = d_0 P d_0 P e_0 P j =$   
 $e_0^2 i P^3 d_0 = e_0^2 P d_0 P^2 i = e_0 g P^4 j = e_0 i P d_0 P^2 e_0 = e_0 i P e_0 P^2 d_0 =$   
 $e_0 j P d_0 P^2 d_0 = e_0 k P^4 e_0 = e_0 l P^4 d_0 = e_0 P d_0^2 P j = g^2 P^4 i =$   
 $g i P d_0 P^2 d_0 = g j P^4 e_0 = g k P^4 d_0 = g P e_0 P^3 j = g P j P^3 e_0 =$   
 $g P^2 e_0 P^2 j = i P d_0 P e_0^2 = j P d_0^2 P e_0 = k P d_0^3 = k P e_0 P^3 e_0 =$   
 $k P^2 e_0^2 = l P d_0 P^3 e_0 = l P e_0 P^3 d_0 = l P^2 d_0 P^2 e_0 = m P d_0 P^3 d_0 =$   
 $m P^2 d_0^2$
- (01)  $h_0^{10} x_{21,43}$
- continued

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$$32 \quad (10) \quad h_1 P h_1 P^4 x' = h_1 x' P^5 h_1 = h_1 P^3 h_1 x_{18,20} = P h_1 P^2 h_1 x_{18,20} = \\ P h_1 x' P^4 h_1 = B_1 P^6 h_1 = P^2 h_1 x' P^3 h_1$$

$$(01) \quad h_0^{11} x_{21,43}$$

$$33 \quad (1) \quad h_0^{12} x_{21,43}$$

$$34 \quad (10) \quad d_0 i P^4 j = d_0 j P^4 i = d_0 P^2 i P^2 j = e_0 i P^4 i = e_0 P^2 i^2 = r P^6 e_0 = \\ i^2 P^4 e_0 = i j P^4 d_0 = i P d_0 P^3 j = i P j P^3 d_0 = i P^2 d_0 P^2 j = \\ i P^2 e_0 P^2 i = j P^2 d_0 P^2 i = k P^5 j = P d_0 P j P^2 i = z P^5 d_0$$

$$(01) \quad h_0^{13} x_{21,43}$$

$$35 \quad (1) \quad h_0^{14} x_{21,43}$$

$$36 \quad (1) \quad h_0^{15} x_{21,43}$$

$$37 \quad (10) \quad P^7 u$$

$$(01) \quad h_0^{16} x_{21,43}$$

$$38 \quad (1) \quad h_0^{17} x_{21,43}$$

$$39 \quad (1) \quad h_0^{18} x_{21,43}$$



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- 5 (1)  $h_6p$
- 6 (1)  $h_0h_6p = h_1h_6d_1$
- 8 (10)  $x_{8,83}$   
(01)  $h_1h_6q = h_2h_6r$
- 9 (10)  $h_2x_{8,78}$   
(01)  $h_0x_{8,83}$
- 10 (1)  $h_0^2x_{8,83} = h_1^2x_{8,80}$
- 12 (10)  $x_{12,64}$   
(01)  $h_3x_{11,59} = yD_2$
- 13 (100)  $gx_{9,51} = rx_{7,40} = A'm = Am$   
(010)  $h_6P^2e_0$   
(001)  $h_0x_{12,64} = h_2x_{12,60}$
- 14 (10)  $h_0h_6P^2e_0 = h_2h_6P^2d_0 = h_6d_0P^2h_2 = h_6Ph_2Pd_0$   
(01)  $h_0^2x_{12,64} = h_0h_2x_{12,60} = h_2^2x_{12,55} = h_5R_2 = B_2^2$
- 15 (10)  $x_{15,58}$   
(01)  $h_0^2h_6P^2e_0 = h_0h_2h_6P^2d_0 = h_0h_6d_0P^2h_2 = h_0h_6Ph_2Pd_0$
- 16 (1)  $h_0x_{15,58}$
- 17 (10)  $h_1h_6P^3c_0 = h_6c_0P^3h_1 = h_6Ph_1P^2c_0 = h_6Pc_0P^2h_1$   
(01)  $h_0^2x_{15,58} = h_1^2x_{15,56}$
- 18 (10)  $g^3t = gnw = grN = nrm = r^2t$   
(01)  $d_0e_0B_{23} = d_0gx_{10,27} = d_0gx_{10,28} = e_0^2x_{10,27} = e_0^2x_{10,28} = e_0gB_{21} = g^2Q_1$
- 20 (1)  $d_0x_{16,38} = e_0x_{16,35} = gx_{16,32}$
- 21 (01)  $d_0^2P^2D_1 = d_0e_0R_2 = d_0iB_{21} = d_0jQ_1 = d_0kx' = d_0Pd_0B_4 = e_0iQ_1 = e_0jx' = gix' = lPQ_1 = Pe_0x_{13,35} = x_{10,27}Pj = x_{10,28}Pj$
- (11)  $d_0e_0gw = d_0e_0rm = d_0g^2v = d_0grl = e_0^3w = e_0^2gv = e_0^2rl = e_0g^2u = e_0grk = g^2rj = gmz = jm^2 = klm = l^3$
- 22 (10)  $h_1x_{21,43} = h_1Px_{17,50} = Ph_1x_{17,50}$   
(01)  $h_0d_0^2P^2D_1 = h_0d_0e_0R_2 = h_0d_0iB_{21} = h_0d_0jQ_1 = h_0d_0kx' = h_0d_0Pd_0B_4 = h_0e_0iQ_1 = h_0e_0jx' = h_0gix' = h_0lPQ_1 = h_0Pe_0x_{13,35} = h_0x_{10,27}Pj = h_0x_{10,28}Pj = h_2d_0^2R_2 = h_2d_0iQ_1 = h_2d_0jx' = h_2e_0ix' = h_2gPR_2 = h_2kPQ_1 = h_2Pd_0x_{13,35} = h_2Pe_0P^2D_1 = h_2B_4P^2e_0 = h_2B_{21}Pj = h_4P^2R_2 = d_0^3R_1 = d_0f_0PQ_1 = d_0Ph_2x_{13,35} = d_0B_2Pj = e_0Ph_2P^2D_1 = e_0Pe_0R_1 = e_0P^2h_2B_4 = f_0Pd_0Q_1 = f_0Pe_0x' = gPh_2R_2 = gPd_0R_1 = Ph_2ix_{10,27} = Ph_2ix_{10,28} = Ph_2jB_{21} = Ph_2kQ_1 = Ph_2lx' = Ph_2Pe_0B_4 = D_2P^3d_0 = iB_2Pe_0 = jB_2Pd_0 = Q_2P^2i = B_5P^2d_0 = PD_2P^2d_0$

continued

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23 (1)

continued

$$\begin{aligned}
& h_0^2 d_0^2 P^2 D_1 = h_0^2 d_0 e_0 R_2 = h_0^2 d_0 i B_{21} = h_0^2 d_0 j Q_1 = h_0^2 d_0 k x' = \\
& h_0^2 d_0 P d_0 B_4 = h_0^2 e_0 i Q_1 = h_0^2 e_0 j x' = h_0^2 g i x' = h_0^2 l P Q_1 = \\
& h_0^2 P e_0 x_{13,35} = h_0^2 x_{10,27} P j = h_0^2 x_{10,28} P j = h_0 h_2 d_0^2 R_2 = \\
& h_0 h_2 d_0 i Q_1 = h_0 h_2 d_0 j x' = h_0 h_2 e_0 i x' = h_0 h_2 g P R_2 = \\
& h_0 h_2 k P Q_1 = h_0 h_2 P d_0 x_{13,35} = h_0 h_2 P e_0 P^2 D_1 = h_0 h_2 B_4 P^2 e_0 = \\
& h_0 h_2 B_{21} P j = h_0 h_4 P^2 R_2 = h_0 d_0^3 R_1 = h_0 d_0 f_0 P Q_1 = \\
& h_0 d_0 P h_2 x_{13,35} = h_0 d_0 B_2 P j = h_0 e_0 P h_2 P^2 D_1 = h_0 e_0 P e_0 R_1 = \\
& h_0 e_0 P^2 h_2 B_4 = h_0 f_0 P d_0 Q_1 = h_0 f_0 P e_0 x' = h_0 g P h_2 R_2 = \\
& h_0 g P d_0 R_1 = h_0 P h_2 i x_{10,27} = h_0 P h_2 i x_{10,28} = h_0 P h_2 j B_{21} = \\
& h_0 P h_2 k Q_1 = h_0 P h_2 l x' = h_0 P h_2 P e_0 B_4 = h_0 D_2 P^3 d_0 = \\
& h_0 i B_2 P e_0 = h_0 j B_2 P d_0 = h_0 Q_2 P^2 i = h_0 B_5 P^2 d_0 = h_0 P D_2 P^2 d_0 = \\
& h_1 d_0^3 x' = h_1 d_0 e_0 P Q_1 = h_1 d_0 P d_0 B_{21} = h_1 d_0 P e_0 Q_1 = \\
& h_1 e_0 P d_0 Q_1 = h_1 e_0 P e_0 x' = h_1 g P d_0 x' = h_1 x_{10,27} P^2 e_0 = \\
& h_1 x_{10,28} P^2 e_0 = h_1 B_{23} P^2 d_0 = h_2^2 d_0 i x' = h_2^2 e_0 P R_2 = h_2^2 g R_1 = \\
& h_2^2 j P Q_1 = h_2^2 P d_0 P^2 D_1 = h_2^2 P e_0 R_2 = h_2^2 B_4 P^2 d_0 = \\
& h_2^2 Q_1 P j = h_2 d_0 P h_2 P^2 D_1 = h_2 d_0 P e_0 R_1 = h_2 d_0 P^2 h_2 B_4 = \\
& h_2 e_0 P h_2 R_2 = h_2 e_0 P d_0 R_1 = h_2 f_0 P d_0 x' = h_2 P h_2 i B_{21} = \\
& h_2 P h_2 j Q_1 = h_2 P h_2 k x' = h_2 P h_2 P d_0 B_4 = h_2 i B_2 P d_0 = \\
& h_4 P h_2 R_1 = c_0 i R_2 = d_0^2 P h_1 B_{21} = d_0^2 B_1 P d_0 = d_0 e_0 P h_1 Q_1 = \\
& d_0 e_0 P h_2 R_1 = d_0 f_0 P h_2 x' = d_0 g P h_1 x' = d_0 P h_2^2 B_4 = d_0 P h_2 i B_2 = \\
& d_0 P^2 h_1 B_{23} = e_0^2 P h_1 x' = e_0 B_1 P^2 e_0 = e_0 P^2 h_1 x_{10,27} = \\
& e_0 P^2 h_1 x_{10,28} = f_0 B_2 P^2 d_0 = f_0 P^2 h_2 B_{21} = g B_1 P^2 d_0 = \\
& g P^2 h_1 B_{21} = P h_1 P d_0 B_{23} = P h_1 P e_0 x_{10,27} = P h_1 P e_0 x_{10,28} = \\
& A P^4 h_2 = P c_0 x_{16,37} = k B_2 P^2 h_2 = B_1 P e_0^2 = P A P^3 h_2
\end{aligned}$$

24 (10)

$$i P R_2 = j R_1$$

(01)

$$\begin{aligned}
& d_0^4 g^2 = d_0^3 e_0^2 g = d_0^2 e_0^4 = d_0^2 i w = d_0^2 j v = d_0^2 k u = d_0 e_0 g^2 P e_0 = \\
& d_0 e_0 i v = d_0 e_0 j u = d_0 g^3 P d_0 = d_0 g i u = d_0 r^2 P d_0 = d_0 r i k = \\
& d_0 r j^2 = d_0 l P v = d_0 m P u = d_0 z^2 = e_0^3 g P e_0 = e_0^2 g^2 P d_0 = e_0^2 i u = \\
& e_0 r i j = e_0 k P v = e_0 l P u = e_0 w P j = g r i^2 = g j P v = g k P u = \\
& g v P j = r l P j = r P e_0 z = i l z = j k z = j P e_0 w = k P d_0 w = k P e_0 v = \\
& l P d_0 v = l P e_0 u = m P d_0 u
\end{aligned}$$

25 (1)

$$\begin{aligned}
& h_0 i P R_2 = h_0 j R_1 = h_1 P^2 x_{16,35} = h_2 i R_1 = P h_1 P x_{16,35} = \\
& P^2 h_1 x_{16,35} = P^2 h_2 x_{16,33} = R_1 P^2 j
\end{aligned}$$

continued

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$$\begin{aligned}
27 \quad (1) \quad & d_0^5 j = d_0^4 e_0 i = d_0^3 g P j = d_0^3 k P e_0 = d_0^3 l P d_0 = d_0^2 e_0^2 P j = \\
& d_0^2 e_0 j P e_0 = d_0^2 e_0 k P d_0 = d_0^2 g i P e_0 = d_0^2 g j P d_0 = d_0^2 m P^2 e_0 = \\
& d_0 e_0^2 i P e_0 = d_0 e_0^2 j P d_0 = d_0 e_0 g i P d_0 = d_0 e_0 l P^2 e_0 = d_0 e_0 m P^2 d_0 = \\
& d_0 g^2 P^2 j = d_0 g k P^2 e_0 = d_0 g l P^2 d_0 = d_0 l P e_0^2 = d_0 m P d_0 P e_0 = \\
& e_0^3 i P d_0 = e_0^2 g P^2 j = e_0^2 k P^2 e_0 = e_0^2 l P^2 d_0 = e_0 g^2 P^2 i = e_0 g j P^2 e_0 = \\
& e_0 g k P^2 d_0 = e_0 g P e_0 P j = e_0 k P e_0^2 = e_0 l P d_0 P e_0 = e_0 m P d_0^2 = \\
& g^2 i P^2 e_0 = g^2 j P^2 d_0 = g^2 P d_0 P j = g j P e_0^2 = g k P d_0 P e_0 = g l P d_0^2 = \\
& g m P^3 e_0 = r P^3 v = i^2 P v = i j P u = i u P j = z P^2 u \\
30 \quad (01) \quad & d_0^2 r P^3 d_0 = d_0^2 i^2 P d_0 = d_0^2 j P^2 j = d_0^2 k P^2 i = d_0^2 P j^2 = d_0 e_0 i P^2 j = \\
& d_0 e_0 j P^2 i = d_0 g i P^2 i = d_0 r P d_0 P^2 d_0 = d_0 i j P^2 e_0 = d_0 i k P^2 d_0 = \\
& d_0 i P e_0 P j = d_0 j^2 P^2 d_0 = d_0 j P d_0 P j = d_0 l P^3 j = d_0 z P^3 e_0 = \\
& e_0^2 i P^2 i = e_0 r P^4 e_0 = e_0 i^2 P^2 e_0 = e_0 i j P^2 d_0 = e_0 i P d_0 P j = \\
& e_0 k P^3 j = e_0 z P^3 d_0 = g r P^4 d_0 = g i^2 P^2 d_0 = g j P^3 j = g P j P^2 j = \\
& r P d_0^3 = r P e_0 P^3 e_0 = r P^2 e_0^2 = i^2 P e_0^2 = i j P d_0 P e_0 = i k P d_0^2 = \\
& i l P^3 e_0 = i m P^3 d_0 = j^2 P d_0^2 = j k P^3 e_0 = j l P^3 d_0 = k^2 P^3 d_0 = \\
& k P e_0 P^2 j = k P j P^2 e_0 = l P d_0 P^2 j = l P e_0 P^2 i = l P j P^2 d_0 = \\
& m P d_0 P^2 i = P d_0 z P^2 e_0 = P e_0 z P^2 d_0 \\
(11) \quad & P^5 Q_1 \\
31 \quad (1) \quad & h_0 P^5 Q_1 = P h_2 P^4 x' = x' P^5 h_2 = P^3 h_2 x_{18,20} \\
32 \quad (1) \quad & h_0^2 P^5 Q_1 = h_0 P h_2 P^4 x' = h_0 x' P^5 h_2 = h_0 P^3 h_2 x_{18,20} \\
33 \quad (10) \quad & d_0 P^5 v = P d_0 P^4 v = v P^5 d_0 = P^2 d_0 P^3 v = P v P^4 d_0 = P^3 d_0 P^2 v \\
(01) \quad & h_0^3 P^5 Q_1 = h_0^2 P h_2 P^4 x' = h_0^2 x' P^5 h_2 = h_0^2 P^3 h_2 x_{18,20} = \\
& h_1^2 P h_1 P^4 x' = h_1^2 x' P^5 h_1 = h_1^2 P^3 h_1 x_{18,20} = h_1 P h_1 P^2 h_1 x_{18,20} = \\
& h_1 P h_1 x' P^4 h_1 = h_1 B_1 P^6 h_1 = h_1 P^2 h_1 x' P^3 h_1 = e_0 P^4 Q = \\
& P h_1^3 x_{18,20} = P h_1^2 x' P^3 h_1 = P h_1 B_1 P^5 h_1 = P h_1 P^2 h_1^2 x' = \\
& B_1 P^2 h_1 P^4 h_1 = B_1 P^3 h_1^2 = Q P^4 e_0 \\
(11) \quad & e_0 P^5 u = r P^5 j = i^2 P^3 j = i P j P^2 i = P e_0 P^4 u = u P^5 e_0 = z P^4 i = \\
& P^2 e_0 P^3 u = P u P^4 e_0 = P^3 e_0 P^2 u \\
36 \quad (1) \quad & d_0^3 P^5 d_0 = d_0^2 P d_0 P^4 d_0 = d_0^2 P^2 d_0 P^3 d_0 = d_0 e_0 P^6 e_0 = d_0 g P^6 d_0 = \\
& d_0 P d_0^2 P^3 d_0 = d_0 P d_0 P^2 d_0^2 = d_0 P e_0 P^5 e_0 = d_0 P^2 e_0 P^4 e_0 = \\
& d_0 P^3 e_0^2 = e_0^2 P^6 d_0 = e_0 P d_0 P^5 e_0 = e_0 P e_0 P^5 d_0 = e_0 P^2 d_0 P^4 e_0 = \\
& e_0 P^2 e_0 P^4 d_0 = e_0 P^3 d_0 P^3 e_0 = g P d_0 P^5 d_0 = g P^2 d_0 P^4 d_0 = \\
& g P^3 d_0^2 = P d_0^3 P^2 d_0 = P d_0 P e_0 P^4 e_0 = P d_0 P^2 e_0 P^3 e_0 = P e_0^2 P^4 d_0 = \\
& P e_0 P^2 d_0 P^3 e_0 = P e_0 P^2 e_0 P^3 d_0 = P^2 d_0 P^2 e_0^2 \\
38 \quad (1) \quad & h_1 P^7 u = P h_1 P^6 u = P^2 h_1 P^4 Q = P^2 h_1 P^5 u = u P^7 h_1 = \\
& P^3 h_1 P^4 u = Q P^6 h_1 = P u P^6 h_1 = P^4 h_1 P^3 u = P^2 u P^5 h_1 \\
39 \quad (1) \quad & d_0 P^7 j = i P^7 e_0 = j P^7 d_0 = P d_0 P^6 j = P e_0 P^6 i = P j P^6 d_0 = \\
& P^2 d_0 P^5 j = P^2 i P^5 e_0 = P^2 j P^5 d_0 = P^3 d_0 P^4 j = P^3 e_0 P^4 i = \\
& P^3 j P^4 d_0
\end{aligned}$$

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- 7 (10)  $x_{7,81}$   
 (01)  $h_2h_6n$
- 8 (1)  $h_0x_{7,81}$
- 9 (10)  $h_6d_0g = h_6e_0^2$   
 (01)  $h_0^2x_{7,81} = h_1x_{8,83} = h_2x_{8,80}$
- 10 (10)  $x_{10,76}$   
 (01)  $h_0h_6d_0g = h_0h_6e_0^2 = h_2h_6d_0e_0$
- 11 (10)  $h_0x_{10,76}$   
 (01)  $h_0^2h_6d_0g = h_0^2h_6e_0^2 = h_0h_2h_6d_0e_0 = h_2^2h_6d_0^2 = h_2h_6gPh_2 = h_3x_{10,63} = h_4h_6P^2h_2 = h_5PD_2 = h_6c_0j = f_1Q_2$
- 12 (100)  $gx_{8,57} = nx_{7,40} = H_1m = tA' = tA$   
 (010)  $h_6Pj$   
 (001)  $h_0^2x_{10,76}$
- 13 (010)  $h_0h_6Pj = h_6Ph_2i$   
 (001)  $h_0^3x_{10,76} = h_3x_{12,55}$   
 (101)  $h_1x_{12,64} = h_2^2x_{11,61}$
- 14 (01)  $h_0^4x_{10,76} = h_0h_3x_{12,55} = g_2x' = xB_4$   
 (11)  $h_0^2h_6Pj = h_0h_6Ph_2i = h_1h_6P^2e_0 = h_6e_0P^2h_1 = h_6Ph_1Pe_0$
- 15 (10)  $g^2Q_2 = rx_{9,39} = mx_{8,33}$   
 (01)  $h_0^5x_{10,76} = h_0^2h_3x_{12,55} = h_0g_2x' = h_0xB_4 = rx_{9,40} = ix_{8,51}$
- 16 (1)  $h_0^6x_{10,76} = h_0^3h_3x_{12,55} = h_0^2g_2x' = h_0^2xB_4 = h_0rx_{9,40} = h_0ix_{8,51} = h_3xx' = h_3rB_4$
- 17 (1)  $e_0gB_4 = lB_{23} = mx_{10,27} = mx_{10,28}$
- 19 (1)  $d_0x_{15,41}$
- 20 (10)  $e_0g^4 = e_0gr^2 = e_0mw = glw = gmv = rlm$   
 (01)  $d_0rx' = d_0iB_4 = e_0x_{16,37} = gx_{16,33} = jx_{13,35} = kP^2D_1 = lR_2 = zQ_1$
- 22 (1)  $Px_{18,50}$
- 23 (10)  $d_0^3gm = d_0^2e_0^2m = d_0^2e_0gl = d_0^2g^2k = d_0^2ru = d_0e_0^3l = d_0e_0^2gk = d_0e_0g^2j = d_0g^3i = d_0r^2i = d_0vz = e_0^4k = e_0^3gj = e_0^2g^2i = e_0gmPe_0 = e_0rPv = e_0uz = g^2lPe_0 = g^2mPd_0 = grPu = rjz = rPd_0w = rPe_0v = ikw = ilv = imu = j^2w = jkv = jlu = k^2u$   
 (01)  $h_0Px_{18,50} = h_1^2x_{21,43} = h_1^2Px_{17,50} = h_1Ph_1x_{17,50} = h_2x_{22,39} = P^2h_1x_{14,42}$

continued

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26 (10)  $d_0x'P^2d_0 = e_0P^3Q_1 = Pd_0^2x' = Pe_0P^2Q_1 = Q_1P^3e_0 = B_{21}P^3d_0 = P^2e_0PQ_1$

(01)  $d_0^4z = d_0^3rPe_0 = d_0^3il = d_0^3jk = d_0^2e_0rPd_0 = d_0^2e_0ik = d_0^2e_0j^2 = d_0^2gij = d_0^2mPj = d_0e_0^2ij = d_0e_0gi^2 = d_0e_0lPj = d_0e_0Pe_0z = d_0grP^2e_0 = d_0gkPj = d_0gPd_0z = d_0imPe_0 = d_0jlPe_0 = d_0jmPd_0 = d_0k^2Pe_0 = d_0klPd_0 = e_0^3i^2 = e_0^2rP^2e_0 = e_0^2kPj = e_0^2Pd_0z = e_0grP^2d_0 = e_0gjPj = e_0rPe_0^2 = e_0ilPe_0 = e_0imPd_0 = e_0jkPe_0 = e_0jlPd_0 = e_0k^2Pd_0 = g^2iPj = grPd_0Pe_0 = gikPe_0 = gilPd_0 = gj^2Pe_0 = gjkPd_0 = gmP^2j = kmP^2e_0 = l^2P^2e_0 = lmP^2d_0 = uP^2v = vP^2u = PuPv$

(11)  $d_0^2x_{18,20}$

27 (1)  $h_0d_0^2x_{18,20} = h_0d_0x'P^2d_0 = h_0e_0P^3Q_1 = h_0Pd_0^2x' = h_0Pe_0P^2Q_1 = h_0Q_1P^3e_0 = h_0B_{21}P^3d_0 = h_0P^2e_0PQ_1 = h_2d_0P^3Q_1 = h_2Pd_0P^2Q_1 = h_2Pe_0x_{18,20} = h_2x'P^3e_0 = h_2Q_1P^3d_0 = h_2P^2d_0PQ_1 = d_0Ph_2P^2Q_1 = d_0P^2h_2PQ_1 = d_0Q_1P^3h_2 = e_0Ph_2x_{18,20} = e_0x'P^3h_2 = Ph_2Pd_0PQ_1 = Ph_2x'P^2e_0 = Ph_2Q_1P^2d_0 = B_2P^4e_0 = Pd_0P^2h_2Q_1 = Pe_0P^2h_2x' = x_{10,27}P^4h_2 = x_{10,28}P^4h_2$

28 (1)  $h_0^2d_0^2x_{18,20} = h_0^2d_0x'P^2d_0 = h_0^2e_0P^3Q_1 = h_0^2Pd_0^2x' = h_0^2Pe_0P^2Q_1 = h_0^2Q_1P^3e_0 = h_0^2B_{21}P^3d_0 = h_0^2P^2e_0PQ_1 = h_0h_2d_0P^3Q_1 = h_0h_2Pd_0P^2Q_1 = h_0h_2Pe_0x_{18,20} = h_0h_2x'P^3e_0 = h_0h_2Q_1P^3d_0 = h_0h_2P^2d_0PQ_1 = h_0d_0Ph_2P^2Q_1 = h_0d_0P^2h_2PQ_1 = h_0d_0Q_1P^3h_2 = h_0e_0Ph_2x_{18,20} = h_0e_0x'P^3h_2 = h_0Ph_2Pd_0PQ_1 = h_0Ph_2x'P^2e_0 = h_0Ph_2Q_1P^2d_0 = h_0B_2P^4e_0 = h_0Pd_0P^2h_2Q_1 = h_0Pe_0P^2h_2x' = h_0x_{10,27}P^4h_2 = h_0x_{10,28}P^4h_2 = h_2^2Pd_0x_{18,20} = h_2^2x'P^3d_0 = h_2d_0Ph_2x_{18,20} = h_2d_0x'P^3h_2 = h_2Ph_2x'P^2d_0 = h_2B_2P^4d_0 = h_2Pd_0P^2h_2x' = h_2B_{21}P^4h_2 = c_0P^3R_2 = d_0Ph_2P^2h_2x' = d_0B_2P^4h_2 = Ph_2^2Pd_0x' = Ph_2B_2P^3d_0 = Ph_2B_{21}P^3h_2 = Pc_0P^2R_2 = B_2Pd_0P^3h_2 = B_2P^2h_2P^2d_0 = P^2h_2^2B_{21} = P^2c_0PR_2 = R_2P^3c_0$

continued

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- 29 (10)  $P^4 R_2$   
 (01)  $d_0^3 P^2 u = d_0^2 r P^2 i = d_0^2 i^3 = d_0^2 P d_0 P u = d_0^2 u P^2 d_0 = d_0 e_0 P^3 v =$   
 $d_0 g P^3 u = d_0 r i P^2 d_0 = d_0 i j P j = d_0 P d_0^2 u = d_0 P e_0 P^2 v =$   
 $d_0 v P^3 e_0 = d_0 w P^3 d_0 = d_0 z P^2 j = d_0 P^2 e_0 P v = e_0^2 P^3 u = e_0 r P^3 j =$   
 $e_0 i^2 P j = e_0 P d_0 P^2 v = e_0 P e_0 P^2 u = e_0 u P^3 e_0 = e_0 v P^3 d_0 =$   
 $e_0 z P^2 i = e_0 P^2 d_0 P v = e_0 P^2 e_0 P u = g P d_0 P^2 u = g u P^3 d_0 =$   
 $g P^2 d_0 P u = r i P d_0^2 = r j P^3 e_0 = r k P^3 d_0 = r P e_0 P^2 j = r P j P^2 e_0 =$   
 $i^2 j P e_0 = i^2 k P d_0 = i j^2 P d_0 = i l P^2 j = i m P^2 i = i z P^2 e_0 =$   
 $j k P^2 j = j l P^2 i = j z P^2 d_0 = k^2 P^2 i = k P j^2 = P d_0 P e_0 P v =$   
 $P d_0 v P^2 e_0 = P d_0 w P^2 d_0 = P d_0 z P j = P e_0^2 P u = P e_0 u P^2 e_0 =$   
 $P e_0 v P^2 d_0$
- 30 (1)  $h_0 P^4 R_2 = P h_2 x_{25,24} = P^3 h_2 R_1$
- 31 (1)  $h_0^2 P^4 R_2 = h_0 P h_2 x_{25,24} = h_0 P^3 h_2 R_1 = h_1 P^5 Q_1 = P h_1 P^4 Q_1 =$   
 $P^2 h_1 P^3 Q_1 = R_1 P^5 h_2 = Q_1 P^5 h_1 = P^3 h_1 P^2 Q_1 = P Q_1 P^4 h_1$
- 32 (1)  $d_0^4 P^3 e_0 = d_0^3 e_0 P^3 d_0 = d_0^3 P d_0 P^2 e_0 = d_0^3 P e_0 P^2 d_0 =$   
 $d_0^2 e_0 P d_0 P^2 d_0 = d_0^2 g P^4 e_0 = d_0^2 P d_0^2 P e_0 = d_0 e_0^2 P^4 e_0 = d_0 e_0 g P^4 d_0 =$   
 $d_0 e_0 P d_0^3 = d_0 e_0 P e_0 P^3 e_0 = d_0 e_0 P^2 e_0^2 = d_0 g P d_0 P^3 e_0 =$   
 $d_0 g P e_0 P^3 d_0 = d_0 g P^2 d_0 P^2 e_0 = d_0 P e_0^2 P^2 e_0 = e_0^3 P^4 d_0 =$   
 $e_0^2 P d_0 P^3 e_0 = e_0^2 P e_0 P^3 d_0 = e_0^2 P^2 d_0 P^2 e_0 = e_0 g P d_0 P^3 d_0 =$   
 $e_0 g P^2 d_0^2 = e_0 P d_0 P e_0 P^2 e_0 = e_0 P e_0^2 P^2 d_0 = g^2 P^5 e_0 = g P d_0^2 P^2 e_0 =$   
 $g P d_0 P e_0 P^2 d_0 = i P^4 v = j P^4 u = P d_0 P e_0^3 = u P^4 j = v P^4 i =$   
 $P j P^3 u = P u P^3 j = P^2 i P^2 v = P^2 j P^2 u$
- 35 (1)  $d_0^3 P^4 i = d_0^2 i P^4 d_0 = d_0^2 P^2 d_0 P^2 i = d_0 e_0 P^5 j = d_0 i P d_0 P^3 d_0 =$   
 $d_0 i P^2 d_0^2 = d_0 j P^5 e_0 = d_0 k P^5 d_0 = d_0 P d_0^2 P^2 i = d_0 P e_0 P^4 j =$   
 $d_0 P j P^4 e_0 = d_0 P^2 e_0 P^3 j = d_0 P^2 j P^3 e_0 = e_0 i P^5 e_0 = e_0 j P^5 d_0 =$   
 $e_0 P d_0 P^4 j = e_0 P e_0 P^4 i = e_0 P j P^4 d_0 = e_0 P^2 d_0 P^3 j = e_0 P^2 i P^3 e_0 =$   
 $e_0 P^2 j P^3 d_0 = g i P^5 d_0 = g P d_0 P^4 i = g P^2 i P^3 d_0 = i P d_0^2 P^2 d_0 =$   
 $i P e_0 P^4 e_0 = i P^2 e_0 P^3 e_0 = j P d_0 P^4 e_0 = j P e_0 P^4 d_0 = j P^2 d_0 P^3 e_0 =$   
 $j P^2 e_0 P^3 d_0 = k P d_0 P^4 d_0 = k P^2 d_0 P^3 d_0 = l P^6 e_0 = m P^6 d_0 =$   
 $P d_0 P e_0 P^3 j = P d_0 P j P^3 e_0 = P d_0 P^2 e_0 P^2 j = P e_0 P j P^2 d_0 =$   
 $P e_0 P^2 d_0 P^2 j = P e_0 P^2 e_0 P^2 i = P j P^2 d_0 P^2 e_0$
- 38 (1)  $i P^6 j = j P^6 i = P^2 i P^4 j = P^2 j P^4 i$
- 39 (1)  $h_0 i P^6 j = h_0 j P^6 i = h_0 P^2 i P^4 j = h_0 P^2 j P^4 i = h_1^2 P^7 u =$   
 $h_1 P h_1 P^6 u = h_1 P^2 h_1 P^4 Q = h_1 P^2 h_1 P^5 u = h_1 u P^7 h_1 =$   
 $h_1 P^3 h_1 P^4 u = h_1 Q P^6 h_1 = h_1 P u P^6 h_1 = h_1 P^4 h_1 P^3 u =$   
 $h_1 P^2 u P^5 h_1 = h_2 i P^6 i = h_2 P^2 i P^4 i = P h_1^2 P^4 Q = P h_1^2 P^5 u =$   
 $P h_1 P^2 h_1 P^4 u = P h_1 u P^6 h_1 = P h_1 P^3 h_1 P^3 u = P h_1 Q P^5 h_1 =$   
 $P h_1 P u P^5 h_1 = P h_1 P^4 h_1 P^2 u = r P^8 h_2 = q P^8 h_1 = i^2 P^6 h_2 =$   
 $i P^2 h_2 P^4 i = i P^2 i P^4 h_2 = P^2 h_1^2 P^3 u = P^2 h_1 u P^5 h_1 =$   
 $P^2 h_1 P^3 h_1 P^2 u = P^2 h_1 Q P^4 h_1 = P^2 h_1 P u P^4 h_1 = P^2 h_2 P^2 i^2 =$   
 $u P^3 h_1 P^4 h_1 = P^3 h_1^2 Q = P^3 h_1^2 P u$

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- 6 (1)  $h_2h_6d_1 = h_4h_6g = h_5Q_3$
- 8 (10)  $h_6m$   
(01)  $h_2x_{7,79}$
- 9 (10)  $h_3x_{8,75}$   
(01)  $h_0h_6m = h_2h_6l = h_6e_0f_0$
- 10 (01)  $h_0^2h_6m = h_0h_2h_6l = h_0h_6e_0f_0 = h_1h_6d_0g = h_1h_6e_0^2 = h_2^2h_6k =$   
 $h_2h_6d_0f_0$   
(11)  $h_0h_3x_{8,75} = c_2Q_2 = f_1D_2$
- 11 (10)  $h_2x_{10,73} = d_1x_{7,40} = H_1t$   
(01)  $h_1x_{10,76}$
- 12 (10)  $h_3x_{11,61}$   
(11)  $h_2^2x_{10,65} = h_5x_{11,35}$
- 13 (1)  $h_0h_3x_{11,61}$
- 14 (100)  $x_{14,67}$   
(010)  $e_0gA' = e_0gA = g^2D_2 = nx_{9,39} = tx_{8,33} = lx_{7,40} = mx_{7,34}$   
(001)  $h_0^2h_3x_{11,61} = g_2R_1 = xX_1$   
(011)  $rG_{21}$
- 15 (1)  $h_0^3h_3x_{11,61} = h_0g_2R_1 = h_0xX_1 = h_0rG_{21} = c_0x_{12,55} = yB_4$
- 18 (1)  $x_{18,60}$
- 19 (1)  $d_0x_{15,43} = rP^2D_1 = uB_{21} = vQ_1 = wx'$
- 21 (1)  $Px_{17,52}$
- 22 (10)  $d_0^2g^2r = d_0^2m^2 = d_0e_0^2gr = d_0e_0lm = d_0gkm = d_0gl^2 = d_0uw =$   
 $d_0v^2 = e_0^4r = e_0^2km = e_0^2l^2 = e_0g^2z = e_0gjm = e_0gkl = e_0uv =$   
 $g^2im = g^2jl = g^2k^2 = gu^2 = riw = rjv = rku$   
(01)  $d_0^3Q_1 = d_0^2e_0x' = d_0gPQ_1 = d_0Pd_0x_{10,27} = d_0Pd_0x_{10,28} =$   
 $d_0Pe_0B_{21} = e_0^2PQ_1 = e_0Pd_0B_{21} = e_0Pe_0Q_1 = gPd_0Q_1 =$   
 $gPe_0x' = B_{23}P^2e_0$
- 24 (1)  $Pd_0x_{16,32}$
- 25 (100)  $iPd_0x' = jP^2Q_1 = B_4P^3d_0 = Q_1P^2j = B_{21}P^2i = PjPQ_1$   
(010)  $d_0^4v = d_0^3e_0u = d_0^3rj = d_0^2e_0ri = d_0^2gPv = d_0^2kz = d_0^2Pe_0w =$   
 $d_0e_0^2Pv = d_0e_0gPu = d_0e_0jz = d_0e_0Pd_0w = d_0e_0Pe_0v =$   
 $d_0grPj = d_0giz = d_0gPd_0v = d_0gPe_0u = d_0rkPe_0 = d_0rlPd_0 =$   
 $d_0ijm = d_0ikl = d_0j^2l = d_0jk^2 = e_0^3Pu = e_0^2rPj = e_0^2iz =$   
 $e_0^2Pd_0v = e_0^2Pe_0u = e_0gPd_0u = e_0rjPe_0 = e_0rkPd_0 = e_0i^2m =$   
 $e_0ijl = e_0ik^2 = e_0j^2k = g^2P^2v = griPe_0 = grjPd_0 = gi^2l =$   
 $gijk = gj^3 = gwP^2e_0 = rmP^2e_0 = kmPj = l^2Pj = lPe_0z =$   
 $mPd_0z$   
(110)  $kx_{18,20}$   
(001)  $h_0Pd_0x_{16,32} = h_2P^2x_{16,35} = Ph_2Px_{16,35} = P^2h_2x_{16,35}$   
(101)  $d_0^2R_1 = e_0P^2R_2 = Pe_0PR_2 = P^2d_0P^2D_1 = P^2e_0R_2$

continued

Stem 98      continued

26 (10)  $h_0 i P d_0 x' = h_0 j P^2 Q_1 = h_0 k x_{18,20} = h_0 B_4 P^3 d_0 = h_0 Q_1 P^2 j =$   
 $h_0 B_{21} P^2 i = h_0 P j P Q_1 = h_2 i P^2 Q_1 = h_2 j x_{18,20} = h_2 x' P^2 j =$   
 $h_2 Q_1 P^2 i = f_0 P^3 Q_1 = P h_2 i P Q_1 = P h_2 x' P j = i P^2 h_2 Q_1 =$   
 $j P^2 h_2 x' = B_2 P^3 j = P^3 h_2 x_{13,35}$

(01)  $h_0^2 P d_0 x_{16,32} = h_0 h_2 P^2 x_{16,35} = h_0 P h_2 P x_{16,35} = h_0 P^2 h_2 x_{16,35} =$   
 $h_2^2 P^2 x_{16,32} = h_2 P^2 h_2 x_{16,32} = P h_2^2 x_{16,32} = P^3 h_2 x_{13,34}$

(11)  $h_0 d_0^2 R_1 = h_0 e_0 P^2 R_2 = h_0 P e_0 P R_2 = h_0 P^2 d_0 P^2 D_1 =$   
 $h_0 P^2 e_0 R_2 = h_2 d_0 P^2 R_2 = h_2 P d_0 P R_2 = h_2 P e_0 R_1 =$   
 $h_2 P^2 d_0 R_2 = d_0 P h_2 P R_2 = d_0 P^2 h_2 R_2 = d_0 R_1 P^2 d_0 =$   
 $e_0 P h_2 R_1 = P h_2 P d_0 R_2 = P d_0^2 R_1$

27 (1)  $h_0^2 d_0^2 R_1 = h_0^2 e_0 P^2 R_2 = h_0^2 i P d_0 x' = h_0^2 j P^2 Q_1 = h_0^2 k x_{18,20} =$   
 $h_0^2 P e_0 P R_2 = h_0^2 B_4 P^3 d_0 = h_0^2 Q_1 P^2 j = h_0^2 B_{21} P^2 i = h_0^2 P j P Q_1 =$   
 $h_0^2 P^2 d_0 P^2 D_1 = h_0^2 P^2 e_0 R_2 = h_0 h_2 d_0 P^2 R_2 = h_0 h_2 i P^2 Q_1 =$   
 $h_0 h_2 j x_{18,20} = h_0 h_2 P d_0 P R_2 = h_0 h_2 P e_0 R_1 = h_0 h_2 x' P^2 j =$   
 $h_0 h_2 Q_1 P^2 i = h_0 h_2 P^2 d_0 R_2 = h_0 d_0 P h_2 P R_2 = h_0 d_0 P^2 h_2 R_2 =$   
 $h_0 d_0 R_1 P^2 d_0 = h_0 e_0 P h_2 R_1 = h_0 f_0 P^3 Q_1 = h_0 P h_2 i P Q_1 =$   
 $h_0 P h_2 P d_0 R_2 = h_0 P h_2 x' P j = h_0 i P^2 h_2 Q_1 = h_0 j P^2 h_2 x' =$   
 $h_0 B_2 P^3 j = h_0 P d_0^2 R_1 = h_0 P^3 h_2 x_{13,35} = h_1 d_0^2 x_{18,20} =$   
 $h_1 d_0 x' P^2 d_0 = h_1 e_0 P^3 Q_1 = h_1 P d_0^2 x' = h_1 P e_0 P^2 Q_1 =$   
 $h_1 Q_1 P^3 e_0 = h_1 B_{21} P^3 d_0 = h_1 P^2 e_0 P Q_1 = h_2^2 i x_{18,20} =$   
 $h_2^2 P d_0 R_1 = h_2^2 x' P^2 i = h_2 d_0 P h_2 R_1 = h_2 i P^2 h_2 x' = h_2 B_4 P^4 h_2 =$   
 $h_2 R_1 P^3 e_0 = h_2 P^3 h_2 P^2 D_1 = d_0^2 P^2 h_1 x' = d_0 P h_1 P d_0 x' =$   
 $d_0 B_1 P^3 d_0 = d_0 B_{21} P^3 h_1 = e_0 P h_1 P^2 Q_1 = e_0 P^2 h_1 P Q_1 =$   
 $e_0 R_1 P^3 h_2 = e_0 Q_1 P^3 h_1 = f_0 P h_2 x_{18,20} = f_0 x' P^3 h_2 =$   
 $g P h_1 x_{18,20} = g x' P^3 h_1 = P h_1 P e_0 P Q_1 = P h_1 Q_1 P^2 e_0 =$   
 $P h_1 B_{21} P^2 d_0 = P h_2^2 i x' = P h_2 B_2 P^2 i = P h_2 P^2 h_2 P^2 D_1 =$   
 $P h_2 B_4 P^3 h_2 = P h_2 R_1 P^2 e_0 = i B_2 P^3 h_2 = B_1 P d_0 P^2 d_0 =$   
 $P d_0 P^2 h_1 B_{21} = P e_0 P^2 h_1 Q_1 = P e_0 P^2 h_2 R_1 = P^2 h_2^2 B_4 = B_{23} P^4 h_1$

28 (1)  $d_0^7 = d_0^4 e_0 P e_0 = d_0^4 g P d_0 = d_0^3 e_0^2 P d_0 = d_0^2 e_0 g P^2 e_0 = d_0^2 g^2 P^2 d_0 =$   
 $d_0^2 g P e_0^2 = d_0^2 i P u = d_0 e_0^3 P^2 e_0 = d_0 e_0^2 g P^2 d_0 = d_0 e_0^2 P e_0^2 =$   
 $d_0 e_0 g P d_0 P e_0 = d_0 g^2 P d_0^2 = d_0 i P d_0 u = d_0 j P d_0 v = d_0 k P^2 u =$   
 $d_0 v P^2 j = d_0 w P^2 i = d_0 P j P v = e_0^4 P^2 d_0 = e_0^3 P d_0 P e_0 = e_0^2 g P d_0^2 =$   
 $e_0 g^2 P^3 e_0 = e_0 i P^2 v = e_0 j P^2 u = e_0 u P^2 j = e_0 v P^2 i = e_0 P j P u =$   
 $g^3 P^3 d_0 = g^2 P e_0 P^2 e_0 = g i P^2 u = g u P^2 i = r^2 P^3 d_0 = r i^2 P d_0 =$   
 $r j P^2 j = r k P^2 i = r P j^2 = i^3 k = i^2 j^2 = i P e_0 P v = i v P^2 e_0 =$   
 $i w P^2 d_0 = i z P j = j P d_0 P v = j P e_0 P u = j u P^2 e_0 = j v P^2 d_0 =$   
 $k P d_0 P u = k u P^2 d_0 = l P^3 v = m P^3 u = P d_0 v P j = P e_0 u P j$

continued



Stem 98 continued

$$\begin{aligned}
31 \quad (1) \quad & d_0^4 P^2 j = d_0^3 e_0 P^2 i = d_0^3 i P^2 e_0 = d_0^3 j P^2 d_0 = d_0^3 P d_0 P j = \\
& d_0^2 e_0 i P^2 d_0 = d_0^2 g P^3 j = d_0^2 i P d_0 P e_0 = d_0^2 j P d_0^2 = d_0^2 k P^3 e_0 = \\
& d_0^2 l P^3 d_0 = d_0 e_0^2 P^3 j = d_0 e_0 i P d_0^2 = d_0 e_0 j P^3 e_0 = d_0 e_0 k P^3 d_0 = \\
& d_0 e_0 P e_0 P^2 j = d_0 e_0 P j P^2 e_0 = d_0 g i P^3 e_0 = d_0 g j P^3 d_0 = \\
& d_0 g P d_0 P^2 j = d_0 g P e_0 P^2 i = d_0 g P j P^2 d_0 = d_0 j P e_0 P^2 e_0 = \\
& d_0 k P d_0 P^2 e_0 = d_0 k P e_0 P^2 d_0 = d_0 l P d_0 P^2 d_0 = d_0 m P^4 e_0 = \\
& d_0 P e_0^2 P j = e_0^2 i P^3 e_0 = e_0^2 j P^3 d_0 = e_0^2 P d_0 P^2 j = e_0^2 P e_0 P^2 i = \\
& e_0^2 P j P^2 d_0 = e_0 g i P^3 d_0 = e_0 g P d_0 P^2 i = e_0 i P e_0 P^2 e_0 = \\
& e_0 j P d_0 P^2 e_0 = e_0 j P e_0 P^2 d_0 = e_0 k P d_0 P^2 d_0 = e_0 l P^4 e_0 = \\
& e_0 m P^4 d_0 = e_0 P d_0 P e_0 P j = g^2 P^4 j = g i P d_0 P^2 e_0 = g i P e_0 P^2 d_0 = \\
& g j P d_0 P^2 d_0 = g k P^4 e_0 = g l P^4 d_0 = g P d_0^2 P j = i P e_0^3 = j P d_0 P e_0^2 = \\
& k P d_0^2 P e_0 = l P d_0^3 = l P e_0 P^3 e_0 = l P^2 e_0^2 = m P d_0 P^3 e_0 = \\
& m P e_0 P^3 d_0 = m P^2 d_0 P^2 e_0 \\
34 \quad (1) \quad & d_0 r P^5 d_0 = d_0 i^2 P^3 d_0 = d_0 i P d_0 P^2 i = d_0 j P^4 j = d_0 k P^4 i = \\
& d_0 P j P^3 j = d_0 P^2 j^2 = e_0 i P^4 j = e_0 j P^4 i = e_0 P^2 i P^2 j = g i P^4 i = \\
& g P^2 i^2 = r P d_0 P^4 d_0 = r P^2 d_0 P^3 d_0 = i^2 P d_0 P^2 d_0 = i j P^4 e_0 = \\
& i k P^4 d_0 = i P e_0 P^3 j = i P j P^3 e_0 = i P^2 e_0 P^2 j = j^2 P^4 d_0 = \\
& j P d_0 P^3 j = j P j P^3 d_0 = j P^2 d_0 P^2 j = j P^2 e_0 P^2 i = k P^2 d_0 P^2 i = \\
& l P^5 j = P d_0 P j P^2 j = P e_0 P j P^2 i = z P^5 e_0 = P j^2 P^2 d_0 \\
37 \quad (1) \quad & P^7 v
\end{aligned}$$

Stem 99

- 5 (1)  $h_3g_3 = h_4f_2$   
6 (1)  $h_0h_3g_3 = h_0h_4f_2 = h_4^2p'$   
7 (100)  $x_{7,83}$   
(010)  $x_{7,84}$   
(101)  $h_6t$   
8 (1)  $h_0x_{7,84}$   
9 (10)  $x_{9,86}$   
(01)  $h_0^2x_{7,84} = h_2x_{8,83} = h_5G_{21} = c_2D_2$   
10 (10)  $h_2^2x_{8,78} = e_1A'$   
(01)  $h_0^3x_{7,84} = h_0h_2x_{8,83} = h_0h_5G_{21} = h_0c_2D_2 = h_1h_3x_{8,75} = pr_1 = D_3y = xH_1$   
(11)  $e_1A$   
11 (1)  $h_3x_{10,65}$   
12 (10)  $h_1^2x_{10,76}$   
(01)  $h_0h_3x_{10,65} = yA'$   
13 (100)  $h_2x_{12,64}$   
(001)  $h_0^2h_3x_{10,65} = h_0yA' = h_1h_3x_{11,61} = e_1X_1 = nG_{21} = xx_{8,32}$   
(011)  $h_6d_0Pd_0$   
(111)  $h_3x_{12,58}$   
14 (10)  $h_0h_2x_{12,64} = h_2^2x_{12,60} = h_5P^2D_1 = c_0x_{11,61}$   
(01)  $h_0h_6d_0Pd_0 = h_2h_6P^2e_0 = h_6e_0P^2h_2 = h_6Ph_2Pe_0$   
(11)  $h_0h_3x_{12,58}$   
15 (1)  $h_0^2h_3x_{12,58} = h_0^2h_6d_0Pd_0 = h_0h_2h_6P^2e_0 = h_0h_6e_0P^2h_2 = h_0h_6Ph_2Pe_0 = h_2^2h_6P^2d_0 = h_2h_6d_0P^2h_2 = h_2h_6Ph_2Pd_0 = h_2^3x_{13,46} = h_6d_0Ph_2^2 = xx_{10,27} = yX_1$   
16 (1)  $h_2x_{15,58}$   
17 (10)  $gx_{13,42}$   
(01)  $Ph_1x_{12,55} = B_1x'$   
18 (1)  $d_0gB_{23} = e_0^2B_{23} = e_0gx_{10,27} = e_0gx_{10,28} = g^2B_{21} = uB_4$   
20 (1)  $d_0x_{16,42} = e_0x_{16,38} = gx_{16,35}$   
21 (10)  $d_0g^2w = d_0grm = e_0^2gw = e_0^2rm = e_0g^2v = e_0grl = g^3u = g^2rk = r^2u = km^2 = l^2m$   
(01)  $d_0^2x_{13,35} = d_0e_0P^2D_1 = d_0gR_2 = d_0ix_{10,27} = d_0ix_{10,28} = d_0jB_{21} = d_0kQ_1 = d_0lx' = d_0Pe_0B_4 = e_0^2R_2 = e_0iB_{21} = e_0jQ_1 = e_0kx' = e_0Pd_0B_4 = giQ_1 = gjx' = mPQ_1 = B_{23}Pj$   
23 (1)  $ix_{16,32}$

continued

- Stem 99      continued
- 24 (100)  $i^2x' = B_4P^2i$
- (010)  $d_0^3e_0g^2 = d_0^2e_0^3g = d_0^2rz = d_0^2jw = d_0^2kv = d_0^2lu = d_0e_0^5 = d_0e_0iw =$   
 $d_0e_0jv = d_0e_0ku = d_0g^3Pe_0 = d_0giv = d_0gju = d_0r^2Pe_0 =$   
 $d_0ril = d_0rjk = d_0mPv = e_0^2g^2Pe_0 = e_0^2iv = e_0^2ju = e_0g^3Pd_0 =$   
 $e_0giu = e_0r^2Pd_0 = e_0rik = e_0rj^2 = e_0lPv = e_0mPu = e_0z^2 =$   
 $grij = gkPv = glPu = gwPj = rmPj = imz = jlz = k^2z =$   
 $kPe_0w = lPd_0w = lPe_0v = mPd_0v = mPe_0u$
- (110)  $rx_{18,20}$
- (001)  $h_0ix_{16,32}$
- (101)  $jPR_2 = kR_1 = Pd_0x_{16,33} = PjR_2$
- 25 (10)  $h_0rx_{18,20} = h_0i^2x' = h_0B_4P^2i = h_3P^2x_{16,32}$
- (01)  $h_0^2ix_{16,32}$
- (11)  $h_0jPR_2 = h_0kR_1 = h_0Pd_0x_{16,33} = h_0PjR_2 = h_1Pd_0x_{16,32} =$   
 $h_2iPR_2 = h_2jR_1 = d_0Ph_1x_{16,32} = f_0P^2R_2 = Ph_2iR_2 =$   
 $iPd_0R_1 = P^2h_1x_{16,38} = P^2h_2x_{16,37} = P^2d_0W_1$
- 26 (1)  $h_0^3ix_{16,32} = h_0^2rx_{18,20} = h_0^2i^2x' = h_0^2B_4P^2i = h_0h_3P^2x_{16,32} =$   
 $h_3ix_{18,20} = h_3x'P^2i$
- 27 (10)  $d_0^5k = d_0^4e_0j = d_0^4gi = d_0^3e_0^2i = d_0^3lPe_0 = d_0^3mPd_0 = d_0^2e_0gPj =$   
 $d_0^2e_0kPe_0 = d_0^2e_0lPd_0 = d_0^2gjPe_0 = d_0^2gkPd_0 = d_0e_0^3Pj =$   
 $d_0e_0^2jPe_0 = d_0e_0^2kPd_0 = d_0e_0giPe_0 = d_0e_0gjPd_0 = d_0e_0mP^2e_0 =$   
 $d_0g^2iPd_0 = d_0glP^2e_0 = d_0gmP^2d_0 = d_0rP^2u = d_0i^2u =$   
 $d_0mPe_0^2 = e_0^3iPe_0 = e_0^3jPd_0 = e_0^2giPd_0 = e_0^2lP^2e_0 = e_0^2mP^2d_0 =$   
 $e_0g^2P^2j = e_0gkP^2e_0 = e_0glP^2d_0 = e_0lPe_0^2 = e_0mPd_0Pe_0 =$   
 $g^3P^2i = g^2jP^2e_0 = g^2kP^2d_0 = g^2Pe_0Pj = gkPe_0^2 = glPd_0Pe_0 =$   
 $gmPd_0^2 = rPd_0Pu = ruP^2d_0 = ijPv = ikPu = ivPj = j^2Pu =$   
 $juPj = zP^2v$
- (01)  $h_0^4ix_{16,32} = h_0^3rx_{18,20} = h_0^3i^2x' = h_0^3B_4P^2i = h_0^2h_3P^2x_{16,32} =$   
 $h_0h_3ix_{18,20} = h_0h_3x'P^2i = g_2P^4i = xiP^2i$
- (11)  $r^2P^2i = ri^3$
- 28 (1)  $h_0^5ix_{16,32} = h_0^4rx_{18,20} = h_0^4i^2x' = h_0^4B_4P^2i = h_0^3h_3P^2x_{16,32} =$   
 $h_0^2h_3ix_{18,20} = h_0^2h_3x'P^2i = h_0g_2P^4i = h_0xiP^2i = h_0r^2P^2i =$   
 $h_0ri^3 = h_3^2P^4x'$

continued

Stem 99 continued

- 30 (10)  $d_0P^4x' = x'P^4d_0$   
 (01)  $d_0^3iPj = d_0^2rP^3e_0 = d_0^2i^2Pe_0 = d_0^2ijPd_0 = d_0^2kP^2j = d_0^2lP^2i =$   
 $d_0^2zP^2d_0 = d_0e_0rP^3d_0 = d_0e_0i^2Pd_0 = d_0e_0jP^2j = d_0e_0kP^2i =$   
 $d_0e_0Pj^2 = d_0giP^2j = d_0gjP^2i = d_0rPd_0P^2e_0 = d_0rPe_0P^2d_0 =$   
 $d_0ikP^2e_0 = d_0ilP^2d_0 = d_0j^2P^2e_0 = d_0jkP^2d_0 = d_0jPe_0Pj =$   
 $d_0kPd_0Pj = d_0mP^3j = d_0Pd_0^2z = e_0^2iP^2j = e_0^2jP^2i = e_0giP^2i =$   
 $e_0rPd_0P^2d_0 = e_0ijP^2e_0 = e_0ikP^2d_0 = e_0iPe_0Pj = e_0j^2P^2d_0 =$   
 $e_0jPd_0Pj = e_0lP^3j = e_0zP^3e_0 = grP^4e_0 = gi^2P^2e_0 = gijP^2d_0 =$   
 $giPd_0Pj = gkP^3j = gzP^3d_0 = rPd_0^2Pe_0 = ijPe_0^2 = ikPd_0Pe_0 =$   
 $ilPd_0^2 = imP^3e_0 = j^2Pd_0Pe_0 = jkPd_0^2 = jlP^3e_0 = jmP^3d_0 =$   
 $k^2P^3e_0 = klP^3d_0 = lPe_0P^2j = lPjP^2e_0 = mPd_0P^2j =$   
 $mPe_0P^2i = mPjP^2d_0 = Pe_0zP^2e_0$
- (11)  $P^2d_0x_{18,20}$
- 31 (1)  $h_0d_0P^4x' = h_0x'P^4d_0 = h_0P^2d_0x_{18,20} = h_2P^5Q_1 = Ph_2P^4Q_1 =$   
 $P^2h_2P^3Q_1 = Q_1P^5h_2 = P^3h_2P^2Q_1 = PQ_1P^4h_2$
- 32 (1)  $h_0^2d_0P^4x' = h_0^2x'P^4d_0 = h_0^2P^2d_0x_{18,20} = h_0h_2P^5Q_1 =$   
 $h_0Ph_2P^4Q_1 = h_0P^2h_2P^3Q_1 = h_0Q_1P^5h_2 = h_0P^3h_2P^2Q_1 =$   
 $h_0PQ_1P^4h_2 = h_2Ph_2P^4x' = h_2x'P^5h_2 = h_2P^3h_2x_{18,20} =$   
 $Ph_2P^2h_2x_{18,20} = Ph_2x'P^4h_2 = B_2P^6h_2 = P^2h_2x'P^3h_2$
- 33 (1)  $d_0^2P^4u = d_0rP^4i = d_0i^2P^2i = d_0Pd_0P^3u = d_0uP^4d_0 =$   
 $d_0P^2d_0P^2u = d_0PuP^3d_0 = e_0P^5v = gP^5u = riP^4d_0 =$   
 $rP^2d_0P^2i = i^3P^2d_0 = ijP^3j = iPjP^2j = jPjP^2i = Pd_0^2P^2u =$   
 $Pd_0uP^3d_0 = Pd_0P^2d_0Pu = Pe_0P^4v = uP^2d_0^2 = vP^5e_0 =$   
 $wP^5d_0 = zP^4j = P^2e_0P^3v = PvP^4e_0 = P^3e_0P^2v$
- 36 (1)  $d_0^3P^5e_0 = d_0^2e_0P^5d_0 = d_0^2Pd_0P^4e_0 = d_0^2Pe_0P^4d_0 = d_0^2P^2d_0P^3e_0 =$   
 $d_0^2P^2e_0P^3d_0 = d_0e_0Pd_0P^4d_0 = d_0e_0P^2d_0P^3d_0 = d_0gP^6e_0 =$   
 $d_0Pd_0^2P^3e_0 = d_0Pd_0Pe_0P^3d_0 = d_0Pd_0P^2d_0P^2e_0 = d_0Pe_0P^2d_0^2 =$   
 $e_0^2P^6e_0 = e_0gP^6d_0 = e_0Pd_0^2P^3d_0 = e_0Pd_0P^2d_0^2 = e_0Pe_0P^5e_0 =$   
 $e_0P^2e_0P^4e_0 = e_0P^3e_0^2 = gPd_0P^5e_0 = gPe_0P^5d_0 = gP^2d_0P^4e_0 =$   
 $gP^2e_0P^4d_0 = gP^3d_0P^3e_0 = Pd_0^3P^2e_0 = Pd_0^2Pe_0P^2d_0 =$   
 $Pe_0^2P^4e_0 = Pe_0P^2e_0P^3e_0 = P^2e_0^3$
- 39 (1)  $d_0^2P^6i = d_0iP^6d_0 = d_0P^2d_0P^4i = d_0P^2iP^4d_0 = e_0P^7j =$   
 $iPd_0P^5d_0 = iP^2d_0P^4d_0 = iP^3d_0^2 = jP^7e_0 = kP^7d_0 = Pd_0^2P^4i =$   
 $Pd_0P^2iP^3d_0 = Pe_0P^6j = PjP^6e_0 = P^2d_0^2P^2i = P^2e_0P^5j =$   
 $P^2jP^5e_0 = P^3e_0P^4j = P^3jP^4e_0$

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- 4 (1)  $h_4c_3$   
5 (1)  $h_0h_4c_3 = h_5p'$   
6 (10)  $h_6x$   
(01)  $h_0^2h_4c_3 = h_0h_5p' = h_1h_3g_3 = h_1h_4f_2 = h_4^2p_1$   
7 (1)  $h_0h_6x$   
8 (1000)  $h_2x_{7,81}$   
(0100)  $h_3h_6r$   
(0010)  $h_1x_{7,84}$   
(0001)  $h_0^2h_6x$   
(0101)  $h_1h_6t = h_1x_{7,83} = h_2^2h_6n = h_6c_1f_0$   
9 (100)  $h_6e_0g$   
(010)  $e_1H_1$   
(001)  $h_0^3h_6x = h_0h_3h_6r$   
(011)  $h_3x_{8,78}$   
10 (100)  $x_{10,82}$   
(010)  $h_1x_{9,86}$   
(001)  $h_0^4h_6x = h_0^2h_3h_6r = h_0h_3x_{8,78} = h_0h_6e_0g = h_2h_6d_0g = h_2h_6e_0^2 = h_3^2h_6i = h_4h_6Pd_0$   
11 (100)  $h_3x_{10,67}$   
(010)  $h_0x_{10,82}$   
(110)  $h_2x_{10,76}$   
(001)  $h_0^5h_6x = h_0^3h_3h_6r = h_0^2h_3x_{8,78} = h_0^2h_6e_0g = h_0h_2h_6d_0g = h_0h_2h_6e_0^2 = h_0h_3^2h_6i = h_0h_4h_6Pd_0 = h_2^2h_6d_0e_0 = h_5PA = h_6c_0k$   
(101)  $H_1y$   
12 (100)  $h_6d_0i$   
(010)  $h_1h_3x_{10,65} = d_1G_{21} = e_1x_{8,32}$   
(001)  $h_0^2x_{10,82} = h_0h_2x_{10,76}$   
13 (100)  $x_{13,73}$   
(010)  $h_0h_6d_0i = h_2h_6Pj = h_6Ph_2j$   
(001)  $h_0^3x_{10,82} = h_0^2h_2x_{10,76} = h_1^3x_{10,76} = h_3x_{12,60} = D_3u = Ph_1x_{8,75} = GB_1$   
14 (1)  $h_0^2h_6d_0i = h_0h_2h_6Pj = h_0h_6Ph_2j = h_1h_3x_{12,58} = h_1h_6d_0Pd_0 = h_2h_6Ph_2i = h_3^2x_{12,48} = h_6d_0^2Ph_1 = h_6f_0P^2h_2 = h_6gP^2h_1 = e_1x_{10,27} = g_2Q_1 = qG_{21} = yx_{8,32}$   
16 (1)  $gx_{12,44}$   
17 (1)  $g^2B_4 = mB_{23}$   
18 (1)  $h_1Ph_1x_{12,55} = h_1B_1x' = uX_1$   
19 (1)  $e_0x_{15,41}$

continued

- Stem 100    continued
- 20 (10)  $g^5 = g^2r^2 = gmw = rm^2$   
 (01)  $d_0rQ_1 = d_0jB_4 = e_0rx' = e_0iB_4 = gx_{16,37} = kx_{13,35} = lP^2D_1 = mR_2 = zB_{21}$
- 22 (1)  $Px_{18,55}$
- 23 (100)  $d_0^2e_0gm = d_0^2g^2l = d_0^2rv = d_0e_0^3m = d_0e_0^2gl = d_0e_0g^2k = d_0e_0ru = d_0g^3j = d_0r^2j = d_0wz = e_0^4l = e_0^3gk = e_0^2g^2j = e_0g^3i = e_0r^2i = e_0vz = g^2mPe_0 = grPv = guz = rkz = rPe_0w = ilw = imv = jkw = jlv = jmu = k^2v = klu$
- (010)  $x'Q$   
 (001)  $x'Pu$   
 (011)  $rR_1 = ix_{16,33}$
- 24 (1)  $h_0rR_1 = h_0ix_{16,33} = h_0x'Q = i^2R_1 = X_1P^2i$
- 25 (1)  $h_0^2rR_1 = h_0^2ix_{16,33} = h_0^2x'Q = h_0i^2R_1 = h_0X_1P^2i = h_3iR_1$
- 26 (100)  $d_0^2P^2Q_1 = d_0Pd_0PQ_1 = d_0x'P^2e_0 = d_0Q_1P^2d_0 = e_0x'P^2d_0 = gP^3Q_1 = Pd_0^2Q_1 = Pd_0Pe_0x' = B_{21}P^3e_0 = x_{10,27}P^3d_0 = x_{10,28}P^3d_0$
- (010)  $d_0^5r = d_0^3e_0z = d_0^3im = d_0^3jl = d_0^3k^2 = d_0^2e_0rPe_0 = d_0^2e_0il = d_0^2e_0jk = d_0^2grPd_0 = d_0^2gik = d_0^2gj^2 = d_0e_0^2rPd_0 = d_0e_0^2ik = d_0e_0^2j^2 = d_0e_0gij = d_0e_0mPj = d_0g^2i^2 = d_0glPj = d_0gPe_0z = d_0jmPe_0 = d_0klPe_0 = d_0kmPd_0 = d_0l^2Pd_0 = d_0uPu = e_0^3ij = e_0^2gi^2 = e_0^2lPj = e_0^2Pe_0z = e_0grP^2e_0 = e_0gkPj = e_0gPd_0z = e_0imPe_0 = e_0jlPe_0 = e_0jmPd_0 = e_0k^2Pe_0 = e_0klPd_0 = g^2rP^2d_0 = g^2jPj = grPe_0^2 = gilPe_0 = gimPd_0 = gjkPe_0 = gjlPd_0 = gk^2Pd_0 = riPu = lmP^2e_0 = m^2P^2d_0 = Pd_0u^2 = vP^2v = wP^2u = Pv^2$
- (110)  $d_0e_0x_{18,20}$   
 (001)  $h_0^3rR_1 = h_0^3ix_{16,33} = h_0^3x'Q = h_0^2i^2R_1 = h_0^2X_1P^2i = h_0h_3iR_1 = h_3R_1P^2i = riQ$

continued

Stem 100     continued

$$\begin{aligned}
27 \quad (10) \quad & h_4 P^4 x' = c_0 P^2 x_{16,32} = P^2 c_0 x_{16,32} \\
(01) \quad & h_0^4 r R_1 = h_0^4 i x_{16,33} = h_0^4 x' Q = h_0^3 i^2 R_1 = h_0^3 X_1 P^2 i = h_0^2 h_3 i R_1 = \\
& h_0 h_3 R_1 P^2 i = h_0 r i Q = h_3^2 x_{25,24} \\
(11) \quad & h_0 d_0^2 P^2 Q_1 = h_0 d_0 e_0 x_{18,20} = h_0 d_0 P d_0 P Q_1 = h_0 d_0 x' P^2 e_0 = \\
& h_0 d_0 Q_1 P^2 d_0 = h_0 e_0 x' P^2 d_0 = h_0 g P^3 Q_1 = h_0 P d_0^2 Q_1 = \\
& h_0 P d_0 P e_0 x' = h_0 B_{21} P^3 e_0 = h_0 x_{10,27} P^3 d_0 = h_0 x_{10,28} P^3 d_0 = \\
& h_2 d_0^2 x_{18,20} = h_2 d_0 x' P^2 d_0 = h_2 e_0 P^3 Q_1 = h_2 P d_0^2 x' = \\
& h_2 P e_0 P^2 Q_1 = h_2 Q_1 P^3 e_0 = h_2 B_{21} P^3 d_0 = h_2 P^2 e_0 P Q_1 = \\
& d_0^2 P^2 h_2 x' = d_0 P h_2 P d_0 x' = d_0 B_2 P^3 d_0 = d_0 B_{21} P^3 h_2 = \\
& e_0 P h_2 P^2 Q_1 = e_0 P^2 h_2 P Q_1 = e_0 Q_1 P^3 h_2 = g P h_2 x_{18,20} = \\
& g x' P^3 h_2 = P h_2 P e_0 P Q_1 = P h_2 Q_1 P^2 e_0 = P h_2 B_{21} P^2 d_0 = \\
& B_2 P d_0 P^2 d_0 = P d_0 P^2 h_2 B_{21} = P e_0 P^2 h_2 Q_1 = B_{23} P^4 h_2 \\
28 \quad (1) \quad & h_0^5 r R_1 = h_0^5 i x_{16,33} = h_0^5 x' Q = h_0^4 i^2 R_1 = h_0^4 X_1 P^2 i = \\
& h_0^3 h_3 i R_1 = h_0^2 h_3 R_1 P^2 i = h_0^2 d_0^2 P^2 Q_1 = h_0^2 d_0 e_0 x_{18,20} = \\
& h_0^2 d_0 P d_0 P Q_1 = h_0^2 d_0 x' P^2 e_0 = h_0^2 d_0 Q_1 P^2 d_0 = h_0^2 e_0 x' P^2 d_0 = \\
& h_0^2 g P^3 Q_1 = h_0^2 r i Q = h_0^2 P d_0^2 Q_1 = h_0^2 P d_0 P e_0 x' = \\
& h_0^2 B_{21} P^3 e_0 = h_0^2 x_{10,27} P^3 d_0 = h_0^2 x_{10,28} P^3 d_0 = h_0 h_2 d_0^2 x_{18,20} = \\
& h_0 h_2 d_0 x' P^2 d_0 = h_0 h_2 e_0 P^3 Q_1 = h_0 h_2 P d_0^2 x' = h_0 h_2 P e_0 P^2 Q_1 = \\
& h_0 h_2 Q_1 P^3 e_0 = h_0 h_2 B_{21} P^3 d_0 = h_0 h_2 P^2 e_0 P Q_1 = \\
& h_0 h_3^2 x_{25,24} = h_0 d_0^2 P^2 h_2 x' = h_0 d_0 P h_2 P d_0 x' = h_0 d_0 B_2 P^3 d_0 = \\
& h_0 d_0 B_{21} P^3 h_2 = h_0 e_0 P h_2 P^2 Q_1 = h_0 e_0 P^2 h_2 P Q_1 = \\
& h_0 e_0 Q_1 P^3 h_2 = h_0 g P h_2 x_{18,20} = h_0 g x' P^3 h_2 = h_0 P h_2 P e_0 P Q_1 = \\
& h_0 P h_2 Q_1 P^2 e_0 = h_0 P h_2 B_{21} P^2 d_0 = h_0 B_2 P d_0 P^2 d_0 = \\
& h_0 P d_0 P^2 h_2 B_{21} = h_0 P e_0 P^2 h_2 Q_1 = h_0 B_{23} P^4 h_2 = h_2^2 d_0 P^3 Q_1 = \\
& h_2^2 P d_0 P^2 Q_1 = h_2^2 P e_0 x_{18,20} = h_2^2 x' P^3 e_0 = h_2^2 Q_1 P^3 d_0 = \\
& h_2^2 P^2 d_0 P Q_1 = h_2 d_0 P h_2 P^2 Q_1 = h_2 d_0 P^2 h_2 P Q_1 = \\
& h_2 d_0 Q_1 P^3 h_2 = h_2 e_0 P h_2 x_{18,20} = h_2 e_0 x' P^3 h_2 = h_2 P h_2 P d_0 P Q_1 = \\
& h_2 P h_2 x' P^2 e_0 = h_2 P h_2 Q_1 P^2 d_0 = h_2 B_2 P^4 e_0 = h_2 P d_0 P^2 h_2 Q_1 = \\
& h_2 P e_0 P^2 h_2 x' = h_2 x_{10,27} P^4 h_2 = h_2 x_{10,28} P^4 h_2 = h_3 i^2 Q = \\
& c_0 i x_{18,20} = c_0 P d_0 R_1 = c_0 x' P^2 i = d_0 P h_2^2 P Q_1 = \\
& d_0 P h_2 P^2 h_2 Q_1 = d_0 P c_0 R_1 = e_0 P h_2 P^2 h_2 x' = e_0 B_2 P^4 h_2 = \\
& P h_2^2 P d_0 Q_1 = P h_2^2 P e_0 x' = P h_2 B_2 P^3 e_0 = P h_2 x_{10,27} P^3 h_2 = \\
& P h_2 x_{10,28} P^3 h_2 = y i P^2 i = i x' P^2 c_0 = B_2 P e_0 P^3 h_2 = \\
& B_2 P^2 h_2 P^2 e_0 = Q_2 P^5 h_2 = P^2 h_2^2 x_{10,27} = P^2 h_2^2 x_{10,28} = B_4 P^4 c_0 = \\
& P^2 D_1 P^3 c_0
\end{aligned}$$

continued

Stem 100 continued

$$\begin{aligned}
29 \quad (10) \quad & P^2 d_0 R_1 \\
(01) \quad & d_0^3 P^2 v = d_0^2 e_0 P^2 u = d_0^2 r P^2 j = d_0^2 i^2 j = d_0^2 P d_0 P v = d_0^2 P e_0 P u = \\
& d_0^2 u P^2 e_0 = d_0^2 v P^2 d_0 = d_0 e_0 r P^2 i = d_0 e_0 i^3 = d_0 e_0 P d_0 P u = \\
& d_0 e_0 u P^2 d_0 = d_0 g P^3 v = d_0 r i P^2 e_0 = d_0 r j P^2 d_0 = d_0 r P d_0 P j = \\
& d_0 i k P j = d_0 i P d_0 z = d_0 j^2 P j = d_0 P d_0^2 v = d_0 P d_0 P e_0 u = \\
& d_0 w P^3 e_0 = e_0^2 P^3 v = e_0 g P^3 u = e_0 r i P^2 d_0 = e_0 i j P j = e_0 P d_0^2 u = \\
& e_0 P e_0 P^2 v = e_0 v P^3 e_0 = e_0 w P^3 d_0 = e_0 z P^2 j = e_0 P^2 e_0 P v = \\
& g r P^3 j = g i^2 P j = g P d_0 P^2 v = g P e_0 P^2 u = g u P^3 e_0 = g v P^3 d_0 = \\
& g z P^2 i = g P^2 d_0 P v = g P^2 e_0 P u = r i P d_0 P e_0 = r j P d_0^2 = r k P^3 e_0 = \\
& r l P^3 d_0 = i^2 k P e_0 = i^2 l P d_0 = i j^2 P e_0 = i j k P d_0 = i m P^2 j = \\
& j^3 P d_0 = j l P^2 j = j m P^2 i = j z P^2 e_0 = k^2 P^2 j = k l P^2 i = k z P^2 d_0 = \\
& l P j^2 = P d_0 w P^2 e_0 = P e_0^2 P v = P e_0 v P^2 e_0 = P e_0 w P^2 d_0 = P e_0 z P j \\
(11) \quad & d_0 x_{25,24} \\
30 \quad (1) \quad & h_0 d_0 x_{25,24} = h_0 P^2 d_0 R_1 = h_2 P^4 R_2 = P h_2 P^3 R_2 = P^2 h_2 P^2 R_2 = \\
& R_1 P^4 d_0 = P^3 h_2 P R_2 = R_2 P^4 h_2 \\
31 \quad (1) \quad & h_0^2 d_0 x_{25,24} = h_0^2 P^2 d_0 R_1 = h_0 h_2 P^4 R_2 = h_0 P h_2 P^3 R_2 = \\
& h_0 P^2 h_2 P^2 R_2 = h_0 R_1 P^4 d_0 = h_0 P^3 h_2 P R_2 = h_0 R_2 P^4 h_2 = \\
& h_1 d_0 P^4 x' = h_1 x' P^4 d_0 = h_1 P^2 d_0 x_{18,20} = h_2 P h_2 x_{25,24} = \\
& h_2 P^3 h_2 R_1 = d_0 P^2 h_1 x_{18,20} = d_0 x' P^4 h_1 = P h_1 P d_0 x_{18,20} = \\
& P h_1 x' P^3 d_0 = P h_2 P^2 h_2 R_1 = B_1 P^5 d_0 = P d_0 x' P^3 h_1 = \\
& P^2 h_1 x' P^2 d_0 = B_2 P^5 h_1 \\
32 \quad (1) \quad & d_0^5 P^2 d_0 = d_0^4 P d_0^2 = d_0^3 e_0 P^3 e_0 = d_0^3 g P^3 d_0 = d_0^3 P e_0 P^2 e_0 = \\
& d_0^2 e_0^2 P^3 d_0 = d_0^2 e_0 P d_0 P^2 e_0 = d_0^2 e_0 P e_0 P^2 d_0 = d_0^2 g P d_0 P^2 d_0 = \\
& d_0^2 P d_0 P e_0^2 = d_0 e_0^2 P d_0 P^2 d_0 = d_0 e_0 g P^4 e_0 = d_0 e_0 P d_0^2 P e_0 = \\
& d_0 g^2 P^4 d_0 = d_0 g P d_0^3 = d_0 g P e_0 P^3 e_0 = d_0 g P^2 e_0^2 = d_0 i P^3 u = \\
& d_0 P u P^2 i = e_0^3 P^4 e_0 = e_0^2 g P^4 d_0 = e_0^2 P d_0^3 = e_0^2 P e_0 P^3 e_0 = e_0^2 P^2 e_0^2 = \\
& e_0 g P d_0 P^3 e_0 = e_0 g P e_0 P^3 d_0 = e_0 g P^2 d_0 P^2 e_0 = e_0 P e_0^2 P^2 e_0 = \\
& g^2 P d_0 P^3 d_0 = g^2 P^2 d_0^2 = g P d_0 P e_0 P^2 e_0 = g P e_0^2 P^2 d_0 = i P d_0 P^2 u = \\
& i u P^3 d_0 = i P^2 d_0 P u = j P^4 v = k P^4 u = P d_0 u P^2 i = P e_0^4 = v P^4 j = \\
& w P^4 i = P j P^3 v = P v P^3 j = P^2 j P^2 v \\
35 \quad (1) \quad & d_0^3 P^4 j = d_0^2 e_0 P^4 i = d_0^2 i P^4 e_0 = d_0^2 j P^4 d_0 = d_0^2 P d_0 P^3 j = \\
& d_0^2 P j P^3 d_0 = d_0^2 P^2 d_0 P^2 j = d_0^2 P^2 e_0 P^2 i = d_0 e_0 i P^4 d_0 = \\
& d_0 e_0 P^2 d_0 P^2 i = d_0 g P^5 j = d_0 i P d_0 P^3 e_0 = d_0 i P e_0 P^3 d_0 = \\
& d_0 i P^2 d_0 P^2 e_0 = d_0 j P d_0 P^3 d_0 = d_0 j P^2 d_0^2 = d_0 k P^5 e_0 = d_0 l P^5 d_0 = \\
& d_0 P d_0^2 P^2 j = d_0 P d_0 P e_0 P^2 i = d_0 P d_0 P j P^2 d_0 = e_0^2 P^5 j = \\
& e_0 i P d_0 P^3 d_0 = e_0 i P^2 d_0^2 = e_0 j P^5 e_0 = e_0 k P^5 d_0 = e_0 P d_0^2 P^2 i = \\
& e_0 P e_0 P^4 j = e_0 P j P^4 e_0 = e_0 P^2 e_0 P^3 j = e_0 P^2 j P^3 e_0 = g i P^5 e_0 = \\
& g j P^5 d_0 = g P d_0 P^4 j = g P e_0 P^4 i = g P j P^4 d_0 = g P^2 d_0 P^3 j = \\
& g P^2 i P^3 e_0 = g P^2 j P^3 d_0 = i P d_0^2 P^2 e_0 = i P d_0 P e_0 P^2 d_0 = \\
& j P d_0^2 P^2 d_0 = j P e_0 P^4 e_0 = j P^2 e_0 P^3 e_0 = k P d_0 P^4 e_0 = k P e_0 P^4 d_0 = \\
& k P^2 d_0 P^3 e_0 = k P^2 e_0 P^3 d_0 = l P d_0 P^4 d_0 = l P^2 d_0 P^3 d_0 = m P^6 e_0 = \\
& P d_0^3 P j = P e_0^2 P^3 j = P e_0 P j P^3 e_0 = P e_0 P^2 e_0 P^2 j = P j P^2 e_0^2 \\
38 \quad (1) \quad & r P^7 d_0 = i^2 P^5 d_0 = i P d_0 P^4 i = i P^2 i P^3 d_0 = j P^6 j = k P^6 i = \\
& P d_0 P^2 i^2 = P j P^5 j = P^2 j P^4 j = P^3 j^2
\end{aligned}$$



Stem 101

5	(1)	$h_6e_1$
7	(010)	$x_{7,88}$
	(001)	$h_1h_6x = h_2^2h_6d_1 = h_2h_4h_6g = h_2h_5Q_3 = h_3h_6n = h_6c_1^2$
	(101)	$h_6y$
8	(10)	$x_{8,93}$
	(01)	$h_0h_6y$
9	(0100)	$h_1^2x_{7,84} = h_2^2x_{7,79} = g_3Ph_1$
	(1011)	$h_3x_{8,80}$
	(0010)	$h_0x_{8,93}$
	(0001)	$h_0^2h_6y = h_2h_6m = h_6f_0g$
10	(10)	$h_0^2x_{8,93}$
	(01)	$h_0^3h_6y = h_0h_2h_6m = h_0h_6f_0g = h_1h_6e_0g = h_2^2h_6l = h_2h_6e_0f_0 = h_6c_0r$
	(11)	$h_0h_3x_{8,80} = f_1A'$
11	(100)	$g_2Q_2$
	(010)	$x_{11,80}$
	(001)	$h_0^3x_{8,93} = h_0^2h_3x_{8,80} = h_0f_1A' = h_1^2x_{9,86} = h_3pA' = h_3x_{10,70} = e_1x_{7,33} = xA''$
12	(1)	$h_0g_2Q_2 = h_0x_{11,80} = pG_{21}$
13	(1)	$h_0^2g_2Q_2 = h_0^2x_{11,80} = h_0pG_{21} = h_1^2h_3x_{10,65} = h_1d_1G_{21} = h_1e_1x_{8,32} = h_2^3x_{10,65} = h_2h_5x_{11,35} = h_3d_1x_{8,32} = h_3xQ_2 = h_4x_{12,48} = f_1X_1 = yx_{7,33}$
14	(1)	$g^2A' = g^2A = mx_{7,40}$
15	(1)	$h_2x_{14,67}$
16	(1)	$Px_{12,60}$
17	(01)	$h_0Px_{12,60} = Ph_2x_{12,55} = B_2x'$
	(11)	$h_6P^3d_0$
18	(10)	$x_{18,63}$
	(01)	$h_0^2Px_{12,60} = h_0h_6P^3d_0 = h_0Ph_2x_{12,55} = h_0B_2x' = h_5R_1$
19	(100)	$g^2nr = gtw = gmN = nm^2 = rtm$
	(010)	$d_0x_{15,47} = e_0x_{15,43} = rx_{13,35} = ux_{10,27} = ux_{10,28} = vB_{21} = wQ_1 = B_4z$
	(001)	$h_0x_{18,63}$
20	(1)	$h_0^2x_{18,63}$
21	(10)	$d_0x_{17,50}$
	(01)	$h_0^3x_{18,63}$

continued

- Stem 101 continued
- 22 (010)  $d_0^3 B_{21} = d_0^2 e_0 Q_1 = d_0^2 g x' = d_0 e_0^2 x' = d_0 P d_0 B_{23} = d_0 P e_0 x_{10,27} =$   
 $d_0 P e_0 x_{10,28} = e_0 g P Q_1 = e_0 P d_0 x_{10,27} = e_0 P d_0 x_{10,28} =$   
 $e_0 P e_0 B_{21} = g P d_0 B_{21} = g P e_0 Q_1$
- (001)  $h_0^4 x_{18,63}$
- (101)  $d_0 e_0 g^2 r = d_0 e_0 m^2 = d_0 g l m = d_0 v w = e_0^3 g r = e_0^2 l m = e_0 g k m =$   
 $e_0 g l^2 = e_0 u w = e_0 v^2 = g^3 z = g^2 j m = g^2 k l = g u v = r^2 z = r j w =$   
 $r k v = r l u$
- 23 (1)  $h_0^5 x_{18,63} = h_3 x_{22,39} = R_1 Q$
- 24 (110)  $d_0 P x_{16,35} = P d_0 x_{16,35}$
- (001)  $h_0^6 x_{18,63} = h_0 h_3 x_{22,39} = h_0 R_1 Q$
- (101)  $P e_0 x_{16,32}$
- (011)  $h_1 x' Q = h_1 x' P u = P h_1 u x' = q x_{18,20} = B_1 P^2 u = P^2 h_1 x_{15,42} =$   
 $P^2 h_1 x_{15,43}$
- 25 (100)  $d_0 i P Q_1 = d_0 x' P j = i P d_0 Q_1 = i P e_0 x' = j P d_0 x' = k P^2 Q_1 =$   
 $B_4 P^3 e_0 = B_{21} P^2 j = x_{10,28} P^2 i = P^2 d_0 x_{13,35}$
- (010)  $d_0^4 w = d_0^3 e_0 v = d_0^3 g u = d_0^3 r k = d_0^2 e_0^2 u = d_0^2 e_0 r j = d_0^2 g r i = d_0^2 l z =$   
 $d_0 e_0^2 r i = d_0 e_0 g P v = d_0 e_0 k z = d_0 e_0 P e_0 w = d_0 g^2 P u = d_0 g j z =$   
 $d_0 g P d_0 w = d_0 g P e_0 v = d_0 r l P e_0 = d_0 r m P d_0 = d_0 i k m = d_0 i l^2 =$   
 $d_0 j^2 m = d_0 j k l = d_0 k^3 = e_0^3 P v = e_0^2 g P u = e_0^2 j z = e_0^2 P d_0 w =$   
 $e_0^2 P e_0 v = e_0 g r P j = e_0 g i z = e_0 g P d_0 v = e_0 g P e_0 u = e_0 r k P e_0 =$   
 $e_0 r l P d_0 = e_0 i j m = e_0 i k l = e_0 j^2 l = e_0 j k^2 = g^2 P d_0 u = g r j P e_0 =$   
 $g r k P d_0 = g i^2 m = g i j l = g i k^2 = g j^2 k = i u^2 = l m P j = m P e_0 z$
- (110)  $l x_{18,20}$
- (001)  $h_0^7 x_{18,63} = h_0^2 h_3 x_{22,39} = h_0^2 R_1 Q = h_0 d_0 P x_{16,35} = h_0 P d_0 x_{16,35} =$   
 $h_0 P e_0 x_{16,32} = h_2 P d_0 x_{16,32} = d_0 P h_2 x_{16,32} = P^2 h_2 x_{16,38} =$   
 $P^2 d_0 x_{13,34}$
- (101)  $d_0^2 P R_2 = d_0 e_0 R_1 = d_0 P d_0 R_2 = g P^2 R_2 = x_{10,27} P^2 i =$   
 $P^2 e_0 P^2 D_1$

continued

Stem 101 continued

$$\begin{aligned}
26 \quad (10) \quad & h_0 d_0 i P Q_1 = h_0 d_0 x' P j = h_0 i P d_0 Q_1 = h_0 i P e_0 x' = h_0 j P d_0 x' = \\
& h_0 k P^2 Q_1 = h_0 l x_{18,20} = h_0 B_4 P^3 e_0 = h_0 B_{21} P^2 j = h_0 x_{10,28} P^2 i = \\
& h_0 P^2 d_0 x_{13,35} = h_2 i P d_0 x' = h_2 j P^2 Q_1 = h_2 k x_{18,20} = h_2 B_4 P^3 d_0 = \\
& h_2 Q_1 P^2 j = h_2 B_{21} P^2 i = h_2 P j P Q_1 = h_4 x_{25,24} = d_0 f_0 x_{18,20} = \\
& d_0 P h_2 i x' = d_0 B_2 P^2 i = d_0 B_4 P^3 h_2 = f_0 x' P^2 d_0 = P h_2 j P Q_1 = \\
& P h_2 B_4 P^2 d_0 = P h_2 Q_1 P j = i B_2 P^2 d_0 = i P^2 h_2 B_{21} = j P^2 h_2 Q_1 = \\
& k P^2 h_2 x' = P d_0 P^2 h_2 B_4 \\
(01) \quad & h_0^8 x_{18,63} = h_0^3 h_3 x_{22,39} = h_0^3 R_1 Q = h_0^2 d_0 P x_{16,35} = h_0^2 P d_0 x_{16,35} = \\
& h_0^2 P e_0 x_{16,32} = h_0 h_2 P d_0 x_{16,32} = h_0 d_0 P h_2 x_{16,32} = h_0 P^2 h_2 x_{16,38} = \\
& h_0 P^2 d_0 x_{13,34} = h_2^2 P^2 x_{16,35} = h_2 P h_2 P x_{16,35} = h_2 P^2 h_2 x_{16,35} = \\
& P h_2^2 x_{16,35} \\
(11) \quad & h_0 d_0^2 P R_2 = h_0 d_0 e_0 R_1 = h_0 d_0 P d_0 R_2 = h_0 g P^2 R_2 = \\
& h_0 x_{10,27} P^2 i = h_0 P^2 e_0 P^2 D_1 = h_2 d_0^2 R_1 = h_2 e_0 P^2 R_2 = \\
& h_2 P e_0 P R_2 = h_2 P^2 d_0 P^2 D_1 = h_2 P^2 e_0 R_2 = d_0 P^2 h_2 P^2 D_1 = \\
& d_0 R_1 P^2 e_0 = e_0 P h_2 P R_2 = e_0 P^2 h_2 R_2 = e_0 R_1 P^2 d_0 = g P h_2 R_1 = \\
& P h_2 P d_0 P^2 D_1 = P h_2 P e_0 R_2 = P d_0 P e_0 R_1 \\
27 \quad (1) \quad & h_0^2 d_0^2 P R_2 = h_0^2 d_0 e_0 R_1 = h_0^2 d_0 i P Q_1 = h_0^2 d_0 P d_0 R_2 = \\
& h_0^2 d_0 x' P j = h_0^2 g P^2 R_2 = h_0^2 i P d_0 Q_1 = h_0^2 i P e_0 x' = \\
& h_0^2 j P d_0 x' = h_0^2 k P^2 Q_1 = h_0^2 l x_{18,20} = h_0^2 B_4 P^3 e_0 = \\
& h_0^2 B_{21} P^2 j = h_0^2 x_{10,27} P^2 i = h_0^2 x_{10,28} P^2 i = h_0^2 P^2 d_0 x_{13,35} = \\
& h_0^2 P^2 e_0 P^2 D_1 = h_0 h_2 d_0^2 R_1 = h_0 h_2 e_0 P^2 R_2 = h_0 h_2 i P d_0 x' = \\
& h_0 h_2 j P^2 Q_1 = h_0 h_2 k x_{18,20} = h_0 h_2 P e_0 P R_2 = h_0 h_2 B_4 P^3 d_0 = \\
& h_0 h_2 Q_1 P^2 j = h_0 h_2 B_{21} P^2 i = h_0 h_2 P j P Q_1 = h_0 h_2 P^2 d_0 P^2 D_1 = \\
& h_0 h_2 P^2 e_0 R_2 = h_0 h_4 x_{25,24} = h_0 d_0 f_0 x_{18,20} = h_0 d_0 P h_2 i x' = \\
& h_0 d_0 B_2 P^2 i = h_0 d_0 P^2 h_2 P^2 D_1 = h_0 d_0 B_4 P^3 h_2 = h_0 d_0 R_1 P^2 e_0 = \\
& h_0 e_0 P h_2 P R_2 = h_0 e_0 P^2 h_2 R_2 = h_0 e_0 R_1 P^2 d_0 = h_0 f_0 x' P^2 d_0 = \\
& h_0 g P h_2 R_1 = h_0 P h_2 j P Q_1 = h_0 P h_2 P d_0 P^2 D_1 = h_0 P h_2 P e_0 R_2 = \\
& h_0 P h_2 B_4 P^2 d_0 = h_0 P h_2 Q_1 P j = h_0 i B_2 P^2 d_0 = h_0 i P^2 h_2 B_{21} = \\
& h_0 j P^2 h_2 Q_1 = h_0 k P^2 h_2 x' = h_0 P d_0 P e_0 R_1 = h_0 P d_0 P^2 h_2 B_4 = \\
& h_1 d_0^2 P^2 Q_1 = h_1 d_0 e_0 x_{18,20} = h_1 d_0 P d_0 P Q_1 = h_1 d_0 x' P^2 e_0 = \\
& h_1 d_0 Q_1 P^2 d_0 = h_1 e_0 x' P^2 d_0 = h_1 g P^3 Q_1 = h_1 P d_0^2 Q_1 = \\
& h_1 P d_0 P e_0 x' = h_1 B_{21} P^3 e_0 = h_1 x_{10,27} P^3 d_0 = h_1 x_{10,28} P^3 d_0 = \\
& h_2^2 d_0 P^2 R_2 = h_2^2 i P^2 Q_1 = h_2^2 j x_{18,20} = h_2^2 P d_0 P R_2 = h_2^2 P e_0 R_1 = \\
& h_2^2 x' P^2 j = h_2^2 Q_1 P^2 i = h_2^2 P^2 d_0 R_2 = h_2 d_0 P h_2 P R_2 = \\
& h_2 d_0 P^2 h_2 R_2 = h_2 d_0 R_1 P^2 d_0 = h_2 e_0 P h_2 R_1 = h_2 f_0 P^3 Q_1 = \\
& h_2 P h_2 i P Q_1 = h_2 P h_2 P d_0 R_2 = h_2 P h_2 x' P j = h_2 i P^2 h_2 Q_1 = \\
& h_2 j P^2 h_2 x' = h_2 B_2 P^3 j = h_2 P d_0^2 R_1 = h_2 P^3 h_2 x_{13,35} = c_0 i R_1 = \\
& d_0^2 P h_1 P Q_1 = d_0^2 P^2 h_1 Q_1 = d_0^2 P^2 h_2 R_1 = d_0 e_0 P^2 h_1 x' = \\
& d_0 P h_1 P d_0 Q_1 = d_0 P h_1 P e_0 x' = d_0 P h_2^2 R_2 = d_0 P h_2 P d_0 R_1 = \\
& d_0 B_1 P^3 e_0 = d_0 x_{10,27} P^3 h_1 = d_0 x_{10,28} P^3 h_1 = e_0 P h_1 P d_0 x' = \\
& \text{(continued)}
\end{aligned}$$

- Stem 101    continued
- 27 (1) (continued) =  $e_0B_1P^3d_0 = e_0B_{21}P^3h_1 = f_0Ph_2P^2Q_1 = f_0P^2h_2PQ_1 = f_0Q_1P^3h_2 = gPh_1P^2Q_1 = gP^2h_1PQ_1 = gR_1P^3h_2 = gQ_1P^3h_1 = Ph_1B_{21}P^2e_0 = Ph_1x_{10,27}P^2d_0 = Ph_1x_{10,28}P^2d_0 = Ph_2^2iQ_1 = Ph_2^2jx' = Ph_2B_2P^2j = Ph_2P^2h_2x_{13,35} = D_2P^5h_2 = jB_2P^3h_2 = B_1Pd_0P^2e_0 = B_1Pe_0P^2d_0 = B_2P^2h_2Pj = Pd_0P^2h_1x_{10,27} = Pd_0P^2h_1x_{10,28} = Pe_0P^2h_1B_{21} = B_5P^4h_2 = PD_2P^4h_2 = P^2c_0x_{16,33}$
- 28 (1)  $d_0^6e_0 = d_0^4gPe_0 = d_0^3e_0^2Pe_0 = d_0^3e_0gPd_0 = d_0^2e_0^3Pd_0 = d_0^2g^2P^2e_0 = d_0^2iPv = d_0^2jPu = d_0^2uPj = d_0e_0^2gP^2e_0 = d_0e_0g^2P^2d_0 = d_0e_0gPe_0^2 = d_0e_0iPu = d_0g^2Pd_0Pe_0 = d_0riPj = d_0i^2z = d_0iPd_0v = d_0iPe_0u = d_0jPd_0u = d_0kP^2v = d_0lP^2u = d_0wP^2j = e_0^4P^2e_0 = e_0^3gP^2d_0 = e_0^3Pe_0^2 = e_0^2gPd_0Pe_0 = e_0g^2Pd_0^2 = e_0iPd_0u = e_0jP^2v = e_0kP^2u = e_0vP^2j = e_0wP^2i = e_0PjPv = g^3P^3e_0 = giP^2v = gjP^2u = guP^2j = gvP^2i = gPjPu = r^2P^3e_0 = ri^2Pe_0 = rijPd_0 = rkP^2j = rlP^2i = rzP^2d_0 = i^3l = i^2jk = ij^3 = iwP^2e_0 = jPe_0Pv = jvP^2e_0 = jwP^2d_0 = jzPj = kPd_0Pv = kPe_0Pu = kuP^2e_0 = kvP^2d_0 = lPd_0Pu = luP^2d_0 = mP^3v = Pd_0wPj = Pe_0vPj$
- 29 (1)  $Ph_1P^2x_{16,32} = P^3h_1x_{16,32}$
- 31 (1)  $d_0^4iPd_0 = d_0^3e_0P^2j = d_0^3gP^2i = d_0^3jP^2e_0 = d_0^3kP^2d_0 = d_0^3Pe_0Pj = d_0^2e_0^2P^2i = d_0^2e_0iP^2e_0 = d_0^2e_0jP^2d_0 = d_0^2e_0Pd_0Pj = d_0^2giP^2d_0 = d_0^2iPe_0^2 = d_0^2jPd_0Pe_0 = d_0^2kPd_0^2 = d_0^2lP^3e_0 = d_0^2mP^3d_0 = d_0e_0^2iP^2d_0 = d_0e_0gP^3j = d_0e_0iPd_0Pe_0 = d_0e_0jPd_0^2 = d_0e_0kP^3e_0 = d_0e_0lP^3d_0 = d_0gipd_0^2 = d_0gjP^3e_0 = d_0gkP^3d_0 = d_0gPe_0P^2j = d_0gPjP^2e_0 = d_0kPe_0P^2e_0 = d_0lPd_0P^2e_0 = d_0lPe_0P^2d_0 = d_0mPd_0P^2d_0 = e_0^3P^3j = e_0^2iPd_0^2 = e_0^2jP^3e_0 = e_0^2kP^3d_0 = e_0^2Pe_0P^2j = e_0^2PjP^2e_0 = e_0giP^3e_0 = e_0gjP^3d_0 = e_0gPd_0P^2j = e_0gPe_0P^2i = e_0gPjP^2d_0 = e_0jPe_0P^2e_0 = e_0kPd_0P^2e_0 = e_0kPe_0P^2d_0 = e_0lPd_0P^2d_0 = e_0mP^4e_0 = e_0Pe_0^2Pj = g^2iP^3d_0 = g^2Pd_0P^2i = giPe_0P^2e_0 = gjPd_0P^2e_0 = gjPe_0P^2d_0 = gkPd_0P^2d_0 = glP^4e_0 = gmP^4d_0 = gPd_0Pe_0Pj = rP^4u = i^2P^2u = iuP^2i = jPe_0^3 = kPd_0Pe_0^2 = lPd_0^2Pe_0 = mPd_0^3 = mPe_0P^3e_0 = mP^2e_0^2$
- continued

Stem 101 continued

- 34 (01)  $d_0^2 i P^3 j = d_0^2 P j P^2 i = d_0 r P^5 e_0 = d_0 i^2 P^3 e_0 = d_0 i j P^3 d_0 =$   
 $d_0 i P d_0 P^2 j = d_0 i P e_0 P^2 i = d_0 i P j P^2 d_0 = d_0 j P d_0 P^2 i = d_0 k P^4 j =$   
 $d_0 l P^4 i = d_0 z P^4 d_0 = e_0 r P^5 d_0 = e_0 i^2 P^3 d_0 = e_0 i P d_0 P^2 i =$   
 $e_0 j P^4 j = e_0 k P^4 i = e_0 P j P^3 j = e_0 P^2 j^2 = g i P^4 j = g j P^4 i =$   
 $g P^2 i P^2 j = r P d_0 P^4 e_0 = r P e_0 P^4 d_0 = r P^2 d_0 P^3 e_0 = r P^2 e_0 P^3 d_0 =$   
 $i^2 P d_0 P^2 e_0 = i^2 P e_0 P^2 d_0 = i j P d_0 P^2 d_0 = i k P^4 e_0 = i l P^4 d_0 =$   
 $i P d_0^2 P j = j^2 P^4 e_0 = j k P^4 d_0 = j P e_0 P^3 j = j P j P^3 e_0 =$   
 $j P^2 e_0 P^2 j = k P d_0 P^3 j = k P j P^3 d_0 = k P^2 d_0 P^2 j = k P^2 e_0 P^2 i =$   
 $l P^2 d_0 P^2 i = m P^5 j = P d_0 z P^3 d_0 = P e_0 P j P^2 j = z P^2 d_0^2 =$   
 $P j^2 P^2 e_0$
- (11)  $P^4 x_{18,20}$
- 35 (1)  $h_0 P^4 x_{18,20}$
- 36 (1)  $h_0^2 P^4 x_{18,20}$
- 37 (10)  $d_0 P^6 u = P d_0 P^5 u = u P^6 d_0 = P^2 d_0 P^4 u = P u P^5 d_0 = P^3 d_0 P^3 u =$   
 $P^2 u P^4 d_0$
- (01)  $h_0^3 P^4 x_{18,20}$
- (11)  $r P^6 i = i^2 P^4 i = i P^2 i^2$
- 38 (1)  $h_0^4 P^4 x_{18,20} = h_0 r P^6 i = h_0 i^2 P^4 i = h_0 i P^2 i^2$
- 39 (1)  $h_0^5 P^4 x_{18,20} = h_0^2 r P^6 i = h_0^2 i^2 P^4 i = h_0^2 i P^2 i^2 = h_3 i P^6 i = h_3 P^2 i P^4 i$

Stem 102

- 6 (1)  $h_1h_6e_1 = h_3h_6d_1$
- 8 (100)  $h_3x_{7,79}$   
(010)  $h_1h_6y = h_2h_6t = h_3h_6q = h_6c_1g$   
(001)  $h_1x_{7,88} = h_2x_{7,84}$   
(011)  $h_2x_{7,83} = h_4x_{7,74}$
- 9 (1)  $h_0h_3x_{7,79} = h_1x_{8,93} = c_2A' = f_1H_1$
- 10 (100)  $h_6u$   
(010)  $g_2D_2$   
(001)  $h_1h_3x_{8,80} = h_2x_{9,86}$
- 11 (1)  $h_0g_2D_2 = h_3x_{10,73}$
- 12 (1)  $h_0^2g_2D_2 = h_0h_3x_{10,73} = h_1g_2Q_2 = h_3e_1Q_2 = h_3xD_2 = c_2X_1 = f_1x_{8,32} = yA''$
- 13 (01)  $h_6d_0Pe_0 = h_6e_0Pd_0$   
(11)  $g^2H_1 = tx_{7,40}$
- 14 (10)  $x_{14,74}$   
(01)  $h_0h_6d_0Pe_0 = h_0h_6e_0Pd_0 = h_2^2x_{12,64} = h_2h_6d_0Pd_0 = h_5x_{13,34} = h_6d_0^2Ph_2 = h_6gP^2h_2$
- 15 (1)  $x_{15,65}$
- 16 (100)  $g^2x_{8,33} = mx_{9,39} = Q_2w$   
(010)  $h_6P^2i$   
(001)  $h_0x_{15,65} = Ph_2x_{11,61}$
- 17 (10)  $h_0h_6P^2i$   
(01)  $h_0^2x_{15,65} = h_0Ph_2x_{11,61} = h_1Px_{12,60} = Ph_1x_{12,60} = B_1Q_1 = B_2R_1$
- 18 (10)  $e_0gB_{23} = g^2x_{10,27} = g^2x_{10,28} = vB_4$   
(01)  $h_0^2h_6P^2i = h_1h_6P^3d_0 = h_4x_{17,50} = h_6d_0P^3h_1 = h_6Ph_1P^2d_0 = h_6Pd_0P^2h_1 = c_0x_{15,56}$
- 19 (10)  $x_{19,58}$   
(01)  $h_1x_{18,63}$
- 20 (10)  $d_0x_{16,48} = e_0x_{16,42} = gx_{16,38}$   
(01)  $h_0x_{19,58}$
- 21 (100)  $e_0g^2w = e_0grm = g^3v = g^2rl = r^2v = lm^2$   
(010)  $d_0^3B_4 = d_0e_0x_{13,35} = d_0gP^2D_1 = d_0iB_{23} = d_0jx_{10,27} = d_0jx_{10,28} = d_0kB_{21} = d_0lQ_1 = d_0mx' = e_0^2P^2D_1 = e_0gR_2 = e_0ix_{10,27} = e_0ix_{10,28} = e_0jB_{21} = e_0kQ_1 = e_0lx' = e_0Pe_0B_4 = giB_{21} = gjQ_1 = gkx' = gPd_0B_4$   
(001)  $h_0^2x_{19,58}$
- 22 (1)  $h_0^3x_{19,58} = h_3x_{21,43}$
- 23 (01)  $h_0^4x_{19,58} = h_0h_3x_{21,43}$   
(11)  $ix_{16,35} = jx_{16,32}$

continued

Stem 102 continued

24 (100)  $d_0^3 g^3 = d_0^3 r^2 = d_0^2 e_0^2 g^2 = d_0^2 k w = d_0^2 l v = d_0^2 m u = d_0 e_0^4 g = d_0 e_0 r z =$   
 $d_0 e_0 j w = d_0 e_0 k v = d_0 e_0 l u = d_0 g i w = d_0 g j v = d_0 g k u = d_0 r i m =$   
 $d_0 r j l = d_0 r k^2 = e_0^6 = e_0^2 i w = e_0^2 j v = e_0^2 k u = e_0 g^3 P e_0 = e_0 g i v =$   
 $e_0 g j u = e_0 r^2 P e_0 = e_0 r i l = e_0 r j k = e_0 m P v = g^4 P d_0 = g^2 i u =$   
 $g r^2 P d_0 = g r i k = g r j^2 = g l P v = g m P u = g z^2 = j m z = k l z =$   
 $l P e_0 w = m P d_0 w = m P e_0 v$

(010)  $r P^2 Q_1 = i^2 Q_1 = i j x' = B_4 P^2 j$

(001)  $h_0^5 x_{19,58} = h_0^2 h_3 x_{21,43} = h_0 i x_{16,35} = h_0 j x_{16,32} = h_2 i x_{16,32} =$   
 $P^2 h_2 x_{15,41}$

(011)  $d_0 i R_2 = k P R_2 = l R_1 = P d_0 x_{16,37} = P e_0 x_{16,33} = P j P^2 D_1$

25 (10)  $h_0 r P^2 Q_1 = h_0 i^2 Q_1 = h_0 i j x' = h_0 B_4 P^2 j = h_1^2 x' Q =$   
 $h_1^2 x' P u = h_1 P h_1 u x' = h_1 q x_{18,20} = h_1 B_1 P^2 u = h_1 P^2 h_1 x_{15,42} =$   
 $h_1 P^2 h_1 x_{15,43} = h_2 r x_{18,20} = h_2 i^2 x' = h_2 B_4 P^2 i = h_3 P^2 x_{16,35} =$   
 $D_3 P^5 h_1 = P h_1^2 x_{15,42} = P h_1^2 x_{15,43} = P h_1 B_1 Q = P h_1 B_1 P u =$   
 $r P^2 h_2 x' = q P^2 h_1 x' = i P^2 h_2 B_4 = B_1 P^2 h_1 u = P D_3 P^4 h_1 =$   
 $X_1 P^3 e_0 = P^2 D_3 P^3 h_1$

(01)  $h_0^6 x_{19,58} = h_0^3 h_3 x_{21,43} = h_0^2 i x_{16,35} = h_0^2 j x_{16,32} = h_0 h_2 i x_{16,32} =$   
 $h_0 P^2 h_2 x_{15,41} = h_1 P e_0 x_{16,32} = e_0 P h_1 x_{16,32} = P^2 e_0 W_1$

(11)  $h_0 d_0 i R_2 = h_0 k P R_2 = h_0 l R_1 = h_0 P d_0 x_{16,37} = h_0 P e_0 x_{16,33} =$   
 $h_0 P j P^2 D_1 = h_1 d_0 P x_{16,35} = h_1 P d_0 x_{16,35} = h_2 j P R_2 = h_2 k R_1 =$   
 $h_2 P d_0 x_{16,33} = h_2 P j R_2 = c_0 x_{22,39} = d_0 f_0 R_1 = d_0 P h_1 x_{16,35} =$   
 $d_0 P h_2 x_{16,33} = d_0 R_1 P j = P h_2 i P^2 D_1 = P h_2 j R_2 = i P e_0 R_1 =$   
 $j P d_0 R_1 = P^2 h_1 x_{16,42}$

27 (1)  $d_0^5 l = d_0^4 e_0 k = d_0^4 g j = d_0^3 e_0^2 j = d_0^3 e_0 g i = d_0^3 m P e_0 = d_0^2 e_0^3 i =$   
 $d_0^2 e_0 l P e_0 = d_0^2 e_0 m P d_0 = d_0^2 g^2 P j = d_0^2 g k P e_0 = d_0^2 g l P d_0 =$   
 $d_0 e_0^2 g P j = d_0 e_0^2 k P e_0 = d_0 e_0^2 l P d_0 = d_0 e_0 g j P e_0 = d_0 e_0 g k P d_0 =$   
 $d_0 g^2 i P e_0 = d_0 g^2 j P d_0 = d_0 g m P^2 e_0 = d_0 r P^2 v = d_0 i^2 v = d_0 i j u =$   
 $d_0 z P u = e_0^4 P j = e_0^3 j P e_0 = e_0^3 k P d_0 = e_0^2 g i P e_0 = e_0^2 g j P d_0 =$   
 $e_0^2 m P^2 e_0 = e_0 g^2 i P d_0 = e_0 g l P^2 e_0 = e_0 g m P^2 d_0 = e_0 r P^2 u =$   
 $e_0 i^2 u = e_0 m P e_0^2 = g^3 P^2 j = g^2 k P^2 e_0 = g^2 l P^2 d_0 = g l P e_0^2 =$   
 $g m P d_0 P e_0 = r^2 P^2 j = r i^2 j = r P d_0 P v = r P e_0 P u = r u P^2 e_0 =$   
 $r v P^2 d_0 = i k P v = i l P u = i w P j = j^2 P v = j k P u = j v P j =$   
 $k u P j = P d_0 u z$

continued

Stem 102 continued

- 30 (100)  $d_0P^4Q_1 = Pd_0P^3Q_1 = Q_1P^4d_0 = P^2d_0P^2Q_1 = PQ_1P^3d_0$   
 (010)  $uP^3u = PuP^2u$   
 (110)  $P^2e_0x_{18,20}$   
 (001)  $h_1Ph_1P^2x_{16,32} = h_1P^3h_1x_{16,32} = Ph_1P^2h_1x_{16,32} = X_1P^5h_1 =$   
 $QP^2u = W_1P^4h_1$   
 (101)  $e_0P^4x' = x'P^4e_0$   
 (011)  $d_0^4i^2 = d_0^3rP^2d_0 = d_0^3jPj = d_0^2e_0iPj = d_0^2rPd_0^2 = d_0^2ijPe_0 =$   
 $d_0^2ikPd_0 = d_0^2j^2Pd_0 = d_0^2lP^2j = d_0^2mP^2i = d_0^2zP^2e_0 =$   
 $d_0e_0rP^3e_0 = d_0e_0i^2Pe_0 = d_0e_0ijPd_0 = d_0e_0kP^2j = d_0e_0lP^2i =$   
 $d_0e_0zP^2d_0 = d_0grP^3d_0 = d_0gi^2Pd_0 = d_0gjP^2j = d_0gkP^2i =$   
 $d_0gPj^2 = d_0rPe_0P^2e_0 = d_0ilP^2e_0 = d_0imP^2d_0 = d_0jkP^2e_0 =$   
 $d_0jlP^2d_0 = d_0k^2P^2d_0 = d_0kPe_0Pj = d_0lPd_0Pj = d_0Pd_0Pe_0z =$   
 $e_0^2rP^3d_0 = e_0^2i^2Pd_0 = e_0^2jP^2j = e_0^2kP^2i = e_0^2Pj^2 = e_0giP^2j =$   
 $e_0gjP^2i = e_0rPd_0P^2e_0 = e_0rPe_0P^2d_0 = e_0ikP^2e_0 = e_0ilP^2d_0 =$   
 $e_0j^2P^2e_0 = e_0jkP^2d_0 = e_0jPe_0Pj = e_0kPd_0Pj = e_0mP^3j =$   
 $e_0Pd_0^2z = g^2iP^2i = grPd_0P^2d_0 = gijP^2e_0 = gikP^2d_0 =$   
 $giPe_0Pj = gj^2P^2d_0 = gjPd_0Pj = glP^3j = gzP^3e_0 = rPd_0Pe_0^2 =$   
 $ikPe_0^2 = ilPd_0Pe_0 = imPd_0^2 = j^2Pe_0^2 = jkPd_0Pe_0 = jlPd_0^2 =$   
 $jmP^3e_0 = k^2Pd_0^2 = klP^3e_0 = kmP^3d_0 = l^2P^3d_0 = mPe_0P^2j =$   
 $mPjP^2e_0$   
 31 (1)  $h_0d_0P^4Q_1 = h_0e_0P^4x' = h_0Pd_0P^3Q_1 = h_0x'P^4e_0 =$   
 $h_0Q_1P^4d_0 = h_0P^2d_0P^2Q_1 = h_0P^2e_0x_{18,20} = h_0PQ_1P^3d_0 =$   
 $h_2d_0P^4x' = h_2x'P^4d_0 = h_2P^2d_0x_{18,20} = d_0P^2h_2x_{18,20} =$   
 $d_0x'P^4h_2 = Ph_2Pd_0x_{18,20} = Ph_2x'P^3d_0 = B_2P^5d_0 =$   
 $Pd_0x'P^3h_2 = P^2h_2x'P^2d_0 = B_{21}P^5h_2$   
 32 (1)  $h_0^2d_0P^4Q_1 = h_0^2e_0P^4x' = h_0^2Pd_0P^3Q_1 = h_0^2x'P^4e_0 =$   
 $h_0^2Q_1P^4d_0 = h_0^2P^2d_0P^2Q_1 = h_0^2P^2e_0x_{18,20} = h_0^2PQ_1P^3d_0 =$   
 $h_0h_2d_0P^4x' = h_0h_2x'P^4d_0 = h_0h_2P^2d_0x_{18,20} = h_0d_0P^2h_2x_{18,20} =$   
 $h_0d_0x'P^4h_2 = h_0Ph_2Pd_0x_{18,20} = h_0Ph_2x'P^3d_0 = h_0B_2P^5d_0 =$   
 $h_0Pd_0x'P^3h_2 = h_0P^2h_2x'P^2d_0 = h_0B_{21}P^5h_2 = h_2^2P^5Q_1 =$   
 $h_2Ph_2P^4Q_1 = h_2P^2h_2P^3Q_1 = h_2Q_1P^5h_2 = h_2P^3h_2P^2Q_1 =$   
 $h_2PQ_1P^4h_2 = Ph_2^2P^3Q_1 = Ph_2P^2h_2P^2Q_1 = Ph_2Q_1P^4h_2 =$   
 $Ph_2P^3h_2PQ_1 = Pc_0x_{25,24} = P^2h_2^2PQ_1 = P^2h_2Q_1P^3h_2 =$   
 $P^3c_0R_1$

continued



Stem 102 continued

- 33 (01)  $d_0^2 P^4 v = d_0 e_0 P^4 u = d_0 r P^4 j = d_0 i^2 P^2 j = d_0 i j P^2 i = d_0 P d_0 P^3 v =$   
 $d_0 P e_0 P^3 u = d_0 u P^4 e_0 = d_0 v P^4 d_0 = d_0 P^2 d_0 P^2 v = d_0 P^2 e_0 P^2 u =$   
 $d_0 P u P^3 e_0 = d_0 P v P^3 d_0 = e_0 r P^4 i = e_0 i^2 P^2 i = e_0 P d_0 P^3 u =$   
 $e_0 u P^4 d_0 = e_0 P^2 d_0 P^2 u = e_0 P u P^3 d_0 = g P^5 v = r i P^4 e_0 =$   
 $r j P^4 d_0 = r P d_0 P^3 j = r P j P^3 d_0 = r P^2 d_0 P^2 j = r P^2 e_0 P^2 i =$   
 $i^3 P^2 e_0 = i^2 j P^2 d_0 = i^2 P d_0 P j = i k P^3 j = i z P^3 d_0 = j^2 P^3 j =$   
 $j P j P^2 j = k P j P^2 i = P d_0^2 P^2 v = P d_0 P e_0 P^2 u = P d_0 u P^3 e_0 =$   
 $P d_0 v P^3 d_0 = P d_0 z P^2 i = P d_0 P^2 d_0 P v = P d_0 P^2 e_0 P u =$   
 $P e_0 u P^3 d_0 = P e_0 P^2 d_0 P u = u P^2 d_0 P^2 e_0 = v P^2 d_0^2 = w P^5 e_0 = P j^3$
- (11)  $P^4 R_1$
- 34 (1)  $h_0 P^4 R_1$
- 35 (10)  $h_1 P^4 x_{18,20} = P^2 h_1 P^4 x' = x' P^6 h_1 = P^4 h_1 x_{18,20}$
- (01)  $h_0^2 P^4 R_1$
- 36 (10)  $d_0^4 P^4 d_0 = d_0^3 P d_0 P^3 d_0 = d_0^3 P^2 d_0^2 = d_0^2 e_0 P^5 e_0 = d_0^2 g P^5 d_0 =$   
 $d_0^2 P d_0^2 P^2 d_0 = d_0^2 P e_0 P^4 e_0 = d_0^2 P^2 e_0 P^3 e_0 = d_0 e_0^2 P^5 d_0 =$   
 $d_0 e_0 P d_0 P^4 e_0 = d_0 e_0 P e_0 P^4 d_0 = d_0 e_0 P^2 d_0 P^3 e_0 =$   
 $d_0 e_0 P^2 e_0 P^3 d_0 = d_0 g P d_0 P^4 d_0 = d_0 g P^2 d_0 P^3 d_0 = d_0 P d_0^4 =$   
 $d_0 P d_0 P e_0 P^3 e_0 = d_0 P d_0 P^2 e_0^2 = d_0 P e_0^2 P^3 d_0 = d_0 P e_0 P^2 d_0 P^2 e_0 =$   
 $e_0^2 P d_0 P^4 d_0 = e_0^2 P^2 d_0 P^3 d_0 = e_0 g P^6 e_0 = e_0 P d_0^2 P^3 e_0 =$   
 $e_0 P d_0 P e_0 P^3 d_0 = e_0 P d_0 P^2 d_0 P^2 e_0 = e_0 P e_0 P^2 d_0^2 = g^2 P^6 d_0 =$   
 $g P d_0^2 P^3 d_0 = g P d_0 P^2 d_0^2 = g P e_0 P^5 e_0 = g P^2 e_0 P^4 e_0 = g P^3 e_0^2 =$   
 $i P^5 u = P d_0^2 P e_0 P^2 e_0 = P d_0 P e_0^2 P^2 d_0 = P u P^4 i = P^2 i P^3 u$
- (01)  $h_0^3 P^4 R_1 = i P^4 Q = Q P^4 i$
- 37 (1)  $h_0^4 P^4 R_1 = h_0 i P^4 Q = h_0 Q P^4 i$
- 38 (1)  $h_0^5 P^4 R_1 = h_0^2 i P^4 Q = h_0^2 Q P^4 i$

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- 5 (1)  $h_6f_1$   
6 (1)  $h_0h_6f_1 = h_3h_6p$   
7 (10)  $x_{7,90}$   
(01)  $h_0^2h_6f_1 = h_0h_3h_6p = h_1^2h_6e_1 = h_1h_3h_6d_1$   
9 (1)  $h_3x_{8,83}$   
10 (1)  $h_0h_3x_{8,83}$   
11 (1)  $h_1h_6u$   
12 (10)  $x_{12,78}$   
(01)  $h_6d_0j = h_6e_0i$   
13 (1)  $h_0h_6d_0j = h_0h_6e_0i = h_0x_{12,78} = h_2h_6d_0i = h_6f_0Pd_0 = h_6Ph_2k$   
14 (1)  $h_0^2h_6d_0j = h_0^2h_6e_0i = h_0^2x_{12,78} = h_0h_2h_6d_0i = h_0h_6f_0Pd_0 = h_0h_6Ph_2k = h_1h_6d_0Pe_0 = h_1h_6e_0Pd_0 = h_2^2h_6Pj = h_2h_6Ph_2j = h_6d_0e_0Ph_1 = B_1Q_2$   
15 (10)  $e_0gx_{7,40} = g^2x_{7,34} = tx_{9,39} = D_2w = A'v = Av = mG_{21} = Q_2N$   
(01)  $h_1x_{14,74}$   
19 (1)  $gx_{15,41}$   
20 (10)  $d_0rB_{21} = d_0kB_4 = e_0rQ_1 = e_0jB_4 = grx' = giB_4 = lx_{13,35} = mP^2D_1 = zx_{10,27} = zx_{10,28}$   
(01)  $h_1^2x_{18,63} = Ph_1x_{15,56}$   
22 (1)  $d_0x_{18,50}$   
23 (10)  $d_0^2g^2m = d_0^2rw = d_0e_0^2gm = d_0e_0g^2l = d_0e_0rv = d_0g^3k = d_0gru = d_0r^2k = e_0^4m = e_0^3gl = e_0^2g^2k = e_0^2ru = e_0g^3j = e_0r^2j = e_0wz = g^4i = gr^2i = gvz = rlz = imw = jlw = jmv = k^2w = klv = kmu = l^2u$   
(01)  $rPR_2 = ix_{16,37} = jx_{16,33} = uPQ_1 = x'Pv = Q_1Pu$   
25 (1)  $P^2x_{17,50}$   
26 (10)  $d_0^2Pd_0x' = d_0e_0P^2Q_1 = d_0Pe_0PQ_1 = d_0Q_1P^2e_0 = d_0B_{21}P^2d_0 = e_0Pd_0PQ_1 = e_0x'P^2e_0 = e_0Q_1P^2d_0 = gx'P^2d_0 = Pd_0^2B_{21} = Pd_0Pe_0Q_1 = Pe_0^2x' = x_{10,27}P^3e_0 = x_{10,28}P^3e_0 = B_{23}P^3d_0$   
(01)  $d_0^4e_0r = d_0^3gz = d_0^3jm = d_0^3kl = d_0^2e_0^2z = d_0^2e_0im = d_0^2e_0jl = d_0^2e_0k^2 = d_0^2grPe_0 = d_0^2gil = d_0^2gjk = d_0e_0^2rPe_0 = d_0e_0^2il = d_0e_0^2jk = d_0e_0grPd_0 = d_0e_0gik = d_0e_0gj^2 = d_0g^2ij = d_0gmPj = d_0kmPe_0 = d_0l^2Pe_0 = d_0lmPd_0 = d_0uPv = d_0vPu = e_0^3rPd_0 = e_0^3ik = e_0^3j^2 = e_0^2gij = e_0^2mPj = e_0g^2i^2 = e_0glPj = e_0gPe_0z = e_0jmPe_0 = e_0klPe_0 = e_0kmPd_0 = e_0l^2Pd_0 = e_0uPu = g^2rP^2e_0 = g^2kPj = g^2Pd_0z = gimPe_0 = gjlPe_0 = gjmPd_0 = gk^2Pe_0 = gklPd_0 = riPv = rjPu = ruPj = iuz = m^2P^2e_0 = Pd_0uv = Pe_0u^2 = wP^2v$   
(11)  $d_0gx_{18,20} = e_0^2x_{18,20}$

continued

Stem 103continued

$$\begin{aligned}
27 \quad (1) \quad & h_0 d_0^2 P d_0 x' = h_0 d_0 e_0 P^2 Q_1 = h_0 d_0 g x_{18,20} = h_0 d_0 P e_0 P Q_1 = \\
& h_0 d_0 Q_1 P^2 e_0 = h_0 d_0 B_{21} P^2 d_0 = h_0 e_0^2 x_{18,20} = h_0 e_0 P d_0 P Q_1 = \\
& h_0 e_0 x' P^2 e_0 = h_0 e_0 Q_1 P^2 d_0 = h_0 g x' P^2 d_0 = h_0 P d_0^2 B_{21} = \\
& h_0 P d_0 P e_0 Q_1 = h_0 P e_0^2 x' = h_0 x_{10,27} P^3 e_0 = h_0 x_{10,28} P^3 e_0 = \\
& h_0 B_{23} P^3 d_0 = h_2 d_0^2 P^2 Q_1 = h_2 d_0 e_0 x_{18,20} = h_2 d_0 P d_0 P Q_1 = \\
& h_2 d_0 x' P^2 e_0 = h_2 d_0 Q_1 P^2 d_0 = h_2 e_0 x' P^2 d_0 = h_2 g P^3 Q_1 = \\
& h_2 P d_0^2 Q_1 = h_2 P d_0 P e_0 x' = h_2 B_{21} P^3 e_0 = h_2 x_{10,27} P^3 d_0 = \\
& h_2 x_{10,28} P^3 d_0 = h_4 P^4 Q_1 = c_0 P^2 x_{16,35} = d_0^2 P h_2 P Q_1 = \\
& d_0^2 P^2 h_2 Q_1 = d_0 e_0 P^2 h_2 x' = d_0 P h_2 P d_0 Q_1 = d_0 P h_2 P e_0 x' = \\
& d_0 B_2 P^3 e_0 = d_0 x_{10,27} P^3 h_2 = d_0 x_{10,28} P^3 h_2 = e_0 P h_2 P d_0 x' = \\
& e_0 B_2 P^3 d_0 = e_0 B_{21} P^3 h_2 = g P h_2 P^2 Q_1 = g P^2 h_2 P Q_1 = \\
& g Q_1 P^3 h_2 = P h_1 x_{22,39} = P h_2 B_{21} P^2 e_0 = P h_2 x_{10,27} P^2 d_0 = \\
& P h_2 x_{10,28} P^2 d_0 = P c_0 P x_{16,35} = B_2 P d_0 P^2 e_0 = B_2 P e_0 P^2 d_0 = \\
& Q_2 P^4 d_0 = P d_0 P^2 h_2 x_{10,27} = P d_0 P^2 h_2 x_{10,28} = P e_0 P^2 h_2 B_{21} = \\
& P^2 c_0 x_{16,35} \\
28 \quad (1) \quad & P^3 x_{16,35} \\
29 \quad (100) \quad & P j x_{18,20} \\
(010) \quad & d_0^4 P u = d_0^3 P d_0 u = d_0^2 e_0 P^2 v = d_0^2 g P^2 u = d_0^2 r i P d_0 = d_0^2 i^2 k = \\
& d_0^2 i j^2 = d_0^2 P e_0 P v = d_0^2 v P^2 e_0 = d_0^2 w P^2 d_0 = d_0^2 z P j = d_0 e_0^2 P^2 u = \\
& d_0 e_0 r P^2 j = d_0 e_0 i^2 j = d_0 e_0 P d_0 P v = d_0 e_0 P e_0 P u = d_0 e_0 u P^2 e_0 = \\
& d_0 e_0 v P^2 d_0 = d_0 g r P^2 i = d_0 g i^3 = d_0 g P d_0 P u = d_0 g u P^2 d_0 = \\
& d_0 r j P^2 e_0 = d_0 r k P^2 d_0 = d_0 r P e_0 P j = d_0 i l P j = d_0 i P e_0 z = \\
& d_0 j k P j = d_0 j P d_0 z = d_0 P d_0^2 w = d_0 P d_0 P e_0 v = d_0 P e_0^2 u = \\
& e_0^2 r P^2 i = e_0^2 i^3 = e_0^2 P d_0 P u = e_0^2 u P^2 d_0 = e_0 g P^3 v = e_0 r i P^2 e_0 = \\
& e_0 r j P^2 d_0 = e_0 r P d_0 P j = e_0 i k P j = e_0 i P d_0 z = e_0 j^2 P j = \\
& e_0 P d_0^2 v = e_0 P d_0 P e_0 u = e_0 w P^3 e_0 = g^2 P^3 u = g r i P^2 d_0 = g i j P j = \\
& g P d_0^2 u = g P e_0 P^2 v = g v P^3 e_0 = g w P^3 d_0 = g z P^2 j = g P^2 e_0 P v = \\
& r i P e_0^2 = r j P d_0 P e_0 = r k P d_0^2 = r l P^3 e_0 = r m P^3 d_0 = i^2 l P e_0 = \\
& i^2 m P d_0 = i j k P e_0 = i j l P d_0 = i k^2 P d_0 = j^3 P e_0 = j^2 k P d_0 = \\
& j m P^2 j = k l P^2 j = k m P^2 i = k z P^2 e_0 = l^2 P^2 i = l z P^2 d_0 = m P j^2 = \\
& P e_0 w P^2 e_0 \\
(110) \quad & i P^3 Q_1 = x' P^3 j = P Q_1 P^2 i \\
(001) \quad & h_0 P^3 x_{16,35} = P h_2 P^2 x_{16,32} = P^3 h_2 x_{16,32} \\
(101) \quad & e_0 x_{25,24} \\
(111) \quad & d_0 P^3 R_2 = P d_0 P^2 R_2 = P^2 d_0 P R_2 = P^2 e_0 R_1 = R_2 P^3 d_0
\end{aligned}$$

continued

Stem 103    continued

30 (10)  $h_0iP^3Q_1 = h_0x'P^3j = h_0Pjx_{18,20} = h_0PQ_1 P^2i = f_0P^4x' = Ph_2ix_{18,20} = Ph_2x'P^2i = ix'P^3h_2 = B_2P^4i = B_4P^5h_2$

(01)  $h_0^2P^3x_{16,35} = h_0Ph_2P^2x_{16,32} = h_0P^3h_2x_{16,32}$

(11)  $h_0d_0P^3R_2 = h_0e_0x_{25,24} = h_0Pd_0P^2R_2 = h_0P^2d_0PR_2 = h_0P^2e_0R_1 = h_0R_2 P^3d_0 = h_2d_0x_{25,24} = h_2P^2d_0R_1 = d_0P^2h_2R_1 = Ph_2Pd_0R_1 = R_1P^4e_0 = P^2D_1P^4h_2$

31 (10)  $h_0^2iP^3Q_1 = h_0^2x'P^3j = h_0^2Pjx_{18,20} = h_0^2PQ_1 P^2i = h_0f_0P^4x' = h_0Ph_2ix_{18,20} = h_0Ph_2x'P^2i = h_0ix'P^3h_2 = h_0B_2P^4i = h_0B_4P^5h_2 = h_1e_0P^4x' = h_1x'P^4e_0 = h_1P^2e_0x_{18,20} = e_0P^2h_1x_{18,20} = e_0x'P^4h_1 = Ph_1Pe_0x_{18,20} = Ph_1x'P^3e_0 = B_1P^5e_0 = Pe_0x'P^3h_1 = P^2h_1x'P^2e_0 = x_{10,28}P^5h_1$

(01)  $h_0^3P^3x_{16,35} = h_0^2Ph_2P^2x_{16,32} = h_0^2P^3h_2x_{16,32} = h_1^2Ph_1P^2x_{16,32} = h_1^2P^3h_1x_{16,32} = h_1Ph_1P^2h_1x_{16,32} = h_1uP^3u = h_1X_1P^5h_1 = h_1QP^2u = h_1PuP^2u = h_1W_1P^4h_1 = h_3P^5Q_1 = Ph_1^3x_{16,32} = Ph_1uP^2u = Ph_1X_1P^4h_1 = Ph_1P^3h_1W_1 = Ph_1Q^2 = Ph_1QPu = Ph_1Pu^2 = qP^4u = GP^6h_1 = P^2h_1^2W_1 = P^2h_1uQ = P^2h_1uPu = P^2h_1X_1P^3h_1 = u^2P^3h_1$

(11)  $h_0^2d_0P^3R_2 = h_0^2e_0x_{25,24} = h_0^2Pd_0P^2R_2 = h_0^2P^2d_0PR_2 = h_0^2P^2e_0R_1 = h_0^2R_2 P^3d_0 = h_0h_2d_0x_{25,24} = h_0h_2P^2d_0R_1 = h_0d_0P^2h_2R_1 = h_0Ph_2Pd_0R_1 = h_0R_1P^4e_0 = h_0P^2D_1P^4h_2 = h_1d_0P^4Q_1 = h_1Pd_0P^3Q_1 = h_1Q_1 P^4d_0 = h_1P^2d_0P^2Q_1 = h_1PQ_1 P^3d_0 = h_2^2P^4R_2 = h_2Ph_2P^3R_2 = h_2P^2h_2P^2R_2 = h_2R_1P^4d_0 = h_2P^3h_2PR_2 = h_2R_2 P^4h_2 = d_0Ph_1P^3Q_1 = d_0P^2h_1P^2Q_1 = d_0R_1P^4h_2 = d_0Q_1 P^4h_1 = d_0P^3h_1PQ_1 = Ph_1Pd_0P^2Q_1 = Ph_1Q_1 P^3d_0 = Ph_1P^2d_0PQ_1 = Ph_2^2P^2R_2 = Ph_2P^2h_2PR_2 = Ph_2R_1P^3d_0 = Ph_2P^3h_2R_2 = Pd_0P^2h_1PQ_1 = Pd_0R_1P^3h_2 = Pd_0Q_1 P^3h_1 = P^2h_1Q_1 P^2d_0 = P^2h_2^2R_2 = P^2h_2R_1P^2d_0 = x_{10,27}P^5h_1$

32 (1)  $d_0^5P^2e_0 = d_0^4e_0P^2d_0 = d_0^4Pd_0Pe_0 = d_0^3e_0Pd_0^2 = d_0^3gP^3e_0 = d_0^2e_0^2P^3e_0 = d_0^2e_0gP^3d_0 = d_0^2e_0Pe_0P^2e_0 = d_0^2gPd_0P^2e_0 = d_0^2gPe_0P^2d_0 = d_0^2Pe_0^3 = d_0e_0^3P^3d_0 = d_0e_0^2Pd_0P^2e_0 = d_0e_0^2Pe_0P^2d_0 = d_0e_0gPd_0P^2d_0 = d_0e_0Pd_0Pe_0^2 = d_0g^2P^4e_0 = d_0gPd_0^2Pe_0 = d_0iP^3v = d_0jP^3u = d_0uP^3j = d_0PjP^2u = d_0PuP^2j = d_0PvP^2i = e_0^3Pd_0P^2d_0 = e_0^2gP^4e_0 = e_0^2Pd_0^2Pe_0 = e_0g^2P^4d_0 = e_0gPd_0^3 = e_0gPe_0P^3e_0 = e_0gP^2e_0^2 = e_0iP^3u = e_0PuP^2i = g^2Pd_0P^3e_0 = g^2Pe_0P^3d_0 = g^2P^2d_0P^2e_0 = gPe_0^2P^2e_0 = riP^3j = rPjP^2i = i^3Pj = iPd_0P^2v = iPe_0P^2u = iuP^3e_0 = ivP^3d_0 = izP^2i = iP^2d_0Pv = iP^2e_0Pu = jPd_0P^2u = juP^3d_0 = jP^2d_0Pu = kP^4v = lP^4u = Pd_0uP^2j = Pd_0vP^2i = Pd_0PjPu = Pe_0uP^2i = uPjP^2d_0 = wP^4j$

continued

Stem 103 continued

$$\begin{aligned}
35 \quad (1) \quad & d_0^3 i P^3 d_0 = d_0^3 P d_0 P^2 i = d_0^2 e_0 P^4 j = d_0^2 g P^4 i = d_0^2 i P d_0 P^2 d_0 = \\
& d_0^2 j P^4 e_0 = d_0^2 k P^4 d_0 = d_0^2 P e_0 P^3 j = d_0^2 P j P^3 e_0 = d_0^2 P^2 e_0 P^2 j = \\
& d_0 e_0^2 P^4 i = d_0 e_0 i P^4 e_0 = d_0 e_0 j P^4 d_0 = d_0 e_0 P d_0 P^3 j = \\
& d_0 e_0 P j P^3 d_0 = d_0 e_0 P^2 d_0 P^2 j = d_0 e_0 P^2 e_0 P^2 i = d_0 g i P^4 d_0 = \\
& d_0 g P^2 d_0 P^2 i = d_0 i P d_0^3 = d_0 i P e_0 P^3 e_0 = d_0 i P^2 e_0^2 = d_0 j P d_0 P^3 e_0 = \\
& d_0 j P e_0 P^3 d_0 = d_0 j P^2 d_0 P^2 e_0 = d_0 k P d_0 P^3 d_0 = d_0 k P^2 d_0^2 = \\
& d_0 l P^5 e_0 = d_0 m P^5 d_0 = d_0 P d_0 P e_0 P^2 j = d_0 P d_0 P j P^2 e_0 = \\
& d_0 P e_0^2 P^2 i = d_0 P e_0 P j P^2 d_0 = e_0^2 i P^4 d_0 = e_0^2 P^2 d_0 P^2 i = e_0 g P^5 j = \\
& e_0 i P d_0 P^3 e_0 = e_0 i P e_0 P^3 d_0 = e_0 i P^2 d_0 P^2 e_0 = e_0 j P d_0 P^3 d_0 = \\
& e_0 j P^2 d_0^2 = e_0 k P^5 e_0 = e_0 l P^5 d_0 = e_0 P d_0^2 P^2 j = e_0 P d_0 P e_0 P^2 i = \\
& e_0 P d_0 P j P^2 d_0 = g i P d_0 P^3 d_0 = g i P^2 d_0^2 = g j P^5 e_0 = g k P^5 d_0 = \\
& g P d_0^2 P^2 i = g P e_0 P^4 j = g P j P^4 e_0 = g P^2 e_0 P^3 j = g P^2 j P^3 e_0 = \\
& i P d_0 P e_0 P^2 e_0 = i P e_0^2 P^2 d_0 = j P d_0^2 P^2 e_0 = j P d_0 P e_0 P^2 d_0 = \\
& k P d_0^2 P^2 d_0 = k P e_0 P^4 e_0 = k P^2 e_0 P^3 e_0 = l P d_0 P^4 e_0 = l P e_0 P^4 d_0 = \\
& l P^2 d_0 P^3 e_0 = l P^2 e_0 P^3 d_0 = m P d_0 P^4 d_0 = m P^2 d_0 P^3 d_0 = \\
& P d_0^2 P e_0 P j \\
36 \quad (1) \quad & h_1^2 P^4 x_{18,20} = h_1 P^2 h_1 P^4 x' = h_1 x' P^6 h_1 = h_1 P^4 h_1 x_{18,20} = \\
& P h_1^2 P^4 x' = P h_1 x' P^5 h_1 = P h_1 P^3 h_1 x_{18,20} = B_1 P^7 h_1 = \\
& P^2 h_1^2 x_{18,20} = P^2 h_1 x' P^4 h_1 = x' P^3 h_1^2
\end{aligned}$$

Stem 104

- 4 (1)  $h_6c_2$
- 5 (1)  $h_0h_6c_2$
- 6 (1)  $h_0^2h_6c_2 = h_1h_6f_1 = h_2h_6e_1$
- 8 (1)  $h_3x_{7,81}$
- 9 (10)  $x_{9,97}$   
(01)  $h_0h_3x_{7,81} = h_2x_{8,93}$
- 10 (1)  $h_0x_{9,97}$
- 11 (10)  $h_6z$   
(01)  $h_0^2x_{9,97}$   
(11)  $h_3x_{10,76}$
- 12 (100)  $x_{12,80}$   
(010)  $h_0h_6z = h_1^2h_6u = h_2x_{11,80} = h_6f_0i = h_6Ph_1q = h_6Ph_2r$   
(001)  $h_0^3x_{9,97}$   
(011)  $h_0h_3x_{10,76}$
- 13 (10)  $h_0x_{12,80} = h_1x_{12,78}$   
(01)  $h_0^4x_{9,97} = h_0^2h_3x_{10,76} = g_2B_4$
- 14 (1)  $h_0^5x_{9,97} = h_0^3h_3x_{10,76} = h_0g_2B_4 = h_3^2x_{12,55} = xx_{9,40} = rx_{8,51}$
- 16 (1)  $d_0x_{12,55}$
- 17 (10)  $h_6P^3e_0$   
(01)  $h_0d_0x_{12,55} = h_2Px_{12,60} = Ph_2x_{12,60} = B_2Q_1$
- 18 (100)  $gx_{14,46}$   
(010)  $x_{18,68}$   
(001)  $h_0^2d_0x_{12,55} = h_0h_2Px_{12,60} = h_0h_6P^3e_0 = h_0Ph_2x_{12,60} = h_0B_2Q_1 = h_2h_6P^3d_0 = h_2Ph_2x_{12,55} = h_2B_2x' = h_5PR_2 = h_6d_0P^3h_2 = h_6Ph_2P^2d_0 = h_6Pd_0P^2h_2$
- 19 (10)  $d_0rB_4 = e_0x_{15,47} = gx_{15,43} = uB_{23} = vx_{10,27} = vx_{10,28} = wB_{21}$   
(01)  $h_0x_{18,68} = h_2x_{18,63}$
- 20 (1)  $h_0^2x_{18,68} = h_0h_2x_{18,63}$
- 21 (10)  $e_0x_{17,50}$   
(01)  $h_0^3x_{18,68} = h_0^2h_2x_{18,63} = h_1^3x_{18,63} = h_1Ph_1x_{15,56}$   
(11)  $d_0x_{17,52}$
- 22 (10)  $d_0g^3r = d_0gm^2 = d_0r^3 = d_0w^2 = e_0^2g^2r = e_0^2m^2 = e_0glm = e_0vw = g^2km = g^2l^2 = guw = gv^2 = rkw = rlv = rmu$   
(01)  $d_0^3x_{10,27} = d_0^3x_{10,28} = d_0^2e_0B_{21} = d_0^2gQ_1 = d_0e_0^2Q_1 = d_0e_0gx' = d_0Pe_0B_{23} = e_0^3x' = e_0Pd_0B_{23} = e_0Pe_0x_{10,27} = e_0Pe_0x_{10,28} = g^2PQ_1 = gPd_0x_{10,27} = gPd_0x_{10,28} = gPe_0B_{21} = uR_2$
- 24 (1)  $d_0^2x_{16,32} = e_0Px_{16,35} = Pd_0x_{16,38} = Pe_0x_{16,35}$
- continued

Stem 104continued

$$\begin{aligned}
25 \quad (10) \quad & d_0^3 e_0 w = d_0^3 g v = d_0^3 r l = d_0^2 e_0^2 v = d_0^2 e_0 g u = d_0^2 e_0 r k = d_0^2 g r j = \\
& d_0^2 m z = d_0 e_0^3 u = d_0 e_0^2 r j = d_0 e_0 g r i = d_0 e_0 l z = d_0 g^2 P v = d_0 g k z = \\
& d_0 g P e_0 w = d_0 r m P e_0 = d_0 i l m = d_0 j k m = d_0 j l^2 = d_0 k^2 l = e_0^3 r i = \\
& e_0^2 g P v = e_0^2 k z = e_0^2 P e_0 w = e_0 g^2 P u = e_0 g j z = e_0 g P d_0 w = \\
& e_0 g P e_0 v = e_0 r l P e_0 = e_0 r m P d_0 = e_0 i k m = e_0 i l^2 = e_0 j^2 m = \\
& e_0 j k l = e_0 k^3 = g^2 r P j = g^2 i z = g^2 P d_0 v = g^2 P e_0 u = g r k P e_0 = \\
& g r l P d_0 = g i j m = g i k l = g j^2 l = g j k^2 = i u v = j u^2 = m^2 P j \\
(01) \quad & d_0^2 i x' = d_0 e_0 P R_2 = d_0 g R_1 = d_0 j P Q_1 = d_0 P d_0 P^2 D_1 = \\
& d_0 P e_0 R_2 = d_0 B_4 P^2 d_0 = d_0 Q_1 P j = e_0^2 R_1 = e_0 i P Q_1 = \\
& e_0 P d_0 R_2 = e_0 x' P j = i P d_0 B_{21} = i P e_0 Q_1 = j P d_0 Q_1 = j P e_0 x' = \\
& k P d_0 x' = l P^2 Q_1 = P d_0^2 B_4 = x_{10,27} P^2 j = x_{10,28} P^2 j = B_{23} P^2 i = \\
& P^2 e_0 x_{13,35}
\end{aligned}$$

(11)

 $m x_{18,20}$ 

$$\begin{aligned}
26 \quad (10) \quad & h_1 P^2 x_{17,50} = P h_1 x_{21,43} = P h_1 P x_{17,50} = P^2 h_1 x_{17,50} \\
(01) \quad & h_0 d_0^2 i x' = h_0 d_0 e_0 P R_2 = h_0 d_0 g R_1 = h_0 d_0 j P Q_1 = \\
& h_0 d_0 P d_0 P^2 D_1 = h_0 d_0 P e_0 R_2 = h_0 d_0 B_4 P^2 d_0 = h_0 d_0 Q_1 P j = \\
& h_0 e_0^2 R_1 = h_0 e_0 i P Q_1 = h_0 e_0 P d_0 R_2 = h_0 e_0 x' P j = h_0 i P d_0 B_{21} = \\
& h_0 i P e_0 Q_1 = h_0 j P d_0 Q_1 = h_0 j P e_0 x' = h_0 k P d_0 x' = h_0 l P^2 Q_1 = \\
& h_0 m x_{18,20} = h_0 P d_0^2 B_4 = h_0 x_{10,27} P^2 j = h_0 x_{10,28} P^2 j = \\
& h_0 B_{23} P^2 i = h_0 P^2 e_0 x_{13,35} = h_2 d_0^2 P R_2 = h_2 d_0 e_0 R_1 = \\
& h_2 d_0 i P Q_1 = h_2 d_0 P d_0 R_2 = h_2 d_0 x' P j = h_2 g P^2 R_2 = \\
& h_2 i P d_0 Q_1 = h_2 i P e_0 x' = h_2 j P d_0 x' = h_2 k P^2 Q_1 = h_2 l x_{18,20} = \\
& h_2 B_4 P^3 e_0 = h_2 B_{21} P^2 j = h_2 x_{10,27} P^2 i = h_2 x_{10,28} P^2 i = \\
& h_2 P^2 d_0 x_{13,35} = h_2 P^2 e_0 P^2 D_1 = h_4 P^3 R_2 = d_0^2 P h_2 R_2 = \\
& d_0^2 P d_0 R_1 = d_0 f_0 P^2 Q_1 = d_0 P h_2 i Q_1 = d_0 P h_2 j x' = \\
& d_0 B_2 P^2 j = d_0 P^2 h_2 x_{13,35} = e_0 f_0 x_{18,20} = e_0 P h_2 i x' = e_0 B_2 P^2 i = \\
& e_0 P^2 h_2 P^2 D_1 = e_0 B_4 P^3 h_2 = e_0 R_1 P^2 e_0 = f_0 P d_0 P Q_1 = \\
& f_0 x' P^2 e_0 = f_0 Q_1 P^2 d_0 = g P h_2 P R_2 = g P^2 h_2 R_2 = g R_1 P^2 d_0 = \\
& P h_2 k P Q_1 = P h_2 P d_0 x_{13,35} = P h_2 P e_0 P^2 D_1 = P h_2 B_4 P^2 e_0 = \\
& P h_2 B_{21} P j = D_2 P^4 d_0 = i B_2 P^2 e_0 = i P^2 h_2 x_{10,27} = i P^2 h_2 x_{10,28} = \\
& j B_2 P^2 d_0 = j P^2 h_2 B_{21} = k P^2 h_2 Q_1 = l P^2 h_2 x' = B_2 P d_0 P j = \\
& P e_0^2 R_1 = P e_0 P^2 h_2 B_4 = B_5 P^3 d_0 = P D_2 P^3 d_0
\end{aligned}$$

continued

Stem 104

27 (1)

continued

$$\begin{aligned}
& h_0^2 d_0^2 i x' = h_0^2 d_0 e_0 P R_2 = h_0^2 d_0 g R_1 = h_0^2 d_0 j P Q_1 = \\
& h_0^2 d_0 P d_0 P^2 D_1 = h_0^2 d_0 P e_0 R_2 = h_0^2 d_0 B_4 P^2 d_0 = h_0^2 d_0 Q_1 P j = \\
& h_0^2 e_0^2 R_1 = h_0^2 e_0 i P Q_1 = h_0^2 e_0 P d_0 R_2 = h_0^2 e_0 x' P j = h_0^2 i P d_0 B_{21} = \\
& h_0^2 i P e_0 Q_1 = h_0^2 j P d_0 Q_1 = h_0^2 j P e_0 x' = h_0^2 k P d_0 x' = h_0^2 l P^2 Q_1 = \\
& h_0^2 m x_{18,20} = h_0^2 P d_0^2 B_4 = h_0^2 x_{10,27} P^2 j = h_0^2 x_{10,28} P^2 j = \\
& h_0^2 B_{23} P^2 i = h_0^2 P^2 e_0 x_{13,35} = h_0 h_2 d_0^2 P R_2 = h_0 h_2 d_0 e_0 R_1 = \\
& h_0 h_2 d_0 i P Q_1 = h_0 h_2 d_0 P d_0 R_2 = h_0 h_2 d_0 x' P j = h_0 h_2 g P^2 R_2 = \\
& h_0 h_2 i P d_0 Q_1 = h_0 h_2 i P e_0 x' = h_0 h_2 j P d_0 x' = h_0 h_2 k P^2 Q_1 = \\
& h_0 h_2 l x_{18,20} = h_0 h_2 B_4 P^3 e_0 = h_0 h_2 B_{21} P^2 j = h_0 h_2 x_{10,27} P^2 i = \\
& h_0 h_2 x_{10,28} P^2 i = h_0 h_2 P^2 d_0 x_{13,35} = h_0 h_2 P^2 e_0 P^2 D_1 = \\
& h_0 h_4 P^3 R_2 = h_0 d_0^2 P h_2 R_2 = h_0 d_0^2 P d_0 R_1 = h_0 d_0 f_0 P^2 Q_1 = \\
& h_0 d_0 P h_2 i Q_1 = h_0 d_0 P h_2 j x' = h_0 d_0 B_2 P^2 j = h_0 d_0 P^2 h_2 x_{13,35} = \\
& h_0 e_0 f_0 x_{18,20} = h_0 e_0 P h_2 i x' = h_0 e_0 B_2 P^2 i = h_0 e_0 P^2 h_2 P^2 D_1 = \\
& h_0 e_0 B_4 P^3 h_2 = h_0 e_0 R_1 P^2 e_0 = h_0 f_0 P d_0 P Q_1 = h_0 f_0 x' P^2 e_0 = \\
& h_0 f_0 Q_1 P^2 d_0 = h_0 g P h_2 P R_2 = h_0 g P^2 h_2 R_2 = h_0 g R_1 P^2 d_0 = \\
& h_0 P h_2 k P Q_1 = h_0 P h_2 P d_0 x_{13,35} = h_0 P h_2 P e_0 P^2 D_1 = \\
& h_0 P h_2 B_4 P^2 e_0 = h_0 P h_2 B_{21} P j = h_0 D_2 P^4 d_0 = h_0 i B_2 P^2 e_0 = \\
& h_0 i P^2 h_2 x_{10,27} = h_0 i P^2 h_2 x_{10,28} = h_0 j B_2 P^2 d_0 = h_0 j P^2 h_2 B_{21} = \\
& h_0 k P^2 h_2 Q_1 = h_0 l P^2 h_2 x' = h_0 B_2 P d_0 P j = h_0 P e_0^2 R_1 = \\
& h_0 P e_0 P^2 h_2 B_4 = h_0 B_5 P^3 d_0 = h_0 P D_2 P^3 d_0 = h_1 d_0^2 P d_0 x' = \\
& h_1 d_0 e_0 P^2 Q_1 = h_1 d_0 g x_{18,20} = h_1 d_0 P e_0 P Q_1 = h_1 d_0 Q_1 P^2 e_0 = \\
& h_1 d_0 B_{21} P^2 d_0 = h_1 e_0^2 x_{18,20} = h_1 e_0 P d_0 P Q_1 = h_1 e_0 x' P^2 e_0 = \\
& h_1 e_0 Q_1 P^2 d_0 = h_1 g x' P^2 d_0 = h_1 P d_0^2 B_{21} = h_1 P d_0 P e_0 Q_1 = \\
& h_1 P e_0^2 x' = h_1 x_{10,27} P^3 e_0 = h_1 x_{10,28} P^3 e_0 = h_1 B_{23} P^3 d_0 = \\
& h_2^2 d_0^2 R_1 = h_2^2 e_0 P^2 R_2 = h_2^2 i P d_0 x' = h_2^2 j P^2 Q_1 = h_2^2 k x_{18,20} = \\
& h_2^2 P e_0 P R_2 = h_2^2 B_4 P^3 d_0 = h_2^2 Q_1 P^2 j = h_2^2 B_{21} P^2 i = h_2^2 P j P Q_1 = \\
& h_2^2 P^2 d_0 P^2 D_1 = h_2^2 P^2 e_0 R_2 = h_2 h_4 x_{25,24} = h_2 d_0 f_0 x_{18,20} = \\
& h_2 d_0 P h_2 i x' = h_2 d_0 B_2 P^2 i = h_2 d_0 P^2 h_2 P^2 D_1 = h_2 d_0 B_4 P^3 h_2 = \\
& h_2 d_0 R_1 P^2 e_0 = h_2 e_0 P h_2 P R_2 = h_2 e_0 P^2 h_2 R_2 = h_2 e_0 R_1 P^2 d_0 = \\
& h_2 f_0 x' P^2 d_0 = h_2 g P h_2 R_1 = h_2 P h_2 j P Q_1 = h_2 P h_2 P d_0 P^2 D_1 = \\
& h_2 P h_2 P e_0 R_2 = h_2 P h_2 B_4 P^2 d_0 = h_2 P h_2 Q_1 P j = h_2 i B_2 P^2 d_0 = \\
& h_2 i P^2 h_2 B_{21} = h_2 j P^2 h_2 Q_1 = h_2 k P^2 h_2 x' = h_2 P d_0 P e_0 R_1 = \\
& h_2 P d_0 P^2 h_2 B_4 = h_4 P^2 h_2 R_1 = c_0 i P R_2 = c_0 j R_1 = \\
& d_0^3 P h_1 x' = d_0^2 B_1 P^2 d_0 = d_0^2 P^2 h_1 B_{21} = d_0 e_0 P h_1 P Q_1 = \\
& d_0 e_0 P^2 h_1 Q_1 = d_0 e_0 P^2 h_2 R_1 = d_0 f_0 P^2 h_2 x' = d_0 g P^2 h_1 x' = \\
& d_0 P h_1 P d_0 B_{21} = d_0 P h_1 P e_0 Q_1 = d_0 P h_2^2 P^2 D_1 = d_0 P h_2 P e_0 R_1 = \\
& d_0 P h_2 P^2 h_2 B_4 = d_0 i B_2 P^2 h_2 = d_0 B_1 P d_0^2 = d_0 B_{23} P^3 h_1 = \\
& e_0^2 P^2 h_1 x' = e_0 P h_1 P d_0 Q_1 = e_0 P h_1 P e_0 x' = e_0 P h_2^2 R_2 = \\
& e_0 P h_2 P d_0 R_1 = e_0 B_1 P^3 e_0 = e_0 x_{10,27} P^3 h_1 = e_0 x_{10,28} P^3 h_1 = \\
& f_0 P h_2 P d_0 x' = f_0 B_2 P^3 d_0 = f_0 B_{21} P^3 h_2 = g P h_1 P d_0 x' = \\
& g B_1 P^3 d_0 = g B_{21} P^3 h_1 = P h_1 x_{10,27} P^2 e_0 = P h_1 x_{10,28} P^2 e_0 = \\
& P h_1 B_{23} P^2 d_0 = P h_2^2 i B_{21} = P h_2^2 j Q_1 = P h_2^2 k x' = P h_2^2 P d_0 B_4 = \\
& P h_2 i B_2 P d_0 = A P^5 h_2 = P c_0 i R_2 = k B_2 P^3 h_2 = B_1 P e_0 P^2 e_0 = \\
& P d_0 P^2 h_1 B_{23} = P e_0 P^2 h_1 x_{10,27} = P e_0 P^2 h_1 x_{10,28} = P A P^4 h_2 = \\
& P^2 c_0 x_{16,37}
\end{aligned}$$

continued



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$$\begin{aligned}
28 \quad (10) \quad & iP^2R_2 = PjR_1 = R_2 P^2i \\
(01) \quad & d_0^6g = d_0^5e_0^2 = d_0^3e_0gPe_0 = d_0^3g^2Pd_0 = d_0^3iu = d_0^2e_0^3Pe_0 = \\
& d_0^2e_0^2gPd_0 = d_0^2ri^2 = d_0^2jPv = d_0^2kPu = d_0^2vPj = d_0e_0^4Pd_0 = \\
& d_0e_0g^2P^2e_0 = d_0e_0iPv = d_0e_0jPu = d_0e_0uPj = d_0g^3P^2d_0 = \\
& d_0g^2Pe_0^2 = d_0giPu = d_0r^2P^2d_0 = d_0rjPj = d_0ijz = d_0iPd_0w = \\
& d_0iPe_0v = d_0jPd_0v = d_0jPe_0u = d_0kPd_0u = d_0lP^2v = \\
& d_0mP^2u = e_0^3gP^2e_0 = e_0^2g^2P^2d_0 = e_0^2gPe_0^2 = e_0^2iPu = \\
& e_0g^2Pd_0Pe_0 = e_0riPj = e_0i^2z = e_0iPd_0v = e_0iPe_0u = \\
& e_0jPd_0u = e_0kP^2v = e_0lP^2u = e_0wP^2j = g^3Pd_0^2 = giPd_0u = \\
& gjP^2v = gkP^2u = gvP^2j = gwP^2i = gPjPv = r^2Pd_0^2 = \\
& rijPe_0 = rikPd_0 = rj^2Pd_0 = rlP^2j = rmP^2i = rzP^2e_0 = \\
& i^3m = i^2jl = i^2k^2 = ij^2k = j^4 = jwP^2e_0 = kPe_0Pv = kvP^2e_0 = \\
& kwP^2d_0 = kzPj = lPd_0Pv = lPe_0Pu = luP^2e_0 = lvP^2d_0 = \\
& mPd_0Pu = muP^2d_0 = Pd_0z^2 = Pe_0wPj \\
29 \quad (1) \quad & h_0iP^2R_2 = h_0PjR_1 = h_0R_2 P^2i = h_1P^3x_{16,35} = f_0x_{25,24} = \\
& Ph_1P^2x_{16,35} = Ph_2iR_1 = P^2h_1Px_{16,35} = R_1P^3j = P^3h_1x_{16,35} = \\
& P^3h_2x_{16,33} \\
31 \quad (1) \quad & d_0^5Pj = d_0^4iPe_0 = d_0^4jPd_0 = d_0^3e_0iPd_0 = d_0^3gP^2j = d_0^3kP^2e_0 = \\
& d_0^3lP^2d_0 = d_0^2e_0^2P^2j = d_0^2e_0gP^2i = d_0^2e_0jP^2e_0 = d_0^2e_0kP^2d_0 = \\
& d_0^2e_0Pe_0Pj = d_0^2giP^2e_0 = d_0^2gjP^2d_0 = d_0^2gPd_0Pj = d_0^2jPe_0^2 = \\
& d_0^2kPd_0Pe_0 = d_0^2lPd_0^2 = d_0^2mP^3e_0 = d_0e_0^3P^2i = d_0e_0^2iP^2e_0 = \\
& d_0e_0^2jP^2d_0 = d_0e_0^2Pd_0Pj = d_0e_0giP^2d_0 = d_0e_0iPe_0^2 = \\
& d_0e_0jPd_0Pe_0 = d_0e_0kPd_0^2 = d_0e_0lP^3e_0 = d_0e_0mP^3d_0 = \\
& d_0g^2P^3j = d_0giPd_0Pe_0 = d_0gjPd_0^2 = d_0gkP^3e_0 = d_0glP^3d_0 = \\
& d_0lPe_0P^2e_0 = d_0mPd_0P^2e_0 = d_0mPe_0P^2d_0 = e_0^3iP^2d_0 = \\
& e_0^2gP^3j = e_0^2iPd_0Pe_0 = e_0^2jPd_0^2 = e_0^2kP^3e_0 = e_0^2lP^3d_0 = \\
& e_0giPd_0^2 = e_0gjP^3e_0 = e_0gkP^3d_0 = e_0gPe_0P^2j = e_0gPjP^2e_0 = \\
& e_0kPe_0P^2e_0 = e_0lPd_0P^2e_0 = e_0lPe_0P^2d_0 = e_0mPd_0P^2d_0 = \\
& g^2iP^3e_0 = g^2jP^3d_0 = g^2Pd_0P^2j = g^2Pe_0P^2i = g^2PjP^2d_0 = \\
& gjPe_0P^2e_0 = gkPd_0P^2e_0 = gkPe_0P^2d_0 = glPd_0P^2d_0 = \\
& gmP^4e_0 = gPe_0^2Pj = rP^4v = i^2P^2v = ijP^2u = iuP^2j = ivP^2i = \\
& iPjPu = juP^2i = kPe_0^3 = lPd_0Pe_0^2 = mPd_0^2Pe_0 = zP^3u
\end{aligned}$$

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$$\begin{aligned}
34 \quad (01) \quad & d_0^3 i P^2 i = d_0^2 r P^4 d_0 = d_0^2 i^2 P^2 d_0 = d_0^2 j P^3 j = d_0^2 P j P^2 j = \\
& d_0 e_0 i P^3 j = d_0 e_0 P j P^2 i = d_0 r P d_0 P^3 d_0 = d_0 r P^2 d_0^2 = d_0 i^2 P d_0^2 = \\
& d_0 i j P^3 e_0 = d_0 i k P^3 d_0 = d_0 i P e_0 P^2 j = d_0 i P j P^2 e_0 = d_0 j^2 P^3 d_0 = \\
& d_0 j P d_0 P^2 j = d_0 j P e_0 P^2 i = d_0 j P j P^2 d_0 = d_0 k P d_0 P^2 i = \\
& d_0 l P^4 j = d_0 m P^4 i = d_0 P d_0 P j^2 = d_0 z P^4 e_0 = e_0 r P^5 e_0 = \\
& e_0 i^2 P^3 e_0 = e_0 i j P^3 d_0 = e_0 i P d_0 P^2 j = e_0 i P e_0 P^2 i = e_0 i P j P^2 d_0 = \\
& e_0 j P d_0 P^2 i = e_0 k P^4 j = e_0 l P^4 i = e_0 z P^4 d_0 = g r P^5 d_0 = \\
& g i^2 P^3 d_0 = g i P d_0 P^2 i = g j P^4 j = g k P^4 i = g P j P^3 j = \\
& g P^2 j^2 = r P d_0^2 P^2 d_0 = r P e_0 P^4 e_0 = r P^2 e_0 P^3 e_0 = i^2 P e_0 P^2 e_0 = \\
& i j P d_0 P^2 e_0 = i j P e_0 P^2 d_0 = i k P d_0 P^2 d_0 = i l P^4 e_0 = i m P^4 d_0 = \\
& i P d_0 P e_0 P j = j^2 P d_0 P^2 d_0 = j k P^4 e_0 = j l P^4 d_0 = j P d_0^2 P j = \\
& k^2 P^4 d_0 = k P e_0 P^3 j = k P j P^3 e_0 = k P^2 e_0 P^2 j = l P d_0 P^3 j = \\
& l P j P^3 d_0 = l P^2 d_0 P^2 j = l P^2 e_0 P^2 i = m P^2 d_0 P^2 i = P d_0 z P^3 e_0 = \\
& P e_0 z P^3 d_0 = z P^2 d_0 P^2 e_0 \\
(11) \quad & P^6 Q_1 \\
35 \quad (1) \quad & h_0 P^6 Q_1 = h_2 P^4 x_{18,20} = P^2 h_2 P^4 x' = x' P^6 h_2 = P^4 h_2 x_{18,20} \\
36 \quad (1) \quad & h_0^2 P^6 Q_1 = h_0 h_2 P^4 x_{18,20} = h_0 P^2 h_2 P^4 x' = h_0 x' P^6 h_2 = \\
& h_0 P^4 h_2 x_{18,20}
\end{aligned}$$

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- 7 (1)  $x_{7,92}$   
8 (1)  $h_0x_{7,92} = g_2D_3$   
9 (1)  $x_{9,99}$   
10 (100)  $h_3^2x_{8,75} = g_2A$   
(001)  $h_0x_{9,99} = h_1x_{9,97} = h_6v$   
(111)  $g_2A'$   
11 (10)  $h_0h_3^2x_{8,75} = h_0g_2A = h_2g_2D_2 = h_3c_2Q_2 = h_3f_1D_2 = h_4x_{10,63} =$   
 $n_1y$   
(11)  $h_0g_2A'$   
13 (10)  $h_3^2x_{11,61} = g_2X_1 = xG_{21}$   
(01)  $h_1x_{12,80} = h_4x_{12,55} = c_0x_{10,76}$   
(11)  $h_6d_0^3 = h_6e_0Pe_0 = h_6gPd_0$   
14 (1)  $h_0h_3^2x_{11,61} = h_0h_6d_0^3 = h_0h_6e_0Pe_0 = h_0h_6gPd_0 = h_0g_2X_1 =$   
 $h_0xG_{21} = h_2h_6d_0Pe_0 = h_2h_6e_0Pd_0 = h_6d_0e_0Ph_2 = B_2Q_2$   
15 (10)  $x_{15,68}$   
(01)  $d_0x_{11,61}$   
16 (100)  $h_6P^2j$   
(010)  $h_0x_{15,68}$   
(001)  $h_0d_0x_{11,61} = h_2x_{15,65}$   
17 (100)  $h_0h_6P^2j = h_2h_6P^2i = h_6iP^2h_2$   
(010)  $h_0^2x_{15,68}$   
(001)  $h_0^2d_0x_{11,61} = h_0h_2x_{15,65} = h_1d_0x_{12,55} = h_2Ph_2x_{11,61} =$   
 $Ph_1x_{12,64} = B_1B_{21}$   
18 (10)  $g^2B_{23} = wB_4$   
(01)  $h_0^2h_6P^2j = h_0h_2h_6P^2i = h_0h_6iP^2h_2 = h_1h_6P^3e_0 = h_4x_{17,52} =$   
 $h_6e_0P^3h_1 = h_6Ph_1P^2e_0 = h_6Pe_0P^2h_1$   
19 (1)  $h_1x_{18,68}$   
20 (1)  $e_0x_{16,48} = gx_{16,42}$   
21 (10)  $g^3w = g^2rm = r^2w = m^3$   
(01)  $d_0^2e_0B_4 = d_0gx_{13,35} = d_0jB_{23} = d_0kx_{10,27} = d_0kx_{10,28} = d_0lB_{21} =$   
 $d_0mQ_1 = e_0^2x_{13,35} = e_0gP^2D_1 = e_0iB_{23} = e_0jx_{10,27} = e_0jx_{10,28} =$   
 $e_0kB_{21} = e_0lQ_1 = e_0mx' = g^2R_2 = gix_{10,27} = gix_{10,28} =$   
 $gjB_{21} = gkQ_1 = glx' = gPe_0B_4$   
23 (1)  $ix_{16,38} = jx_{16,35} = kx_{16,32} = Pd_0x_{15,41}$

continued

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$$24 \quad (01) \quad d_0^2 x_{16,33} = d_0 i P^2 D_1 = d_0 j R_2 = e_0 i R_2 = r P d_0 x' = i^2 B_{21} = \\ ij Q_1 = ik x' = i P d_0 B_4 = j^2 x' = l P R_2 = m R_1 = P e_0 x_{16,37} = \\ z P Q_1 = P j x_{13,35}$$

$$(11) \quad d_0^2 e_0 g^3 = d_0^2 e_0 r^2 = d_0^2 l w = d_0^2 m v = d_0 e_0^3 g^2 = d_0 e_0 k w = d_0 e_0 l v = \\ d_0 e_0 m u = d_0 g r z = d_0 g j w = d_0 g k v = d_0 g l u = d_0 r j m = d_0 r k l = \\ e_0^5 g = e_0^2 r z = e_0^2 j w = e_0^2 k v = e_0^2 l u = e_0 g i w = e_0 g j v = e_0 g k u = \\ e_0 r i m = e_0 r j l = e_0 r k^2 = g^4 P e_0 = g^2 i v = g^2 j u = g r^2 P e_0 = g r i l = \\ g r j k = g m P v = k m z = l^2 z = m P e_0 w$$

$$26 \quad (1) \quad P^2 x_{18,50}$$

$$27 \quad (10) \quad d_0^5 m = d_0^4 e_0 l = d_0^4 g k = d_0^3 e_0^2 k = d_0^3 e_0 g j = d_0^3 g^2 i = d_0^2 e_0^3 j = \\ d_0^2 e_0^2 g i = d_0^2 e_0 m P e_0 = d_0^2 g l P e_0 = d_0^2 g m P d_0 = d_0^2 r P u = d_0 e_0^4 i = \\ d_0 e_0^2 l P e_0 = d_0 e_0^2 m P d_0 = d_0 e_0 g^2 P j = d_0 e_0 g k P e_0 = d_0 e_0 g l P d_0 = \\ d_0 g^2 j P e_0 = d_0 g^2 k P d_0 = d_0 r P d_0 u = d_0 i^2 w = d_0 i j v = d_0 i k u = \\ d_0 j^2 u = d_0 z P v = e_0^3 g P j = e_0^3 k P e_0 = e_0^3 l P d_0 = e_0^2 g j P e_0 = \\ e_0^2 g k P d_0 = e_0 g^2 i P e_0 = e_0 g^2 j P d_0 = e_0 g m P^2 e_0 = e_0 r P^2 v = \\ e_0 i^2 v = e_0 i j u = e_0 z P u = g^3 i P d_0 = g^2 l P^2 e_0 = g^2 m P^2 d_0 = \\ g r P^2 u = g i^2 u = g m P e_0^2 = r^2 i P d_0 = r i^2 k = r i j^2 = r P e_0 P v = \\ r v P^2 e_0 = r w P^2 d_0 = r z P j = i l P v = i m P u = i z^2 = j k P v = \\ j l P u = j w P j = k^2 P u = k v P j = l u P j = P d_0 v z = P e_0 u z$$

$$(01) \quad h_0 P^2 x_{18,50} = h_1^2 P^2 x_{17,50} = h_1 P h_1 x_{21,43} = h_1 P h_1 P x_{17,50} = \\ h_1 P^2 h_1 x_{17,50} = P h_1^2 x_{17,50} = P h_2 x_{22,39} = P^3 h_1 x_{14,42}$$

$$30 \quad (10) \quad d_0 x' P^3 d_0 = e_0 P^4 Q_1 = g P^4 x' = P d_0 x' P^2 d_0 = P e_0 P^3 Q_1 = \\ Q_1 P^4 e_0 = B_{21} P^4 d_0 = P^2 e_0 P^2 Q_1 = P Q_1 P^3 e_0$$

$$(01) \quad d_0^4 i j = d_0^3 e_0 i^2 = d_0^3 r P^2 e_0 = d_0^3 k P j = d_0^3 P d_0 z = d_0^2 e_0 r P^2 d_0 = \\ d_0^2 e_0 j P j = d_0^2 g i P j = d_0^2 r P d_0 P e_0 = d_0^2 i k P e_0 = d_0^2 i l P d_0 = \\ d_0^2 j^2 P e_0 = d_0^2 j k P d_0 = d_0^2 m P^2 j = d_0 e_0^2 i P j = d_0 e_0 r P d_0^2 = \\ d_0 e_0 i j P e_0 = d_0 e_0 i k P d_0 = d_0 e_0 j^2 P d_0 = d_0 e_0 l P^2 j = d_0 e_0 m P^2 i = \\ d_0 e_0 z P^2 e_0 = d_0 g r P^3 e_0 = d_0 g i^2 P e_0 = d_0 g i j P d_0 = d_0 g k P^2 j = \\ d_0 g l P^2 i = d_0 g z P^2 d_0 = d_0 i m P^2 e_0 = d_0 j l P^2 e_0 = d_0 j m P^2 d_0 = \\ d_0 k^2 P^2 e_0 = d_0 k l P^2 d_0 = d_0 l P e_0 P j = d_0 m P d_0 P j = d_0 P e_0^2 z = \\ e_0^2 r P^3 e_0 = e_0^2 i^2 P e_0 = e_0^2 i j P d_0 = e_0^2 k P^2 j = e_0^2 l P^2 i = e_0^2 z P^2 d_0 = \\ e_0 g r P^3 d_0 = e_0 g i^2 P d_0 = e_0 g j P^2 j = e_0 g k P^2 i = e_0 g P j^2 = \\ e_0 r P e_0 P^2 e_0 = e_0 i l P^2 e_0 = e_0 i m P^2 d_0 = e_0 j k P^2 e_0 = e_0 j l P^2 d_0 = \\ e_0 k^2 P^2 d_0 = e_0 k P e_0 P j = e_0 l P d_0 P j = e_0 P d_0 P e_0 z = g^2 i P^2 j = \\ g^2 j P^2 i = g r P d_0 P^2 e_0 = g r P e_0 P^2 d_0 = g i k P^2 e_0 = g i l P^2 d_0 = \\ g j^2 P^2 e_0 = g j k P^2 d_0 = g j P e_0 P j = g k P d_0 P j = g m P^3 j = g P d_0^2 z = \\ r P e_0^3 = i l P e_0^2 = i m P d_0 P e_0 = j k P e_0^2 = j l P d_0 P e_0 = j m P d_0^2 = \\ k^2 P d_0 P e_0 = k l P d_0^2 = k m P^3 e_0 = l^2 P^3 e_0 = l m P^3 d_0 = u P^3 v = \\ v P^3 u = P u P^2 v = P v P^2 u$$

$$(11) \quad d_0 P d_0 x_{18,20}$$

continued

Stem 105continued

$$\begin{aligned}
31 \quad (1) \quad & h_0 d_0 P d_0 x_{18,20} = h_0 d_0 x' P^3 d_0 = h_0 e_0 P^4 Q_1 = h_0 g P^4 x' = \\
& h_0 P d_0 x' P^2 d_0 = h_0 P e_0 P^3 Q_1 = h_0 Q_1 P^4 e_0 = h_0 B_{21} P^4 d_0 = \\
& h_0 P^2 e_0 P^2 Q_1 = h_0 P Q_1 P^3 e_0 = h_2 d_0 P^4 Q_1 = h_2 e_0 P^4 x' = \\
& h_2 P d_0 P^3 Q_1 = h_2 x' P^4 e_0 = h_2 Q_1 P^4 d_0 = h_2 P^2 d_0 P^2 Q_1 = \\
& h_2 P^2 e_0 x_{18,20} = h_2 P Q_1 P^3 d_0 = d_0 P h_2 P^3 Q_1 = d_0 P^2 h_2 P^2 Q_1 = \\
& d_0 Q_1 P^4 h_2 = d_0 P^3 h_2 P Q_1 = e_0 P^2 h_2 x_{18,20} = e_0 x' P^4 h_2 = \\
& P h_2 P d_0 P^2 Q_1 = P h_2 P e_0 x_{18,20} = P h_2 x' P^3 e_0 = P h_2 Q_1 P^3 d_0 = \\
& P h_2 P^2 d_0 P Q_1 = B_2 P^5 e_0 = P d_0 P^2 h_2 P Q_1 = P d_0 Q_1 P^3 h_2 = \\
& P e_0 x' P^3 h_2 = P^2 h_2 x' P^2 e_0 = P^2 h_2 Q_1 P^2 d_0 = x_{10,27} P^5 h_2 = \\
& x_{10,28} P^5 h_2 \\
32 \quad (1) \quad & h_0^2 d_0 P d_0 x_{18,20} = h_0^2 d_0 x' P^3 d_0 = h_0^2 e_0 P^4 Q_1 = h_0^2 g P^4 x' = \\
& h_0^2 P d_0 x' P^2 d_0 = h_0^2 P e_0 P^3 Q_1 = h_0^2 Q_1 P^4 e_0 = h_0^2 B_{21} P^4 d_0 = \\
& h_0^2 P^2 e_0 P^2 Q_1 = h_0^2 P Q_1 P^3 e_0 = h_0 h_2 d_0 P^4 Q_1 = \\
& h_0 h_2 e_0 P^4 x' = h_0 h_2 P d_0 P^3 Q_1 = h_0 h_2 x' P^4 e_0 = h_0 h_2 Q_1 P^4 d_0 = \\
& h_0 h_2 P^2 d_0 P^2 Q_1 = h_0 h_2 P^2 e_0 x_{18,20} = h_0 h_2 P Q_1 P^3 d_0 = \\
& h_0 d_0 P h_2 P^3 Q_1 = h_0 d_0 P^2 h_2 P^2 Q_1 = h_0 d_0 Q_1 P^4 h_2 = \\
& h_0 d_0 P^3 h_2 P Q_1 = h_0 e_0 P^2 h_2 x_{18,20} = h_0 e_0 x' P^4 h_2 = \\
& h_0 P h_2 P d_0 P^2 Q_1 = h_0 P h_2 P e_0 x_{18,20} = h_0 P h_2 x' P^3 e_0 = \\
& h_0 P h_2 Q_1 P^3 d_0 = h_0 P h_2 P^2 d_0 P Q_1 = h_0 B_2 P^5 e_0 = \\
& h_0 P d_0 P^2 h_2 P Q_1 = h_0 P d_0 Q_1 P^3 h_2 = h_0 P e_0 x' P^3 h_2 = \\
& h_0 P^2 h_2 x' P^2 e_0 = h_0 P^2 h_2 Q_1 P^2 d_0 = h_0 x_{10,27} P^5 h_2 = \\
& h_0 x_{10,28} P^5 h_2 = h_0^2 d_0 P^4 x' = h_0^2 x' P^4 d_0 = h_0^2 P^2 d_0 x_{18,20} = \\
& h_2 d_0 P^2 h_2 x_{18,20} = h_2 d_0 x' P^4 h_2 = h_2 P h_2 P d_0 x_{18,20} = \\
& h_2 P h_2 x' P^3 d_0 = h_2 B_2 P^5 d_0 = h_2 P d_0 x' P^3 h_2 = h_2 P^2 h_2 x' P^2 d_0 = \\
& h_2 B_{21} P^5 h_2 = c_0 P^4 R_2 = d_0 P h_2^2 x_{18,20} = d_0 P h_2 x' P^3 h_2 = \\
& d_0 B_2 P^5 h_2 = d_0 P^2 h_2^2 x' = P h_2^2 x' P^2 d_0 = P h_2 B_2 P^4 d_0 = \\
& P h_2 P d_0 P^2 h_2 x' = P h_2 B_{21} P^4 h_2 = P c_0 P^3 R_2 = B_2 P d_0 P^4 h_2 = \\
& B_2 P^2 h_2 P^3 d_0 = B_2 P^2 d_0 P^3 h_2 = P^2 h_2 B_{21} P^3 h_2 = P^2 c_0 P^2 R_2 = \\
& R_2 P^4 c_0 = P^3 c_0 P R_2
\end{aligned}$$

continued

Stem 105 continued

$$\begin{aligned}
33 \quad (10) \quad & P^5 R_2 \\
(01) \quad & d_0^3 P^3 u = d_0^2 P d_0 P^2 u = d_0^2 u P^3 d_0 = d_0^2 P^2 d_0 P u = d_0 e_0 P^4 v = \\
& d_0 g P^4 u = d_0 r i P^3 d_0 = d_0 r P d_0 P^2 i = d_0 i^3 P d_0 = d_0 i j P^2 j = \\
& d_0 i k P^2 i = d_0 i P j^2 = d_0 j^2 P^2 i = d_0 P d_0^2 P u = d_0 P d_0 u P^2 d_0 = \\
& d_0 P e_0 P^3 v = d_0 v P^4 e_0 = d_0 w P^4 d_0 = d_0 z P^3 j = d_0 P^2 e_0 P^2 v = \\
& d_0 P v P^3 e_0 = e_0^2 P^4 u = e_0 r P^4 j = e_0 i^2 P^2 j = e_0 i j P^2 i = \\
& e_0 P d_0 P^3 v = e_0 P e_0 P^3 u = e_0 u P^4 e_0 = e_0 v P^4 d_0 = e_0 P^2 d_0 P^2 v = \\
& e_0 P^2 e_0 P^2 u = e_0 P u P^3 e_0 = e_0 P v P^3 d_0 = g r P^4 i = g i^2 P^2 i = \\
& g P d_0 P^3 u = g u P^4 d_0 = g P^2 d_0 P^2 u = g P u P^3 d_0 = r i P d_0 P^2 d_0 = \\
& r j P^4 e_0 = r k P^4 d_0 = r P e_0 P^3 j = r P j P^3 e_0 = r P^2 e_0 P^2 j = \\
& i^2 j P^2 e_0 = i^2 k P^2 d_0 = i^2 P e_0 P j = i j^2 P^2 d_0 = i j P d_0 P j = \\
& i l P^3 j = i z P^3 e_0 = j k P^3 j = j z P^3 d_0 = k P j P^2 j = l P j P^2 i = \\
& P d_0^3 u = P d_0 P e_0 P^2 v = P d_0 v P^3 e_0 = P d_0 w P^3 d_0 = P d_0 z P^2 j = \\
& P d_0 P^2 e_0 P v = P e_0^2 P^2 u = P e_0 u P^3 e_0 = P e_0 v P^3 d_0 = P e_0 z P^2 i = \\
& P e_0 P^2 d_0 P v = P e_0 P^2 e_0 P u = u P^2 e_0^2 = v P^2 d_0 P^2 e_0 = w P^2 d_0^2 = \\
& z P j P^2 d_0 \\
34 \quad (1) \quad & h_0 P^5 R_2 = h_2 P^4 R_1 = P^2 h_2 x_{25,24} = P^4 h_2 R_1 \\
35 \quad (1) \quad & h_0^2 P^5 R_2 = h_0 h_2 P^4 R_1 = h_0 P^2 h_2 x_{25,24} = h_0 P^4 h_2 R_1 = \\
& h_1 P^6 Q_1 = P h_1 P^5 Q_1 = P^2 h_1 P^4 Q_1 = R_1 P^6 h_2 = Q_1 P^6 h_1 = \\
& P^3 h_1 P^3 Q_1 = P Q_1 P^5 h_1 = P^4 h_1 P^2 Q_1
\end{aligned}$$

Stem 106

- 6 (1)  $C_1$
- 8 (1)  $h_3x_{7,84}$
- 9 (10)  $g_2H_1$   
(01)  $h_0h_3x_{7,84} = h_4x_{8,75}$
- 10 (01)  $h_1x_{9,99}$   
(11)  $h_3x_{9,86}$
- 12 (10)  $h_4x_{11,61}$   
(01)  $h_6d_0k = h_6e_0j = h_6gi$   
(11)  $h_3^2x_{10,65} = e_1G_{21} = g_2x_{8,32}$
- 13 (1)  $h_0h_4x_{11,61} = h_0h_6d_0k = h_0h_6e_0j = h_0h_6gi = h_2h_6d_0j =$   
 $h_2h_6e_0i = h_2x_{12,78} = h_6f_0Pe_0 = h_6Ph_2l = D_2B_2$
- 14 (10)  $x_{14,79}$   
(01)  $h_0^2h_4x_{11,61} = h_0^2h_6d_0k = h_0^2h_6e_0j = h_0^2h_6gi = h_0h_2h_6d_0j =$   
 $h_0h_2h_6e_0i = h_0h_2x_{12,78} = h_0h_6f_0Pe_0 = h_0h_6Ph_2l = h_0D_2B_2 =$   
 $h_1^2x_{12,80} = h_1h_4x_{12,55} = h_1h_6d_0^3 = h_1h_6e_0Pe_0 = h_1h_6gPd_0 =$   
 $h_1c_0x_{10,76} = h_2^2h_6d_0i = h_2h_6f_0Pd_0 = h_2h_6Ph_2k = h_6d_0f_0Ph_2 =$   
 $h_6d_0gPh_1 = h_6e_0^2Ph_1 = Q_3u = B_1B_3$
- 15 (100)  $g^2x_{7,40} = rx_{9,51} = A'w = Aw$   
(010)  $Ph_1x_{10,76}$   
(001)  $h_0x_{14,79}$
- 16 (1)  $h_0^2x_{14,79} = h_1x_{15,68}$
- 20 (100)  $g^3N = g^2nm = g^2rt = nrw = r^2N = tm^2$   
(001)  $d_0rx_{10,27} = d_0rx_{10,28} = d_0lB_4 = e_0rB_{21} = e_0kB_4 = grQ_1 =$   
 $gjB_4 = mx_{13,35} = zB_{23}$   
(011)  $x'^2$
- 21 (1)  $h_0x'^2$
- 22 (10)  $rx_{16,32} = ix_{15,41}$   
(01)  $h_0^2x'^2$   
(11)  $d_0x_{18,55} = e_0x_{18,50}$
- 23 (100)  $d_0e_0g^2m = d_0e_0rv = d_0g^3l = d_0grv = d_0r^2l = e_0^3gm = e_0^2g^2l =$   
 $e_0^2rv = e_0g^3k = e_0gru = e_0r^2k = g^4j = gr^2j = gwz = rmz =$   
 $jmw = klw = kmv = l^2v = lmu$   
(010)  $d_0ux' = jx_{16,37} = kx_{16,33} = Pd_0x_{15,43} = vPQ_1 = zR_2 =$   
 $Q_1Pv = B_{21}Pu$   
(001)  $h_0^3x'^2 = h_0rx_{16,32} = h_0ix_{15,41} = xx_{18,20}$   
(011)  $rix' = i^2B_4$
- 24 (1)  $h_0^4x'^2 = h_0^2rx_{16,32} = h_0^2ix_{15,41} = h_0xx_{18,20} = h_0rix' = h_0i^2B_4 =$   
 $h_3ix_{16,32} = x_{9,40}P^2i$

continued

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$$\begin{aligned}
25 \quad (10) \quad & P^2x_{17,52} \\
(01) \quad & h_0^5x'^2 = h_0^3rx_{16,32} = h_0^3ix_{15,41} = h_0^2xx_{18,20} = h_0^2rix' = h_0^2i^2B_4 = \\
& h_0h_3ix_{16,32} = h_0x_{9,40}P^2i = h_3rx_{18,20} = h_3i^2x' = h_3B_4P^2i \\
26 \quad (100) \quad & d_0^4gr = d_0^3e_0^2r = d_0^3km = d_0^3l^2 = d_0^2e_0gz = d_0^2e_0jm = d_0^2e_0kl = \\
& d_0^2gim = d_0^2gjl = d_0^2gk^2 = d_0^2u^2 = d_0e_0^3z = d_0e_0^2im = d_0e_0^2jl = \\
& d_0e_0^2k^2 = d_0e_0grPe_0 = d_0e_0gil = d_0e_0gjk = d_0g^2rPd_0 = d_0g^2ik = \\
& d_0g^2j^2 = d_0riu = d_0lmPe_0 = d_0m^2Pd_0 = d_0vPv = d_0wPu = \\
& e_0^3rPe_0 = e_0^3il = e_0^3jk = e_0^2grPd_0 = e_0^2gik = e_0^2gj^2 = e_0g^2ij = \\
& e_0gmPj = e_0kmPe_0 = e_0l^2Pe_0 = e_0lmPd_0 = e_0uPv = e_0vPu = \\
& g^3i^2 = g^2lPj = g^2Pe_0z = gjmPe_0 = gklPe_0 = gkmPd_0 = \\
& gl^2Pd_0 = guPu = rjPv = rkPu = rvPj = ivz = juz = Pd_0uw = \\
& Pd_0v^2 = Pe_0uv \\
(001) \quad & h_0^6x'^2 = h_0^4rx_{16,32} = h_0^4ix_{15,41} = h_0^3xx_{18,20} = h_0^3rix' = \\
& h_0^3i^2B_4 = h_0^2h_3ix_{16,32} = h_0^2x_{9,40}P^2i = h_0h_3rx_{18,20} = h_0h_3i^2x' = \\
& h_0h_3B_4P^2i = h_3^2P^2x_{16,32} = g_2iP^2i = Ph_2x_{21,43} = xrP^2i = xi^3 = \\
& x_{11,35}P^2i \\
(101) \quad & r^2i^2 \\
(011) \quad & d_0^3PQ_1 = d_0^2Pd_0Q_1 = d_0^2Pe_0x' = d_0e_0Pd_0x' = d_0gP^2Q_1 = \\
& d_0B_{21}P^2e_0 = d_0x_{10,27}P^2d_0 = d_0x_{10,28}P^2d_0 = e_0^2P^2Q_1 = \\
& e_0Pe_0PQ_1 = e_0Q_1P^2e_0 = e_0B_{21}P^2d_0 = gPd_0PQ_1 = gx'P^2e_0 = \\
& gQ_1P^2d_0 = Pd_0^2x_{10,27} = Pd_0^2x_{10,28} = Pd_0Pe_0B_{21} = Pe_0^2Q_1 = \\
& B_{23}P^3e_0 \\
(111) \quad & e_0gx_{18,20}
\end{aligned}$$

continued



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continued

27 (1)

$$\begin{aligned}
& h_0^7 x'^2 = h_0^5 r x_{16,32} = h_0^5 i x_{15,41} = h_0^4 x x_{18,20} = h_0^4 r i x' = \\
& h_0^4 i^2 B_4 = h_0^3 h_3 i x_{16,32} = h_0^3 x_{9,40} P^2 i = h_0^2 h_3 r x_{18,20} = h_0^2 h_3 i^2 x' = \\
& h_0^2 h_3 B_4 P^2 i = h_0 h_3^2 P^2 x_{16,32} = h_0 d_0^3 P Q_1 = h_0 d_0^2 P d_0 Q_1 = \\
& h_0 d_0^2 P e_0 x' = h_0 d_0 e_0 P d_0 x' = h_0 d_0 g P^2 Q_1 = h_0 d_0 B_{21} P^2 e_0 = \\
& h_0 d_0 x_{10,27} P^2 d_0 = h_0 d_0 x_{10,28} P^2 d_0 = h_0 e_0^2 P^2 Q_1 = h_0 e_0 g x_{18,20} = \\
& h_0 e_0 P e_0 P Q_1 = h_0 e_0 Q_1 P^2 e_0 = h_0 e_0 B_{21} P^2 d_0 = h_0 g P d_0 P Q_1 = \\
& h_0 g x' P^2 e_0 = h_0 g Q_1 P^2 d_0 = h_0 g_2 i P^2 i = h_0 P h_2 x_{21,43} = \\
& h_0 x r P^2 i = h_0 x i^3 = h_0 r^2 i^2 = h_0 P d_0^2 x_{10,27} = h_0 P d_0^2 x_{10,28} = \\
& h_0 P d_0 P e_0 B_{21} = h_0 P e_0^2 Q_1 = h_0 B_{23} P^3 e_0 = h_0 x_{11,35} P^2 i = \\
& h_1 P^2 x_{18,50} = h_2 d_0^2 P d_0 x' = h_2 d_0 e_0 P^2 Q_1 = h_2 d_0 g x_{18,20} = \\
& h_2 d_0 P e_0 P Q_1 = h_2 d_0 Q_1 P^2 e_0 = h_2 d_0 B_{21} P^2 d_0 = h_2 e_0^2 x_{18,20} = \\
& h_2 e_0 P d_0 P Q_1 = h_2 e_0 x' P^2 e_0 = h_2 e_0 Q_1 P^2 d_0 = h_2 g x' P^2 d_0 = \\
& h_2 P d_0^2 B_{21} = h_2 P d_0 P e_0 Q_1 = h_2 P e_0^2 x' = h_2 x_{10,27} P^3 e_0 = \\
& h_2 x_{10,28} P^3 e_0 = h_2 B_{23} P^3 d_0 = h_2^3 i x_{18,20} = h_2^3 x' P^2 i = \\
& h_4 P d_0 x_{18,20} = h_4 x' P^3 d_0 = e_0 P d_0 x_{16,32} = d_0^3 P h_2 x' = d_0^2 B_2 P^2 d_0 = \\
& d_0^2 P^2 h_2 B_{21} = d_0 e_0 P h_2 P Q_1 = d_0 e_0 P^2 h_2 Q_1 = d_0 g P^2 h_2 x' = \\
& d_0 P h_2 P d_0 B_{21} = d_0 P h_2 P e_0 Q_1 = d_0 P c_0 x_{16,32} = d_0 B_2 P d_0^2 = \\
& d_0 B_{23} P^3 h_2 = e_0^2 P^2 h_2 x' = e_0 P h_2 P d_0 Q_1 = e_0 P h_2 P e_0 x' = \\
& e_0 B_2 P^3 e_0 = e_0 x_{10,27} P^3 h_2 = e_0 x_{10,28} P^3 h_2 = g P h_2 P d_0 x' = \\
& g B_2 P^3 d_0 = g B_{21} P^3 h_2 = P h_1 P x_{18,50} = P h_2 x_{10,27} P^2 e_0 = \\
& P h_2 x_{10,28} P^2 e_0 = P h_2 B_{23} P^2 d_0 = B_2 P e_0 P^2 e_0 = Q_2 P^4 e_0 = \\
& B_3 P^4 d_0 = P d_0 P^2 h_2 B_{23} = P e_0 P^2 h_2 x_{10,27} = P e_0 P^2 h_2 x_{10,28} = \\
& P^2 h_1 x_{18,50} = P^2 c_0 x_{16,38}
\end{aligned}$$

28 (1)

$$d_0 P^2 x_{16,32} = P^2 d_0 x_{16,32}$$

29 (100)

$$d_0 i x_{18,20}$$

(010)

$$\begin{aligned}
& d_0^4 P v = d_0^3 e_0 P u = d_0^3 r P j = d_0^3 i z = d_0^3 P d_0 v = d_0^3 P e_0 u = \\
& d_0^2 e_0 P d_0 u = d_0^2 g P^2 v = d_0^2 r i P e_0 = d_0^2 r j P d_0 = d_0^2 i^2 l = d_0^2 i j k = \\
& d_0^2 j^3 = d_0^2 w P^2 e_0 = d_0 e_0^2 P^2 v = d_0 e_0 g P^2 u = d_0 e_0 r i P d_0 = \\
& d_0 e_0 i^2 k = d_0 e_0 i j^2 = d_0 e_0 P e_0 P v = d_0 e_0 v P^2 e_0 = d_0 e_0 w P^2 d_0 = \\
& d_0 e_0 z P j = d_0 g r P^2 j = d_0 g i^2 j = d_0 g P d_0 P v = d_0 g P e_0 P u = \\
& d_0 g u P^2 e_0 = d_0 g v P^2 d_0 = d_0 r k P^2 e_0 = d_0 r l P^2 d_0 = d_0 i m P j = \\
& d_0 j l P j = d_0 j P e_0 z = d_0 k^2 P j = d_0 k P d_0 z = d_0 P d_0 P e_0 w = \\
& d_0 P e_0^2 v = e_0^3 P^2 u = e_0^2 r P^2 j = e_0^2 i^2 j = e_0^2 P d_0 P v = e_0^2 P e_0 P u = \\
& e_0^2 u P^2 e_0 = e_0^2 v P^2 d_0 = e_0 g r P^2 i = e_0 g i^3 = e_0 g P d_0 P u = \\
& e_0 g u P^2 d_0 = e_0 r j P^2 e_0 = e_0 r k P^2 d_0 = e_0 r P e_0 P j = e_0 i l P j = \\
& e_0 i P e_0 z = e_0 j k P j = e_0 j P d_0 z = e_0 P d_0^2 w = e_0 P d_0 P e_0 v = \\
& e_0 P e_0^2 u = g^2 P^3 v = g r i P^2 e_0 = g r j P^2 d_0 = g r P d_0 P j = g i k P j = \\
& g i P d_0 z = g j^2 P j = g P d_0^2 v = g P d_0 P e_0 u = g w P^3 e_0 = r j P e_0^2 = \\
& r k P d_0 P e_0 = r l P d_0^2 = r m P^3 e_0 = i^2 m P e_0 = i j l P e_0 = i j m P d_0 = \\
& i k^2 P e_0 = i k l P d_0 = j^2 k P e_0 = j^2 l P d_0 = j k^2 P d_0 = k m P^2 j = \\
& l^2 P^2 j = l m P^2 i = l z P^2 e_0 = m z P^2 d_0
\end{aligned}$$

continued

Stem 106 continued

- (110)  $d_0x'P^2i = ix'P^2d_0 = jP^3Q_1 = B_4P^4d_0 = Q_1P^3j = PjP^2Q_1 = PQ_1P^2j$
- (001)  $h_0d_0P^2x_{16,32} = h_0P^2d_0x_{16,32} = h_2P^3x_{16,35} = Ph_2P^2x_{16,35} = P^2h_2Px_{16,35} = P^3h_2x_{16,35}$
- (101)  $gx_{25,24}$
- (111)  $d_0Pd_0R_1 = e_0P^3R_2 = Pe_0P^2R_2 = P^2e_0PR_2 = R_2P^3e_0 = P^2D_1P^3d_0$
- 30 (10)  $h_0d_0ix_{18,20} = h_0d_0x'P^2i = h_0ix'P^2d_0 = h_0jP^3Q_1 = h_0B_4P^4d_0 = h_0Q_1P^3j = h_0PjP^2Q_1 = h_0PQ_1P^2j = h_2iP^3Q_1 = h_2x'P^3j = h_2Pjx_{18,20} = h_2PQ_1P^2i = f_0P^4Q_1 = Ph_2iP^2Q_1 = Ph_2jx_{18,20} = Ph_2x'P^2j = Ph_2Q_1P^2i = iP^2h_2PQ_1 = iQ_1P^3h_2 = jx'P^3h_2 = B_2P^4j = P^2h_2x'Pj = x_{13,35}P^4h_2$
- (01)  $h_0^2d_0P^2x_{16,32} = h_0^2P^2d_0x_{16,32} = h_0h_2P^3x_{16,35} = h_0Ph_2P^2x_{16,35} = h_0P^2h_2Px_{16,35} = h_0P^3h_2x_{16,35} = h_2Ph_2P^2x_{16,32} = h_2P^3h_2x_{16,32} = Ph_2P^2h_2x_{16,32} = x_{13,34}P^4h_2$
- (11)  $h_0d_0Pd_0R_1 = h_0e_0P^3R_2 = h_0gx_{25,24} = h_0Pe_0P^2R_2 = h_0P^2e_0PR_2 = h_0R_2P^3e_0 = h_0P^2D_1P^3d_0 = h_2d_0P^3R_2 = h_2e_0x_{25,24} = h_2Pd_0P^2R_2 = h_2P^2d_0PR_2 = h_2P^2e_0R_1 = h_2R_2P^3d_0 = d_0Ph_2P^2R_2 = d_0P^2h_2PR_2 = d_0R_1P^3d_0 = d_0P^3h_2R_2 = e_0P^2h_2R_1 = Ph_2Pd_0PR_2 = Ph_2Pe_0R_1 = Ph_2P^2d_0R_2 = Pd_0P^2h_2R_2 = Pd_0R_1P^2d_0$
- 31 (1)  $h_0^2d_0ix_{18,20} = h_0^2d_0Pd_0R_1 = h_0^2d_0x'P^2i = h_0^2e_0P^3R_2 = h_0^2gx_{25,24} = h_0^2ix'P^2d_0 = h_0^2jP^3Q_1 = h_0^2Pe_0P^2R_2 = h_0^2B_4P^4d_0 = h_0^2Q_1P^3j = h_0^2PjP^2Q_1 = h_0^2P^2e_0PR_2 = h_0^2R_2P^3e_0 = h_0^2P^2D_1P^3d_0 = h_0^2PQ_1P^2j = h_0h_2d_0P^3R_2 = h_0h_2e_0x_{25,24} = h_0h_2iP^3Q_1 = h_0h_2Pd_0P^2R_2 = h_0h_2x'P^3j = h_0h_2Pjx_{18,20} = h_0h_2P^2d_0PR_2 = h_0h_2P^2e_0R_1 = h_0h_2R_2P^3d_0 = h_0h_2PQ_1P^2i = h_0d_0Ph_2P^2R_2 = h_0d_0P^2h_2PR_2 = h_0d_0R_1P^3d_0 = h_0d_0P^3h_2R_2 = h_0e_0P^2h_2R_1 = h_0f_0P^4Q_1 = h_0Ph_2iP^2Q_1 = h_0Ph_2jx_{18,20} = h_0Ph_2Pd_0PR_2 = h_0Ph_2Pe_0R_1 = h_0Ph_2x'P^2j = h_0Ph_2Q_1P^2i = h_0Ph_2P^2d_0R_2 = h_0iP^2h_2PQ_1 = h_0iQ_1P^3h_2 = h_0jx'P^3h_2 = h_0B_2P^4j = h_0Pd_0P^2h_2R_2 = h_0Pd_0R_1P^2d_0 = h_0P^2h_2x'Pj = h_0x_{13,35}P^4h_2 = h_1d_0Pd_0x_{18,20} = h_1d_0x'P^3d_0 = h_1e_0P^4Q_1 = h_1gP^4x' = h_1Pd_0x'P^2d_0 = h_1Pe_0P^3Q_1 = h_1Q_1P^4e_0 = h_1B_{21}P^4d_0 = h_1P^2e_0P^2Q_1 = h_1PQ_1P^3e_0 = h_2^2d_0x_{25,24} = h_2^2P^2d_0R_1 = h_2d_0P^2h_2R_1 = h_2f_0P^4x' = h_2Ph_2ix_{18,20} = h_2Ph_2Pd_0R_1 = h_2Ph_2x'P^2i = h_2ix'P^3h_2 = h_2B_2P^4i = h_2B_4P^3h_2 = h_2R_1P^4e_0 = h_2P^2D_1P^4h_2 = d_0^2Ph_1x_{18,20} = d_0^2x'P^3h_1 = d_0Ph_1x'P^2d_0 =$   
(continued)

Stem 106 continued

$$\begin{aligned}
31 \quad (1) \quad & \text{(continued)} = d_0Ph_2^2R_1 = d_0B_1P^4d_0 = d_0Pd_0P^2h_1x' = \\
& d_0B_{21}P^4h_1 = e_0Ph_1P^3Q_1 = e_0P^2h_1P^2Q_1 = e_0R_1P^4h_2 = \\
& e_0Q_1P^4h_1 = e_0P^3h_1PQ_1 = f_0P^2h_2x_{18,20} = f_0x'P^4h_2 = \\
& gP^2h_1x_{18,20} = gx'P^4h_1 = Ph_1Pd_0^2x' = Ph_1Pe_0P^2Q_1 = \\
& Ph_1Q_1P^3e_0 = Ph_1B_{21}P^3d_0 = Ph_1P^2e_0PQ_1 = Ph_2iP^2h_2x' = \\
& Ph_2B_4P^4h_2 = Ph_2R_1P^3e_0 = Ph_2P^3h_2P^2D_1 = iB_2P^4h_2 = \\
& B_1Pd_0P^3d_0 = B_1P^2d_0^2 = B_2P^2h_2P^2i = Pd_0B_{21}P^3h_1 = \\
& Pe_0P^2h_1PQ_1 = Pe_0R_1P^3h_2 = Pe_0Q_1P^3h_1 = P^2h_1Q_1P^2e_0 = \\
& P^2h_1B_{21}P^2d_0 = P^2h_2^2P^2D_1 = P^2h_2B_4P^3h_2 = P^2h_2R_1P^2e_0 = \\
& B_{23}P^5h_1 \\
32 \quad (1) \quad & d_0^6Pd_0 = d_0^4e_0P^2e_0 = d_0^4gP^2d_0 = d_0^4Pe_0^2 = d_0^3e_0^2P^2d_0 = \\
& d_0^3e_0Pd_0Pe_0 = d_0^3gPd_0^2 = d_0^2e_0^2Pd_0^2 = d_0^2e_0gP^3e_0 = d_0^2g^2P^3d_0 = \\
& d_0^2gPe_0P^2e_0 = d_0^2iP^2u = d_0^2uP^2i = d_0e_0^3P^3e_0 = d_0e_0^2gP^3d_0 = \\
& d_0e_0^2Pe_0P^2e_0 = d_0e_0gPd_0P^2e_0 = d_0e_0gPe_0P^2d_0 = d_0e_0Pe_0^3 = \\
& d_0g^2Pd_0P^2d_0 = d_0gPd_0Pe_0^2 = d_0riP^2i = d_0i^4 = d_0iPd_0Pu = \\
& d_0iuP^2d_0 = d_0jP^3v = d_0kP^3u = d_0vP^3j = d_0PjP^2v = \\
& d_0PvP^2j = e_0^4P^3d_0 = e_0^3Pd_0P^2e_0 = e_0^3Pe_0P^2d_0 = e_0^2gPd_0P^2d_0 = \\
& e_0^2Pd_0Pe_0^2 = e_0g^2P^4e_0 = e_0gPd_0^2Pe_0 = e_0iP^3v = e_0jP^3u = \\
& e_0uP^3j = e_0PjP^2u = e_0PuP^2j = e_0PvP^2i = g^3P^4d_0 = \\
& g^2Pd_0^3 = g^2Pe_0P^3e_0 = g^2P^2e_0^2 = giP^3u = gPuP^2i = r^2P^4d_0 = \\
& ri^2P^2d_0 = rjP^3j = rPjP^2j = i^2jPj = iPd_0^2u = iPe_0P^2v = \\
& ivP^3e_0 = iwP^3d_0 = izP^2j = iP^2e_0Pv = jPd_0P^2v = jPe_0P^2u = \\
& juP^3e_0 = jvP^3d_0 = jzP^2i = jP^2d_0Pv = jP^2e_0Pu = kPd_0P^2u = \\
& kuP^3d_0 = kP^2d_0Pu = lP^4v = mP^4u = Pd_0vP^2j = Pd_0wP^2i = \\
& Pd_0PjPv = Pe_0uP^2j = Pe_0vP^2i = Pe_0PjPu = uPjP^2e_0 = \\
& vPjP^2d_0
\end{aligned}$$

Stem 107

- 5 (1)  $h_4g_3 = h_6g_2$   
6 (1)  $h_0h_4g_3 = h_0h_6g_2$   
7 (10)  $x_{7,93}$   
(01)  $h_0^2h_4g_3 = h_0^2h_6g_2 = h_3h_6x$   
8 (1)  $h_0x_{7,93}$   
9 (1)  $x_{9,102}$   
10 (1)  $h_0x_{9,102} = h_2x_{9,97}$   
11 (010)  $h_1^2x_{9,99}$   
(001)  $h_0^2x_{9,102} = h_0h_2x_{9,97} = h_3x_{10,82}$   
(101)  $h_1h_3x_{9,86} = d_1x_{7,53} = g_2x_{7,33}$   
(011)  $h_6d_0r$   
(111)  $D_3B_1$   
12 (1)  $x_{12,85}$   
13 (1)  $x_{13,85}$   
14 (1)  $gx_{10,60} = nx_{9,51} = H_1w = rx_{8,57} = A'N = AN$   
16 (10)  $d_0x_{12,60}$   
(01)  $h_1Ph_1x_{10,76} = Gx' = B_1X_1$   
(11)  $e_0x_{12,55}$   
17 (10)  $g^2x_{9,39} = grQ_2 = x_{8,33}w$   
(01)  $h_0d_0x_{12,60} = h_0e_0x_{12,55} = h_2d_0x_{12,55} = h_5x_{16,32} = h_6d_0P^2d_0 = h_6Pd_0^2 = Ph_2x_{12,64} = B_2B_{21}$   
18 (10)  $x_{18,72}$   
(01)  $h_0^2d_0x_{12,60} = h_0^2e_0x_{12,55} = h_0h_2d_0x_{12,55} = h_0h_5x_{16,32} = h_0h_6d_0P^2d_0 = h_0h_6Pd_0^2 = h_0Ph_2x_{12,64} = h_0B_2B_{21} = h_2^2Px_{12,60} = h_2h_6P^3e_0 = h_2Ph_2x_{12,60} = h_2B_2Q_1 = h_6e_0P^3h_2 = h_6Ph_2P^2e_0 = h_6Pe_0P^2h_2 = Pc_0x_{11,61}$   
19 (010)  $e_0rB_4 = gx_{15,47} = vB_{23} = wx_{10,27} = wx_{10,28}$   
(001)  $h_0x_{18,72} = h_2x_{18,68}$   
(101)  $P^2x_{11,61}$   
20 (10)  $x'R_1$   
(01)  $h_0^2x_{18,72} = h_0h_2x_{18,68} = h_2^2x_{18,63} = Ph_2x_{15,58}$   
(11)  $h_0P^2x_{11,61}$   
21 (010)  $h_1x'^2 = P^2h_1x_{12,55}$   
(110)  $d_0x_{17,57} = e_0x_{17,52} = gx_{17,50}$   
(001)  $h_0^2P^2x_{11,61} = h_0x'R_1$

continued

Stem 107 continued

$$\begin{aligned}
22 \quad (100) \quad & e_0g^3r = e_0gm^2 = e_0r^3 = e_0w^2 = g^2lm = gvw = rlw = rmv \\
(010) \quad & d_0^3B_{23} = d_0^2e_0x_{10,27} = d_0^2e_0x_{10,28} = d_0^2gB_{21} = d_0e_0^2B_{21} = \\
& d_0e_0gQ_1 = d_0g^2x' = e_0^3Q_1 = e_0^2gx' = e_0Pe_0B_{23} = gPd_0B_{23} = \\
& gPe_0x_{10,27} = gPe_0x_{10,28} = ix_{15,43} = uP^2D_1 = vR_2 = B_4Pu \\
(001) \quad & h_0^3P^2x_{11,61} = h_0^2x'R_1 = xR_1 = ix_{15,42} = B_4Q \\
(011) \quad & rx_{16,33} \\
23 \quad (1) \quad & h_0^4P^2x_{11,61} = h_0^3x'R_1 = h_0xR_1 = h_0rx_{16,33} = h_0ix_{15,42} = \\
& h_0B_4Q = riR_1 = i^2X_1 = G_{21}P^2i \\
24 \quad (10) \quad & d_0^2x_{16,35} = d_0e_0x_{16,32} = gPx_{16,35} = Pd_0x_{16,42} = Pe_0x_{16,38} \\
(01) \quad & h_0^5P^2x_{11,61} = h_0^4x'R_1 = h_0^2xR_1 = h_0^2rx_{16,33} = h_0^2ix_{15,42} = \\
& h_0^2B_4Q = h_0riR_1 = h_0i^2X_1 = h_0G_{21}P^2i = h_3rR_1 = h_3ix_{16,33} = \\
& h_3x'Q = yx_{18,20} \\
25 \quad (100) \quad & d_0^3gw = d_0^3rm = d_0^2e_0^2w = d_0^2e_0gv = d_0^2e_0rl = d_0^2g^2u = d_0^2grk = \\
& d_0e_0^3v = d_0e_0^2gu = d_0e_0^2rk = d_0e_0grj = d_0e_0mz = d_0g^2ri = \\
& d_0glz = d_0im^2 = d_0jlm = d_0k^2m = d_0kl^2 = e_0^4u = e_0^3rj = \\
& e_0^2gri = e_0^2lz = e_0g^2Pv = e_0gkz = e_0gPe_0w = e_0rmPe_0 = \\
& e_0ilm = e_0jkm = e_0jl^2 = e_0k^2l = g^3Pu = g^2jz = g^2Pd_0w = \\
& g^2Pe_0v = grlPe_0 = grmPd_0 = gikm = gil^2 = gj^2m = gjkl = \\
& gk^3 = r^2Pu = iuw = iv^2 = juv = ku^2 \\
(001) \quad & h_0^6P^2x_{11,61} = h_0^5x'R_1 = h_0^3xR_1 = h_0^3rx_{16,33} = h_0^3ix_{15,42} = \\
& h_0^3B_4Q = h_0^2riR_1 = h_0^2i^2X_1 = h_0^2G_{21}P^2i = h_0h_3rR_1 = \\
& h_0h_3ix_{16,33} = h_0h_3x'Q = h_0yx_{18,20} = h_3i^2R_1 = h_3X_1P^2i = \\
& h_4P^2x_{16,32} = xiQ = r^2Q \\
(011) \quad & d_0^3R_2 = d_0^2iQ_1 = d_0^2jx' = d_0e_0ix' = d_0gPR_2 = d_0kPQ_1 = \\
& d_0Pd_0x_{13,35} = d_0Pe_0P^2D_1 = d_0B_4P^2e_0 = d_0B_{21}Pj = e_0^2PR_2 = \\
& e_0gR_1 = e_0jPQ_1 = e_0Pd_0P^2D_1 = e_0Pe_0R_2 = e_0B_4P^2d_0 = \\
& e_0Q_1Pj = giPQ_1 = gPd_0R_2 = gx'Pj = iPd_0x_{10,27} = \\
& iPd_0x_{10,28} = iPe_0B_{21} = jPd_0B_{21} = jPe_0Q_1 = kPd_0Q_1 = \\
& kPe_0x' = lPd_0x' = mP^2Q_1 = Pd_0Pe_0B_4 = B_{23}P^2j
\end{aligned}$$

continued

Stem 107

26 (1)

continued

$$\begin{aligned}
& h_0^7 P^2 x_{11,61} = h_0^6 x' R_1 = h_0^4 x R_1 = h_0^4 r x_{16,33} = h_0^4 i x_{15,42} = \\
& h_0^4 B_4 Q = h_0^3 r i R_1 = h_0^3 i^2 X_1 = h_0^3 G_{21} P^2 i = h_0^2 h_3 r R_1 = \\
& h_0^2 h_3 i x_{16,33} = h_0^2 h_3 x' Q = h_0^2 y x_{18,20} = h_0 h_3 i^2 R_1 = h_0 h_3 X_1 P^2 i = \\
& h_0 h_4 P^2 x_{16,32} = h_0 d_0^3 R_2 = h_0 d_0^2 i Q_1 = h_0 d_0^2 j x' = h_0 d_0 e_0 i x' = \\
& h_0 d_0 g P R_2 = h_0 d_0 k P Q_1 = h_0 d_0 P d_0 x_{13,35} = h_0 d_0 P e_0 P^2 D_1 = \\
& h_0 d_0 B_4 P^2 e_0 = h_0 d_0 B_{21} P j = h_0 e_0^2 P R_2 = h_0 e_0 g R_1 = \\
& h_0 e_0 j P Q_1 = h_0 e_0 P d_0 P^2 D_1 = h_0 e_0 P e_0 R_2 = h_0 e_0 B_4 P^2 d_0 = \\
& h_0 e_0 Q_1 P j = h_0 g i P Q_1 = h_0 g P d_0 R_2 = h_0 g x' P j = \\
& h_0 x i Q = h_0 r^2 Q = h_0 i P d_0 x_{10,27} = h_0 i P d_0 x_{10,28} = h_0 i P e_0 B_{21} = \\
& h_0 j P d_0 B_{21} = h_0 j P e_0 Q_1 = h_0 k P d_0 Q_1 = h_0 k P e_0 x' = \\
& h_0 l P d_0 x' = h_0 m P^2 Q_1 = h_0 P d_0 P e_0 B_4 = h_0 B_{23} P^2 j = \\
& h_2 d_0^2 i x' = h_2 d_0 e_0 P R_2 = h_2 d_0 g R_1 = h_2 d_0 j P Q_1 = \\
& h_2 d_0 P d_0 P^2 D_1 = h_2 d_0 P e_0 R_2 = h_2 d_0 B_4 P^2 d_0 = h_2 d_0 Q_1 P j = \\
& h_2 e_0^2 R_1 = h_2 e_0 i P Q_1 = h_2 e_0 P d_0 R_2 = h_2 e_0 x' P j = \\
& h_2 i P d_0 B_{21} = h_2 i P e_0 Q_1 = h_2 j P d_0 Q_1 = h_2 j P e_0 x' = \\
& h_2 k P d_0 x' = h_2 l P^2 Q_1 = h_2 m x_{18,20} = h_2 P d_0^2 B_4 = h_2 x_{10,27} P^2 j = \\
& h_2 x_{10,28} P^2 j = h_2 B_{23} P^2 i = h_2 P^2 e_0 x_{13,35} = h_3^2 i R_1 = h_4 P d_0 R_1 = \\
& d_0^2 P h_2 P^2 D_1 = d_0^2 P e_0 R_1 = d_0^2 P^2 h_2 B_4 = d_0 e_0 P h_2 R_2 = \\
& d_0 e_0 P d_0 R_1 = d_0 f_0 P d_0 x' = d_0 P h_2 i B_{21} = d_0 P h_2 j Q_1 = \\
& d_0 P h_2 k x' = d_0 P h_2 P d_0 B_4 = d_0 i B_2 P d_0 = e_0 f_0 P^2 Q_1 = \\
& e_0 P h_2 i Q_1 = e_0 P h_2 j x' = e_0 B_2 P^2 j = e_0 P^2 h_2 x_{13,35} = f_0 g x_{18,20} = \\
& f_0 P e_0 P Q_1 = f_0 Q_1 P^2 e_0 = f_0 B_{21} P^2 d_0 = g P h_2 i x' = \\
& g B_2 P^2 i = g P^2 h_2 P^2 D_1 = g B_4 P^3 h_2 = g R_1 P^2 e_0 = P h_2 l P Q_1 = \\
& P h_2 P e_0 x_{13,35} = P h_2 x_{10,27} P j = P h_2 x_{10,28} P j = D_2 P^4 e_0 = \\
& A P^4 d_0 = i P^2 h_2 B_{23} = j B_2 P^2 e_0 = j P^2 h_2 x_{10,27} = j P^2 h_2 x_{10,28} = \\
& k B_2 P^2 d_0 = k P^2 h_2 B_{21} = l P^2 h_2 Q_1 = m P^2 h_2 x' = B_2 P e_0 P j = \\
& Q_2 P^3 j = B_5 P^3 e_0 = P D_2 P^3 e_0 = P A P^3 d_0
\end{aligned}$$

continued

Stem 107 continued

$$\begin{aligned}
27 \quad (1) \quad & h_0^8 P^2 x_{11,61} = h_0^7 x' R_1 = h_0^5 x R_1 = h_0^5 r x_{16,33} = h_0^5 i x_{15,42} = \\
& h_0^5 B_4 Q = h_0^4 r i R_1 = h_0^4 i^2 X_1 = h_0^4 G_{21} P^2 i = h_0^3 h_3 r R_1 = \\
& h_0^3 h_3 i x_{16,33} = h_0^3 h_3 x' Q = h_0^3 y x_{18,20} = h_0^2 h_3 i^2 R_1 = \\
& h_0^2 h_3 X_1 P^2 i = h_0^2 h_4 P^2 x_{16,32} = h_0^2 d_0^3 R_2 = h_0^2 d_0^2 i Q_1 = \\
& h_0^2 d_0^2 j x' = h_0^2 d_0 e_0 i x' = h_0^2 d_0 g P R_2 = h_0^2 d_0 k P Q_1 = \\
& h_0^2 d_0 P d_0 x_{13,35} = h_0^2 d_0 P e_0 P^2 D_1 = h_0^2 d_0 B_4 P^2 e_0 = h_0^2 d_0 B_{21} P j = \\
& h_0^2 e_0^2 P R_2 = h_0^2 e_0 g R_1 = h_0^2 e_0 j P Q_1 = h_0^2 e_0 P d_0 P^2 D_1 = \\
& h_0^2 e_0 P e_0 R_2 = h_0^2 e_0 B_4 P^2 d_0 = h_0^2 e_0 Q_1 P j = h_0^2 g i P Q_1 = \\
& h_0^2 g P d_0 R_2 = h_0^2 g x' P j = h_0^2 x i Q = h_0^2 r^2 Q = h_0^2 i P d_0 x_{10,27} = \\
& h_0^2 i P d_0 x_{10,28} = h_0^2 i P e_0 B_{21} = h_0^2 j P d_0 B_{21} = h_0^2 j P e_0 Q_1 = \\
& h_0^2 k P d_0 Q_1 = h_0^2 k P e_0 x' = h_0^2 l P d_0 x' = h_0^2 m P^2 Q_1 = \\
& h_0^2 P d_0 P e_0 B_4 = h_0^2 B_{23} P^2 j = h_0 h_2 d_0^2 i x' = h_0 h_2 d_0 e_0 P R_2 = \\
& h_0 h_2 d_0 g R_1 = h_0 h_2 d_0 j P Q_1 = h_0 h_2 d_0 P d_0 P^2 D_1 = \\
& h_0 h_2 d_0 P e_0 R_2 = h_0 h_2 d_0 B_4 P^2 d_0 = h_0 h_2 d_0 Q_1 P j = h_0 h_2 e_0^2 R_1 = \\
& h_0 h_2 e_0 i P Q_1 = h_0 h_2 e_0 P d_0 R_2 = h_0 h_2 e_0 x' P j = h_0 h_2 i P d_0 B_{21} = \\
& h_0 h_2 i P e_0 Q_1 = h_0 h_2 j P d_0 Q_1 = h_0 h_2 j P e_0 x' = h_0 h_2 k P d_0 x' = \\
& h_0 h_2 l P^2 Q_1 = h_0 h_2 m x_{18,20} = h_0 h_2 P d_0^2 B_4 = h_0 h_2 x_{10,27} P^2 j = \\
& h_0 h_2 x_{10,28} P^2 j = h_0 h_2 B_{23} P^2 i = h_0 h_2 P^2 e_0 x_{13,35} = h_0 h_3^2 i R_1 = \\
& h_0 h_4 P d_0 R_1 = h_0 d_0^2 P h_2 P^2 D_1 = h_0 d_0^2 P e_0 R_1 = h_0 d_0^2 P^2 h_2 B_4 = \\
& h_0 d_0 e_0 P h_2 R_2 = h_0 d_0 e_0 P d_0 R_1 = h_0 d_0 f_0 P d_0 x' = h_0 d_0 P h_2 i B_{21} = \\
& h_0 d_0 P h_2 j Q_1 = h_0 d_0 P h_2 k x' = h_0 d_0 P h_2 P d_0 B_4 = h_0 d_0 i B_2 P d_0 = \\
& h_0 e_0 f_0 P^2 Q_1 = h_0 e_0 P h_2 i Q_1 = h_0 e_0 P h_2 j x' = h_0 e_0 B_2 P^2 j = \\
& h_0 e_0 P^2 h_2 x_{13,35} = h_0 f_0 g x_{18,20} = h_0 f_0 P e_0 P Q_1 = h_0 f_0 Q_1 P^2 e_0 = \\
& h_0 f_0 B_{21} P^2 d_0 = h_0 g P h_2 i x' = h_0 g B_2 P^2 i = h_0 g P^2 h_2 P^2 D_1 = \\
& h_0 g B_4 P^3 h_2 = h_0 g R_1 P^2 e_0 = h_0 P h_2 l P Q_1 = h_0 P h_2 P e_0 x_{13,35} = \\
& h_0 P h_2 x_{10,27} P j = h_0 P h_2 x_{10,28} P j = h_0 D_2 P^4 e_0 = h_0 A P^4 d_0 = \\
& h_0 i P^2 h_2 B_{23} = h_0 j B_2 P^2 e_0 = h_0 j P^2 h_2 x_{10,27} = h_0 j P^2 h_2 x_{10,28} = \\
& h_0 k B_2 P^2 d_0 = h_0 k P^2 h_2 B_{21} = h_0 l P^2 h_2 Q_1 = h_0 m P^2 h_2 x' = \\
& h_0 B_2 P e_0 P j = h_0 Q_2 P^3 j = h_0 B_5 P^3 e_0 = h_0 P D_2 P^3 e_0 = \\
& h_0 P A P^3 d_0 = h_1 d_0^3 P Q_1 = h_1 d_0^2 P d_0 Q_1 = h_1 d_0^2 P e_0 x' = \\
& h_1 d_0 e_0 P d_0 x' = h_1 d_0 g P^2 Q_1 = h_1 d_0 B_{21} P^2 e_0 = h_1 d_0 x_{10,27} P^2 d_0 = \\
& h_1 d_0 x_{10,28} P^2 d_0 = h_1 e_0^2 P^2 Q_1 = h_1 e_0 g x_{18,20} = h_1 e_0 P e_0 P Q_1 = \\
& h_1 e_0 Q_1 P^2 e_0 = h_1 e_0 B_{21} P^2 d_0 = h_1 g P d_0 P Q_1 = h_1 g x' P^2 e_0 = \\
& h_1 g Q_1 P^2 d_0 = h_1 P d_0^2 x_{10,27} = h_1 P d_0^2 x_{10,28} = h_1 P d_0 P e_0 B_{21} = \\
& h_1 P e_0^2 Q_1 = h_1 B_{23} P^3 e_0 = h_2^2 d_0^2 P R_2 = h_2^2 d_0 e_0 R_1 = h_2^2 d_0 i P Q_1 = \\
& h_2^2 d_0 P d_0 R_2 = h_2^2 d_0 x' P j = h_2^2 g P^2 R_2 = h_2^2 i P d_0 Q_1 = h_2^2 i P e_0 x' = \\
& h_2^2 j P d_0 x' = h_2^2 k P^2 Q_1 = h_2^2 l x_{18,20} = h_2^2 B_4 P^3 e_0 = h_2^2 B_{21} P^2 j = \\
& h_2^2 x_{10,27} P^2 i = h_2^2 x_{10,28} P^2 i = h_2^2 P^2 d_0 x_{13,35} = h_2^2 P^2 e_0 P^2 D_1 = \\
& h_2 h_4 P^3 R_2 = h_2 d_0^2 P h_2 R_2 = (\text{continued})
\end{aligned}$$

Stem 107

27 (1)

continued

$$\begin{aligned}
& \text{(continued)} = h_2 d_0^2 P d_0 R_1 = h_2 d_0 f_0 P^2 Q_1 = h_2 d_0 P h_2 i Q_1 = \\
& h_2 d_0 P h_2 j x' = h_2 d_0 B_2 P^2 j = h_2 d_0 P^2 h_2 x_{13,35} = h_2 e_0 f_0 x_{18,20} = \\
& h_2 e_0 P h_2 i x' = h_2 e_0 B_2 P^2 i = h_2 e_0 P^2 h_2 P^2 D_1 = h_2 e_0 B_4 P^3 h_2 = \\
& h_2 e_0 R_1 P^2 e_0 = h_2 f_0 P d_0 P Q_1 = h_2 f_0 x' P^2 e_0 = h_2 f_0 Q_1 P^2 d_0 = \\
& h_2 g P h_2 P R_2 = h_2 g P^2 h_2 R_2 = h_2 g R_1 P^2 d_0 = h_2 P h_2 k P Q_1 = \\
& h_2 P h_2 P d_0 x_{13,35} = h_2 P h_2 P e_0 P^2 D_1 = h_2 P h_2 B_4 P^2 e_0 = \\
& h_2 P h_2 B_{21} P j = h_2 D_2 P^4 d_0 = h_2 i B_2 P^2 e_0 = h_2 i P^2 h_2 x_{10,27} = \\
& h_2 i P^2 h_2 x_{10,28} = h_2 j B_2 P^2 d_0 = h_2 j P^2 h_2 B_{21} = h_2 k P^2 h_2 Q_1 = \\
& h_2 l P^2 h_2 x' = h_2 B_2 P d_0 P j = h_2 P e_0^2 R_1 = h_2 P e_0 P^2 h_2 B_4 = \\
& h_2 B_5 P^3 d_0 = h_2 P D_2 P^3 d_0 = h_3^2 R_1 P^2 i = h_3 r i Q = \\
& h_4 P h_2 P^2 R_2 = h_4 P^2 h_2 P R_2 = h_4 R_1 P^3 d_0 = h_4 P^3 h_2 R_2 = \\
& c_0 r x_{18,20} = c_0 i^2 x' = c_0 j P R_2 = c_0 k R_1 = c_0 P d_0 x_{16,33} = \\
& c_0 B_4 P^2 i = c_0 P j R_2 = d_0^3 P h_1 Q_1 = d_0^3 P h_2 R_1 = \\
& d_0^2 e_0 P h_1 x' = d_0^2 B_1 P^2 e_0 = d_0^2 P^2 h_1 x_{10,27} = d_0^2 P^2 h_1 x_{10,28} = \\
& d_0 e_0 B_1 P^2 d_0 = d_0 e_0 P^2 h_1 B_{21} = d_0 f_0 P h_2 P Q_1 = d_0 f_0 P^2 h_2 Q_1 = \\
& d_0 g P h_1 P Q_1 = d_0 g P^2 h_1 Q_1 = d_0 g P^2 h_2 R_1 = d_0 P h_1 P d_0 x_{10,27} = \\
& d_0 P h_1 P d_0 x_{10,28} = d_0 P h_1 P e_0 B_{21} = d_0 P h_2^2 x_{13,35} = d_0 P h_2 B_2 P j = \\
& d_0 D_2 P^4 h_2 = d_0 P c_0 x_{16,33} = d_0 j B_2 P^2 h_2 = d_0 B_1 P d_0 P e_0 = \\
& d_0 B_5 P^3 h_2 = d_0 P D_2 P^3 h_2 = e_0^2 P h_1 P Q_1 = e_0^2 P^2 h_1 Q_1 = \\
& e_0^2 P^2 h_2 R_1 = e_0 f_0 P^2 h_2 x' = e_0 g P^2 h_1 x' = e_0 P h_1 P d_0 B_{21} = \\
& e_0 P h_1 P e_0 Q_1 = e_0 P h_2^2 P^2 D_1 = e_0 P h_2 P e_0 R_1 = e_0 P h_2 P^2 h_2 B_4 = \\
& e_0 i B_2 P^2 h_2 = e_0 B_1 P d_0^2 = e_0 B_{23} P^3 h_1 = f_0 P h_2 P d_0 Q_1 = \\
& f_0 P h_2 P e_0 x' = f_0 B_2 P^3 e_0 = f_0 x_{10,27} P^3 h_2 = f_0 x_{10,28} P^3 h_2 = \\
& g P h_1 P d_0 Q_1 = g P h_1 P e_0 x' = g P h_2^2 R_2 = g P h_2 P d_0 R_1 = \\
& g B_1 P^3 e_0 = g x_{10,27} P^3 h_1 = g x_{10,28} P^3 h_1 = P h_1 B_{23} P^2 e_0 = \\
& P h_2^2 i x_{10,27} = P h_2^2 i x_{10,28} = P h_2^2 j B_{21} = P h_2^2 k Q_1 = P h_2^2 l x' = \\
& P h_2^2 P e_0 B_4 = P h_2 D_2 P^3 d_0 = P h_2 i B_2 P e_0 = P h_2 j B_2 P d_0 = \\
& P h_2 Q_2 P^2 i = P h_2 B_5 P^2 d_0 = P h_2 P D_2 P^2 d_0 = r y P^2 i = r x' P^2 c_0 = \\
& y i^3 = D_2 P d_0 P^3 h_2 = D_2 P^2 h_2 P^2 d_0 = A'' P^5 h_2 = P c_0 i P^2 D_1 = \\
& P c_0 j R_2 = i Q_2 P^3 h_2 = i B_4 P^2 c_0 = l B_2 P^3 h_2 = P d_0 P^2 h_2 B_5 = \\
& P d_0 P^2 h_2 P D_2 = P e_0 P^2 h_1 B_{23}
\end{aligned}$$

continued



Stem 107 continued

$$\begin{aligned}
28 \quad (10) \quad & d_0 i R_1 = j P^2 R_2 = P j P R_2 = P^2 d_0 x_{16,33} = R_2 P^2 j = P^2 D_1 P^2 i \\
(01) \quad & d_0^5 e_0 g = d_0^4 e_0^3 = d_0^3 g^2 P e_0 = d_0^3 i v = d_0^3 j u = d_0^2 e_0^2 g P e_0 = \\
& d_0^2 e_0 g^2 P d_0 = d_0^2 e_0 i u = d_0^2 r i j = d_0^2 k P v = d_0^2 l P u = d_0^2 w P j = \\
& d_0 e_0^4 P e_0 = d_0 e_0^3 g P d_0 = d_0 e_0 r i^2 = d_0 e_0 j P v = d_0 e_0 k P u = \\
& d_0 e_0 v P j = d_0 g^3 P^2 e_0 = d_0 g i P v = d_0 g j P u = d_0 g u P j = \\
& d_0 r^2 P^2 e_0 = d_0 r k P j = d_0 r P d_0 z = d_0 i k z = d_0 i P e_0 w = d_0 j^2 z = \\
& d_0 j P d_0 w = d_0 j P e_0 v = d_0 k P d_0 v = d_0 k P e_0 u = d_0 l P d_0 u = \\
& d_0 m P^2 v = e_0^5 P d_0 = e_0^2 g^2 P^2 e_0 = e_0^2 i P v = e_0^2 j P u = e_0^2 u P j = \\
& e_0 g^3 P^2 d_0 = e_0 g^2 P e_0^2 = e_0 g i P u = e_0 r^2 P^2 d_0 = e_0 r j P j = e_0 i j z = \\
& e_0 i P d_0 w = e_0 i P e_0 v = e_0 j P d_0 v = e_0 j P e_0 u = e_0 k P d_0 u = \\
& e_0 l P^2 v = e_0 m P^2 u = g^3 P d_0 P e_0 = g r i P j = g i^2 z = g i P d_0 v = \\
& g i P e_0 u = g j P d_0 u = g k P^2 v = g l P^2 u = g w P^2 j = r^2 P d_0 P e_0 = \\
& r i k P e_0 = r i l P d_0 = r j^2 P e_0 = r j k P d_0 = r m P^2 j = i^2 j m = i^2 k l = \\
& i j^2 l = i j k^2 = j^3 k = k w P^2 e_0 = l P e_0 P v = l v P^2 e_0 = l w P^2 d_0 = \\
& l z P j = m P d_0 P v = m P e_0 P u = m u P^2 e_0 = m v P^2 d_0 = P e_0 z^2 \\
29 \quad (1) \quad & h_0 d_0 i R_1 = h_0 j P^2 R_2 = h_0 P j P R_2 = h_0 P^2 d_0 x_{16,33} = h_0 R_2 P^2 j = \\
& h_0 P^2 D_1 P^2 i = h_1 d_0 P^2 x_{16,32} = h_1 P^2 d_0 x_{16,32} = h_2 i P^2 R_2 = \\
& h_2 P j R_1 = h_2 R_2 P^2 i = d_0 P^2 h_1 x_{16,32} = d_0 R_1 P^2 i = f_0 P^3 R_2 = \\
& P h_1 P d_0 x_{16,32} = P h_2 i P R_2 = P h_2 j R_1 = i P^2 h_2 R_2 = i R_1 P^2 d_0 = \\
& P^3 h_1 x_{16,38} = P^3 h_2 x_{16,37} = W_1 P^3 d_0 \\
31 \quad (1) \quad & d_0^6 i = d_0^4 e_0 P j = d_0^4 j P e_0 = d_0^4 k P d_0 = d_0^3 e_0 i P e_0 = d_0^3 e_0 j P d_0 = \\
& d_0^3 g i P d_0 = d_0^3 l P^2 e_0 = d_0^3 m P^2 d_0 = d_0^2 e_0^2 i P d_0 = d_0^2 e_0 g P^2 j = \\
& d_0^2 e_0 k P^2 e_0 = d_0^2 e_0 l P^2 d_0 = d_0^2 g^2 P^2 i = d_0^2 g j P^2 e_0 = d_0^2 g k P^2 d_0 = \\
& d_0^2 g P e_0 P j = d_0^2 k P e_0^2 = d_0^2 l P d_0 P e_0 = d_0^2 m P d_0^2 = d_0 e_0^3 P^2 j = \\
& d_0 e_0^2 g P^2 i = d_0 e_0^2 j P^2 e_0 = d_0 e_0^2 k P^2 d_0 = d_0 e_0^2 P e_0 P j = \\
& d_0 e_0 g i P^2 e_0 = d_0 e_0 g j P^2 d_0 = d_0 e_0 g P d_0 P j = d_0 e_0 j P e_0^2 = \\
& d_0 e_0 k P d_0 P e_0 = d_0 e_0 l P d_0^2 = d_0 e_0 m P^3 e_0 = d_0 g^2 i P^2 d_0 = \\
& d_0 g i P e_0^2 = d_0 g j P d_0 P e_0 = d_0 g k P d_0^2 = d_0 g l P^3 e_0 = d_0 g m P^3 d_0 = \\
& d_0 r P^3 u = d_0 i^2 P u = d_0 m P e_0 P^2 e_0 = e_0^4 P^2 i = e_0^3 i P^2 e_0 = \\
& e_0^3 j P^2 d_0 = e_0^3 P d_0 P j = e_0^2 g i P^2 d_0 = e_0^2 i P e_0^2 = e_0^2 j P d_0 P e_0 = \\
& e_0^2 k P d_0^2 = e_0^2 l P^3 e_0 = e_0^2 m P^3 d_0 = e_0 g^2 P^3 j = e_0 g i P d_0 P e_0 = \\
& e_0 g j P d_0^2 = e_0 g k P^3 e_0 = e_0 g l P^3 d_0 = e_0 l P e_0 P^2 e_0 = e_0 m P d_0 P^2 e_0 = \\
& e_0 m P e_0 P^2 d_0 = g^2 i P d_0^2 = g^2 j P^3 e_0 = g^2 k P^3 d_0 = g^2 P e_0 P^2 j = \\
& g^2 P j P^2 e_0 = g k P e_0 P^2 e_0 = g l P d_0 P^2 e_0 = g l P e_0 P^2 d_0 = \\
& g m P d_0 P^2 d_0 = r P d_0 P^2 u = r u P^3 d_0 = r P^2 d_0 P u = i^2 P d_0 u = \\
& i j P^2 v = i k P^2 u = i v P^2 j = i w P^2 i = i P j P v = j^2 P^2 u = j u P^2 j = \\
& j v P^2 i = j P j P u = k u P^2 i = l P e_0^3 = m P d_0 P e_0^2 = u P j^2 = z P^3 v
\end{aligned}$$

Stem 108

- 6 (10)  $x_{6,89}$   
 (01)  $h_1 h_4 g_3 = h_1 h_6 g_2 = h_3 h_6 e_1$
- 7 (1)  $h_0 x_{6,89}$
- 9 (1)  $h_3 x_{8,93}$
- 10 (10)  $h_1 x_{9,102} = h_2 x_{9,99} = h_6 w$   
 (01)  $h_0 h_3 x_{8,93} = g_2 A''$   
 (11)  $h_3^2 x_{8,80}$
- 11 (10)  $x_{11,91}$   
 (01)  $h_0^2 h_3 x_{8,93} = h_0 h_3^2 x_{8,80} = h_0 g_2 A'' = h_2 g_2 A' = h_3 f_1 A' = p x_{7,53} =$   
 $x x_{6,47}$
- 13 (1)  $h_1 x_{12,85} = h_4 x_{12,60} = h_6 d_0^2 e_0 = h_6 g P e_0$
- 14 (1)  $x_{14,82}$
- 15 (10)  $e_0 x_{11,61}$   
 (01)  $x_{15,74}$
- 16 (100)  $e_0 r A' = e_0 r A = g^2 G_{21} = g n Q_2 = g r D_2 = l x_{9,51} = x_{7,34} w =$   
 $x_{7,40} v = N x_{8,33}$   
 (010)  $h_0 e_0 x_{11,61} = h_2 d_0 x_{11,61} = f_0 x_{12,55} = B_2 B_4$   
 (001)  $h_0 x_{15,74} = h_2 x_{15,68} = h_6 i P d_0$
- 17 (100)  $x_{17,76}$   
 (010)  $h_0^2 e_0 x_{11,61} = h_0 h_2 d_0 x_{11,61} = h_0 f_0 x_{12,55} = h_0 B_2 B_4 = h_1 d_0 x_{12,60} =$   
 $h_1 e_0 x_{12,55} = h_2^2 x_{15,65} = h_5 x_{16,33} = B_1 x_{10,27} = B_1 x_{10,28}$   
 (001)  $h_0^2 x_{15,74} = h_0 h_2 x_{15,68} = h_0 h_6 i P d_0 = h_2 h_6 P^2 j = h_6 P h_2 P j =$   
 $h_6 j P^2 h_2$
- 18 (1)  $h_0 x_{17,76}$
- 19 (10)  $h_1 x_{18,72} = d_0 x_{15,56}$   
 (01)  $h_0^2 x_{17,76}$   
 (11)  $h_3 x_{18,63}$
- 20 (10)  $g x_{16,48}$   
 (01)  $h_0^3 x_{17,76} = h_0 h_3 x_{18,63} = i x_{13,46} = R_1^2$
- 21 (10)  $d_0^2 g B_4 = d_0 e_0^2 B_4 = d_0 k B_{23} = d_0 l x_{10,27} = d_0 l x_{10,28} = d_0 m B_{21} =$   
 $e_0 g x_{13,35} = e_0 j B_{23} = e_0 k x_{10,27} = e_0 k x_{10,28} = e_0 l B_{21} = e_0 m Q_1 =$   
 $g^2 P^2 D_1 = g i B_{23} = g j x_{10,27} = g j x_{10,28} = g k B_{21} = g l Q_1 = g m x'$   
 (01)  $h_0^4 x_{17,76} = h_0^2 h_3 x_{18,63} = h_0 i x_{13,46} = h_0 R_1^2$
- 22 (10)  $h_1^2 x'^2 = h_1 P^2 h_1 x_{12,55} = P h_1^2 x_{12,55} = P h_1 B_1 x' = q x_{16,32} = u W_1 =$   
 $X_1 P u$   
 (01)  $h_0^5 x_{17,76} = h_0^3 h_3 x_{18,63} = h_0^2 i x_{13,46} = h_0^2 R_1^2$   
 (11)  $X_1 Q$
- 23 (1)  $d_0 x_{19,49} = i x_{16,42} = j x_{16,38} = k x_{16,35} = l x_{16,32} = P e_0 x_{15,41}$

continued

- Stem 108 continued
- 24 (10)  $d_0^2 g^4 = d_0^2 g r^2 = d_0^2 m w = d_0 e_0^2 g^3 = d_0 e_0^2 r^2 = d_0 e_0 l w = d_0 e_0 m v =$   
 $d_0 g k w = d_0 g l v = d_0 g m u = d_0 r k m = d_0 r l^2 = e_0^4 g^2 = e_0^2 k w =$   
 $e_0^2 l v = e_0^2 m u = e_0 g r z = e_0 g j w = e_0 g k v = e_0 g l u = e_0 r j m =$   
 $e_0 r k l = g^2 i w = g^2 j v = g^2 k u = g r i m = g r j l = g r k^2 = r u^2 = l m z$
- (01)  $d_0^2 x_{16,37} = d_0 e_0 x_{16,33} = d_0 r P Q_1 = d_0 i x_{13,35} = d_0 j P^2 D_1 =$   
 $d_0 k R_2 = d_0 B_4 P j = d_0 z x' = e_0 i P^2 D_1 = e_0 j R_2 = g i R_2 =$   
 $r P d_0 Q_1 = r P e_0 x' = i^2 x_{10,27} = i^2 x_{10,28} = i j B_{21} = i k Q_1 = i l x' =$   
 $i P e_0 B_4 = j^2 Q_1 = j k x' = j P d_0 B_4 = m P R_2$
- 26 (1)  $d_0 x_{22,39}$
- 27 (10)  $d_0^4 e_0 m = d_0^4 g l = d_0^3 e_0^2 l = d_0^3 e_0 g k = d_0^3 g^2 j = d_0^2 e_0^3 k = d_0^2 e_0^2 g j =$   
 $d_0^2 e_0 g^2 i = d_0^2 g m P e_0 = d_0^2 r P v = d_0^2 u z = d_0 e_0^4 j = d_0 e_0^3 g i =$   
 $d_0 e_0^2 m P e_0 = d_0 e_0 g l P e_0 = d_0 e_0 g m P d_0 = d_0 e_0 r P u = d_0 g^3 P j =$   
 $d_0 g^2 k P e_0 = d_0 g^2 l P d_0 = d_0 r^2 P j = d_0 r i z = d_0 r P d_0 v = d_0 r P e_0 u =$   
 $d_0 i j w = d_0 i k v = d_0 i l u = d_0 j^2 v = d_0 j k u = e_0^5 i = e_0^3 l P e_0 =$   
 $e_0^3 m P d_0 = e_0^2 g^2 P j = e_0^2 g k P e_0 = e_0^2 g l P d_0 = e_0 g^2 j P e_0 =$   
 $e_0 g^2 k P d_0 = e_0 r P d_0 u = e_0 i^2 w = e_0 i j v = e_0 i k u = e_0 j^2 u =$   
 $e_0 z P v = g^3 i P e_0 = g^3 j P d_0 = g^2 m P^2 e_0 = g r P^2 v = g i^2 v = g i j u =$   
 $g z P u = r^2 i P e_0 = r^2 j P d_0 = r i^2 l = r i j k = r j^3 = r w P^2 e_0 =$   
 $i m P v = j l P v = j m P u = j z^2 = k^2 P v = k l P u = k w P j = l v P j =$   
 $m u P j = P d_0 w z = P e_0 v z$
- (01)  $x' P^2 u$
- (11)  $u x_{18,20}$
- continued

Stem 108 continued

$$\begin{aligned}
30 \quad (10) \quad & d_0^2 P^3 Q_1 = d_0 P d_0 P^2 Q_1 = d_0 x' P^3 e_0 = d_0 Q_1 P^3 d_0 = \\
& d_0 P^2 d_0 P Q_1 = e_0 x' P^3 d_0 = g P^4 Q_1 = P d_0^2 P Q_1 = P d_0 x' P^2 e_0 = \\
& P d_0 Q_1 P^2 d_0 = P e_0 x' P^2 d_0 = B_{21} P^4 e_0 = x_{10,27} P^4 d_0 = x_{10,28} P^4 d_0 \\
(01) \quad & d_0^4 r P d_0 = d_0^4 i k = d_0^4 j^2 = d_0^3 e_0 i j = d_0^3 g i^2 = d_0^3 l P j = d_0^3 P e_0 z = \\
& d_0^2 e_0^2 i^2 = d_0^2 e_0 r P^2 e_0 = d_0^2 e_0 k P j = d_0^2 e_0 P d_0 z = d_0^2 g r P^2 d_0 = \\
& d_0^2 g j P j = d_0^2 r P e_0^2 = d_0^2 i l P e_0 = d_0^2 i m P d_0 = d_0^2 j k P e_0 = d_0^2 j l P d_0 = \\
& d_0^2 k^2 P d_0 = d_0 e_0^2 r P^2 d_0 = d_0 e_0^2 j P j = d_0 e_0 g i P j = d_0 e_0 r P d_0 P e_0 = \\
& d_0 e_0 i k P e_0 = d_0 e_0 i l P d_0 = d_0 e_0 j^2 P e_0 = d_0 e_0 j k P d_0 = d_0 e_0 m P^2 j = \\
& d_0 g r P d_0^2 = d_0 g i j P e_0 = d_0 g i k P d_0 = d_0 g j^2 P d_0 = d_0 g l P^2 j = \\
& d_0 g m P^2 i = d_0 g z P^2 e_0 = d_0 j m P^2 e_0 = d_0 k l P^2 e_0 = d_0 k m P^2 d_0 = \\
& d_0 l^2 P^2 d_0 = d_0 m P e_0 P j = d_0 u P^2 u = d_0 P u^2 = e_0^3 i P j = e_0^2 r P d_0^2 = \\
& e_0^2 i j P e_0 = e_0^2 i k P d_0 = e_0^2 j^2 P d_0 = e_0^2 l P^2 j = e_0^2 m P^2 i = e_0^2 z P^2 e_0 = \\
& e_0 g r P^3 e_0 = e_0 g i^2 P e_0 = e_0 g i j P d_0 = e_0 g k P^2 j = e_0 g l P^2 i = \\
& e_0 g z P^2 d_0 = e_0 i m P^2 e_0 = e_0 j l P^2 e_0 = e_0 j m P^2 d_0 = e_0 k^2 P^2 e_0 = \\
& e_0 k l P^2 d_0 = e_0 l P e_0 P j = e_0 m P d_0 P j = e_0 P e_0^2 z = g^2 r P^3 d_0 = \\
& g^2 i^2 P d_0 = g^2 j P^2 j = g^2 k P^2 i = g^2 P j^2 = g r P e_0 P^2 e_0 = g i l P^2 e_0 = \\
& g i m P^2 d_0 = g j k P^2 e_0 = g j l P^2 d_0 = g k^2 P^2 d_0 = g k P e_0 P j = \\
& g l P d_0 P j = g P d_0 P e_0 z = r i P^2 u = r u P^2 i = i^3 u = i m P e_0^2 = \\
& j l P e_0^2 = j m P d_0 P e_0 = k^2 P e_0^2 = k l P d_0 P e_0 = k m P d_0^2 = l^2 P d_0^2 = \\
& l m P^3 e_0 = m^2 P^3 d_0 = P d_0 u P u = u^2 P^2 d_0 = v P^3 v = w P^3 u = \\
& P v P^2 v \\
(11) \quad & d_0 P e_0 x_{18,20} = e_0 P d_0 x_{18,20} \\
31 \quad (1) \quad & h_0 d_0^2 P^3 Q_1 = h_0 d_0 P d_0 P^2 Q_1 = h_0 d_0 P e_0 x_{18,20} = h_0 d_0 x' P^3 e_0 = \\
& h_0 d_0 Q_1 P^3 d_0 = h_0 d_0 P^2 d_0 P Q_1 = h_0 e_0 P d_0 x_{18,20} = h_0 e_0 x' P^3 d_0 = \\
& h_0 g P^4 Q_1 = h_0 P d_0^2 P Q_1 = h_0 P d_0 x' P^2 e_0 = h_0 P d_0 Q_1 P^2 d_0 = \\
& h_0 P e_0 x' P^2 d_0 = h_0 B_{21} P^4 e_0 = h_0 x_{10,27} P^4 d_0 = h_0 x_{10,28} P^4 d_0 = \\
& h_2 d_0 P d_0 x_{18,20} = h_2 d_0 x' P^3 d_0 = h_2 e_0 P^4 Q_1 = h_2 g P^4 x' = \\
& h_2 P d_0 x' P^2 d_0 = h_2 P e_0 P^3 Q_1 = h_2 Q_1 P^4 e_0 = h_2 B_{21} P^4 d_0 = \\
& h_2 P^2 e_0 P^2 Q_1 = h_2 P Q_1 P^3 e_0 = d_0^2 P h_2 x_{18,20} = d_0^2 x' P^3 h_2 = \\
& d_0 P h_2 x' P^2 d_0 = d_0 B_2 P^4 d_0 = d_0 P d_0 P^2 h_2 x' = d_0 B_{21} P^4 h_2 = \\
& e_0 P h_2 P^3 Q_1 = e_0 P^2 h_2 P^2 Q_1 = e_0 Q_1 P^4 h_2 = e_0 P^3 h_2 P Q_1 = \\
& g P^2 h_2 x_{18,20} = g x' P^4 h_2 = P h_2 P d_0^2 x' = P h_2 P e_0 P^2 Q_1 = \\
& P h_2 Q_1 P^3 e_0 = P h_2 B_{21} P^3 d_0 = P h_2 P^2 e_0 P Q_1 = P c_0 P^2 x_{16,32} = \\
& B_2 P d_0 P^3 d_0 = B_2 P^2 d_0^2 = P d_0 B_{21} P^3 h_2 = P e_0 P^2 h_2 P Q_1 = \\
& P e_0 Q_1 P^3 h_2 = P^2 h_2 Q_1 P^2 e_0 = P^2 h_2 B_{21} P^2 d_0 = B_{23} P^5 h_2 = \\
& P^3 c_0 x_{16,32} \\
32 \quad (1) \quad & P^4 x_{16,32}
\end{aligned}$$

Stem 109

5	(1)	$D_{11}$
8	(1)	$h_6 B_1$
9	(10)	$h_6 N$
	(01)	$h_3^2 x_{7,79}$
	(11)	$h_4 x_{8,80}$
10	(10)	$x_{10,100}$
	(01)	$h_0 h_3^2 x_{7,79} = h_0 h_4 x_{8,80} = h_1 h_3 x_{8,93} = h_2 g_2 H_1 = h_3 c_2 A' =$ $h_3 f_1 H_1 = p x_{6,53} = e_1 x_{6,47}$
12	(10)	$x_{12,86}$
	(01)	$h_6 d_0 l = h_6 e_0 k = h_6 g j$
13	(1)	$x_{13,87}$
14	(01)	$x_{14,84}$
	(11)	$y_{14,83}$
15	(100)	$h_1 x_{14,82} = h_6 i^2 = f_0 x_{11,61}$
	(010)	$h_0 y_{14,83}$
	(001)	$h_0 x_{14,84}$
	(101)	$h_2 x_{14,79}$
16	(1)	$h_0^2 x_{14,84} = h_0 h_2 x_{14,79} = h_1 x_{15,74} = h_4 x_{15,56}$
17	(10)	$x_{17,79}$
	(01)	$x_{17,80}$
18	(10)	$h_0 x_{17,79}$
	(01)	$h_0 x_{17,80}$
19	(100)	$r x_{13,42}$
	(010)	$h_0^2 x_{17,79}$
	(001)	$h_0^2 x_{17,80}$
20	(0011)	$h_3 x_{19,58}$
	(0100)	$d_0 r B_{23} = d_0 m B_4 = e_0 r x_{10,27} = e_0 r x_{10,28} = e_0 l B_4 = g r B_{21} =$ $g k B_4$
	(0010)	$h_0^3 x_{17,79}$
	(0001)	$h_0^3 x_{17,80}$
	(1001)	$x' Q_1$
21	(100)	$h_0 x' Q_1 = h_2 x'^2 = P^2 h_2 x_{12,55}$
	(010)	$h_0 h_3 x_{19,58} = i P^3 h_5^2$
	(110)	$c_0 x_{18,63}$
	(001)	$h_0^4 x_{17,80}$
	(011)	$h_0^4 x_{17,79}$

continued

- Stem 109      continued
- 22 (100)  $rx_{16,35} = jx_{15,41}$   
(010)  $h_0^2 h_3 x_{19,58} = h_0^2 x' Q_1 = h_0 h_2 x'^2 = h_0 i P^3 h_5^2 = h_0 P^2 h_2 x_{12,55}$   
(110)  $d_0 x_{18,57} = e_0 x_{18,55} = g x_{18,50}$   
(001)  $h_0^5 x_{17,80}$   
(011)  $h_0^3 x_{17,79}$
- 23 (0011)  $h_0^6 x_{17,79} = h_4 x_{22,39} = x_{10,27} Q$   
(1000)  $d_0 g^3 m = d_0 g r w = d_0 r^2 m = e_0^2 g^2 m = e_0^2 r w = e_0 g^3 l = e_0 g r v = e_0 r^2 l = g^4 k = g^2 r u = g r^2 k = k m w = l^2 w = l m v = m^2 u$   
(0100)  $d_0 r R_2 = d_0 u Q_1 = d_0 v x' = k x_{16,37} = l x_{16,33} = P d_0 x_{15,47} = w P Q_1 = z P^2 D_1 = B_{21} P v = x_{10,27} P u$   
(0010)  $h_0^3 h_3 x_{19,58} = h_0^3 x' Q_1 = h_0^2 h_2 x'^2 = h_0^2 i P^3 h_5^2 = h_0^2 P^2 h_2 x_{12,55} = h_0 r x_{16,35} = h_0 j x_{15,41} = h_1^3 x'^2 = h_1^2 P^2 h_1 x_{12,55} = h_1 P h_1^2 x_{12,55} = h_1 P h_1 B_1 x' = h_1 q x_{16,32} = h_1 u W_1 = h_1 X_1 Q = h_1 X_1 P u = h_2 r x_{16,32} = h_2 i x_{15,41} = h_2^3 x_{21,43} = P h_1 u X_1 = x P^2 Q_1 = G P^2 u = x_{6,53} P^4 h_1 = B_1^2 P^2 h_1 = P e_0 x_{15,42} = x_{10,28} Q = P x_{6,53} P^3 h_1$   
(0110)  $e_0 u x' = r i Q_1 = r j x' = i j B_4 = P e_0 x_{15,43} = x_{10,28} P u$   
(0001)  $h_0^6 x_{17,80}$
- 24 (1)  $h_0^7 x_{17,79} = h_0^7 x_{17,80} = h_0 h_4 x_{22,39} = h_0 x_{10,27} Q$
- 25 (10)  $d_0 P x_{17,50} = P d_0 x_{17,50}$   
(01)  $h_0^8 x_{17,79} = h_0^8 x_{17,80} = h_0^2 h_4 x_{22,39} = h_0^2 x_{10,27} Q$
- 26 (010)  $d_0^4 x' = d_0^2 e_0 P Q_1 = d_0^2 P d_0 B_{21} = d_0^2 P e_0 Q_1 = d_0 e_0 P d_0 Q_1 = d_0 e_0 P e_0 x' = d_0 g P d_0 x' = d_0 x_{10,27} P^2 e_0 = d_0 x_{10,28} P^2 e_0 = d_0 B_{23} P^2 d_0 = e_0^2 P d_0 x' = e_0 g P^2 Q_1 = e_0 B_{21} P^2 e_0 = e_0 x_{10,27} P^2 d_0 = e_0 x_{10,28} P^2 d_0 = g P e_0 P Q_1 = g Q_1 P^2 e_0 = g B_{21} P^2 d_0 = P d_0^2 B_{23} = P d_0 P e_0 x_{10,27} = P d_0 P e_0 x_{10,28} = P e_0^2 B_{21} = u R_1$   
(001)  $h_0^9 x_{17,79} = h_0^9 x_{17,80} = h_0^3 h_4 x_{22,39} = h_0^3 x_{10,27} Q$   
(101)  $d_0^3 e_0 g r = d_0^3 l m = d_0^2 e_0^3 r = d_0^2 e_0 k m = d_0^2 e_0 l^2 = d_0^2 g^2 z = d_0^2 g j m = d_0^2 g k l = d_0^2 u v = d_0 e_0^2 g z = d_0 e_0^2 j m = d_0 e_0^2 k l = d_0 e_0 g i m = d_0 e_0 g j l = d_0 e_0 g k^2 = d_0 e_0 u^2 = d_0 g^2 r P e_0 = d_0 g^2 i l = d_0 g^2 j k = d_0 r i v = d_0 r j u = d_0 m^2 P e_0 = d_0 w P v = e_0^4 z = e_0^3 i m = e_0^3 j l = e_0^3 k^2 = e_0^2 g r P e_0 = e_0^2 g i l = e_0^2 g j k = e_0 g^2 r P d_0 = e_0 g^2 i k = e_0 g^2 j^2 = e_0 r i u = e_0 l m P e_0 = e_0 m^2 P d_0 = e_0 v P v = e_0 w P u = g^3 i j = g^2 m P j = g k m P e_0 = g l^2 P e_0 = g l m P d_0 = g u P v = g v P u = r^2 i j = r k P v = r l P u = r w P j = i w z = j v z = k u z = P d_0 v w = P e_0 u w = P e_0 v^2$   
(111)  $g^2 x_{18,20}$
- 27 (1)  $h_0^{10} x_{17,79} = h_0^{10} x_{17,80} = h_0^4 h_4 x_{22,39} = h_0^4 x_{10,27} Q = h_4 Q^2$
- continued

Stem 109    continued

28 (010)  $h_1 u x_{18,20} = h_1 x' P^2 u = P h_1 x' Q = P h_1 x' P u = B_1 P^3 u =$   
 $P^2 h_1 u x' = P^3 h_1 x_{15,42} = P^3 h_1 x_{15,43}$

(001)  $h_0^{11} x_{17,79} = h_0^{11} x_{17,80} = h_0^5 h_4 x_{22,39} = h_0^5 x_{10,27} Q = h_0 h_4 Q^2$

(101)  $d_0 P^2 x_{16,35} = P d_0 P x_{16,35} = P^2 d_0 x_{16,35}$

(111)  $e_0 P^2 x_{16,32} = P^2 e_0 x_{16,32}$

29 (100)  $d_0 i P^2 Q_1 = d_0 x' P^2 j = d_0 Q_1 P^2 i = e_0 x' P^2 i = i P d_0 P Q_1 =$   
 $i x' P^2 e_0 = i Q_1 P^2 d_0 = j x' P^2 d_0 = k P^3 Q_1 = P d_0 x' P j =$   
 $B_4 P^4 e_0 = B_{21} P^3 j = x_{13,35} P^3 d_0$

(010)  $d_0^5 u = d_0^4 r i = d_0^3 e_0 P v = d_0^3 g P u = d_0^3 j z = d_0^3 P d_0 w = d_0^3 P e_0 v =$   
 $d_0^2 e_0^2 P u = d_0^2 e_0 r P j = d_0^2 e_0 i z = d_0^2 e_0 P d_0 v = d_0^2 e_0 P e_0 u =$   
 $d_0^2 g P d_0 u = d_0^2 r j P e_0 = d_0^2 r k P d_0 = d_0^2 i^2 m = d_0^2 i j l = d_0^2 i k^2 =$   
 $d_0^2 j^2 k = d_0 e_0^2 P d_0 u = d_0 e_0 g P^2 v = d_0 e_0 r i P e_0 = d_0 e_0 r j P d_0 =$   
 $d_0 e_0 i^2 l = d_0 e_0 i j k = d_0 e_0 j^3 = d_0 e_0 w P^2 e_0 = d_0 g^2 P^2 u =$   
 $d_0 g r i P d_0 = d_0 g i^2 k = d_0 g i j^2 = d_0 g P e_0 P v = d_0 g v P^2 e_0 =$   
 $d_0 g w P^2 d_0 = d_0 g z P j = d_0 r l P^2 e_0 = d_0 r m P^2 d_0 = d_0 j m P j =$   
 $d_0 k l P j = d_0 k P e_0 z = d_0 l P d_0 z = d_0 P e_0^2 w = e_0^3 P^2 v = e_0^2 g P^2 u =$   
 $e_0^2 r i P d_0 = e_0^2 i^2 k = e_0^2 i j^2 = e_0^2 P e_0 P v = e_0^2 v P^2 e_0 = e_0^2 w P^2 d_0 =$   
 $e_0^2 z P j = e_0 g r P^2 j = e_0 g i^2 j = e_0 g P d_0 P v = e_0 g P e_0 P u =$   
 $e_0 g u P^2 e_0 = e_0 g v P^2 d_0 = e_0 r k P^2 e_0 = e_0 r l P^2 d_0 = e_0 i m P j =$   
 $e_0 j l P j = e_0 j P e_0 z = e_0 k^2 P j = e_0 k P d_0 z = e_0 P d_0 P e_0 w =$   
 $e_0 P e_0^2 v = g^2 r P^2 i = g^2 i^3 = g^2 P d_0 P u = g^2 u P^2 d_0 = g r j P^2 e_0 =$   
 $g r k P^2 d_0 = g r P e_0 P j = g i l P j = g i P e_0 z = g j k P j = g j P d_0 z =$   
 $g P d_0^2 w = g P d_0 P e_0 v = g P e_0^2 u = r k P e_0^2 = r l P d_0 P e_0 = r m P d_0^2 =$   
 $i j m P e_0 = i k l P e_0 = i k m P d_0 = i l^2 P d_0 = i u P u = j^2 l P e_0 =$   
 $j^2 m P d_0 = j k^2 P e_0 = j k l P d_0 = k^3 P d_0 = l m P^2 j = m^2 P^2 i =$   
 $m z P^2 e_0$

(110)  $d_0 j x_{18,20} = e_0 i x_{18,20}$

(001)  $h_0^{12} x_{17,79} = h_0^{12} x_{17,80} = h_0^6 h_4 x_{22,39} = h_0^6 x_{10,27} Q = h_0^2 h_4 Q^2 =$   
 $h_0 d_0 P^2 x_{16,35} = h_0 e_0 P^2 x_{16,32} = h_0 P d_0 P x_{16,35} = h_0 P^2 d_0 x_{16,35} =$   
 $h_0 P^2 e_0 x_{16,32} = h_2 d_0 P^2 x_{16,32} = h_2 P^2 d_0 x_{16,32} = d_0 P^2 h_2 x_{16,32} =$   
 $P h_2 P d_0 x_{16,32} = P^3 h_2 x_{16,38} = x_{13,34} P^3 d_0$

(101)  $d_0^2 P^2 R_2 = d_0 P d_0 P R_2 = d_0 P e_0 R_1 = d_0 P^2 d_0 R_2 = e_0 P d_0 R_1 =$   
 $g P^3 R_2 = P d_0^2 R_2 = P^2 D_1 P^3 e_0$

continued

Stem 109 continued

$$\begin{aligned}
30 \quad (10) \quad & h_0 d_0 i P^2 Q_1 = h_0 d_0 j x_{18,20} = h_0 d_0 x' P^2 j = h_0 d_0 Q_1 P^2 i = \\
& h_0 e_0 i x_{18,20} = h_0 e_0 x' P^2 i = h_0 i P d_0 P Q_1 = h_0 i x' P^2 e_0 = \\
& h_0 i Q_1 P^2 d_0 = h_0 j x' P^2 d_0 = h_0 k P^3 Q_1 = h_0 P d_0 x' P j = \\
& h_0 B_4 P^4 e_0 = h_0 B_{21} P^3 j = h_0 x_{13,35} P^3 d_0 = h_2 d_0 i x_{18,20} = \\
& h_2 d_0 x' P^2 i = h_2 i x' P^2 d_0 = h_2 j P^3 Q_1 = h_2 B_4 P^4 d_0 = h_2 Q_1 P^3 j = \\
& h_2 P j P^2 Q_1 = h_2 P Q_1 P^2 j = d_0 i P^2 h_2 x' = d_0 B_4 P^4 h_2 = \\
& f_0 P d_0 x_{18,20} = f_0 x' P^3 d_0 = P h_2 i P d_0 x' = P h_2 j P^2 Q_1 = \\
& P h_2 k x_{18,20} = P h_2 B_4 P^3 d_0 = P h_2 Q_1 P^2 j = P h_2 B_{21} P^2 i = \\
& P h_2 P j P Q_1 = i B_2 P^3 d_0 = i B_{21} P^3 h_2 = j P^2 h_2 P Q_1 = j Q_1 P^3 h_2 = \\
& k x' P^3 h_2 = B_2 P d_0 P^2 i = P d_0 B_4 P^3 h_2 = P^2 h_2 B_4 P^2 d_0 = \\
& P^2 h_2 Q_1 P j \\
(01) \quad & h_0^{13} x_{17,79} = h_0^{13} x_{17,80} = h_0^7 h_4 x_{22,39} = h_0^7 x_{10,27} Q = h_0^3 h_4 Q^2 = \\
& h_0^2 d_0 P^2 x_{16,35} = h_0^2 e_0 P^2 x_{16,32} = h_0^2 P d_0 P x_{16,35} = h_0^2 P^2 d_0 x_{16,35} = \\
& h_0^2 P^2 e_0 x_{16,32} = h_0 h_2 d_0 P^2 x_{16,32} = h_0 h_2 P^2 d_0 x_{16,32} = \\
& h_0 d_0 P^2 h_2 x_{16,32} = h_0 P h_2 P d_0 x_{16,32} = h_0 P^3 h_2 x_{16,38} = \\
& h_0 x_{13,34} P^3 d_0 = h_2^2 P^3 x_{16,35} = h_2 P h_2 P^2 x_{16,35} = h_2 P^2 h_2 P x_{16,35} = \\
& h_2 P^3 h_2 x_{16,35} = P h_2^2 P x_{16,35} = P h_2 P^2 h_2 x_{16,35} \\
(11) \quad & h_0 d_0^2 P^2 R_2 = h_0 d_0 P d_0 P R_2 = h_0 d_0 P e_0 R_1 = h_0 d_0 P^2 d_0 R_2 = \\
& h_0 e_0 P d_0 R_1 = h_0 g P^3 R_2 = h_0 P d_0^2 R_2 = h_0 P^2 D_1 P^3 e_0 = \\
& h_2 d_0 P d_0 R_1 = h_2 e_0 P^3 R_2 = h_2 g x_{25,24} = h_2 P e_0 P^2 R_2 = \\
& h_2 P^2 e_0 P R_2 = h_2 R_2 P^3 e_0 = h_2 P^2 D_1 P^3 d_0 = d_0^2 P h_2 R_1 = \\
& d_0 R_1 P^3 e_0 = d_0 P^3 h_2 P^2 D_1 = e_0 P h_2 P^2 R_2 = e_0 P^2 h_2 P R_2 = \\
& e_0 R_1 P^3 d_0 = e_0 P^3 h_2 R_2 = g P^2 h_2 R_1 = P h_2 P e_0 P R_2 = \\
& P h_2 P^2 d_0 P^2 D_1 = P h_2 P^2 e_0 R_2 = P d_0 P^2 h_2 P^2 D_1 = P d_0 R_1 P^2 e_0 = \\
& P e_0 P^2 h_2 R_2 = P e_0 R_1 P^2 d_0 \\
31 \quad (1) \quad & h_0^2 d_0^2 P^2 R_2 = h_0^2 d_0 i P^2 Q_1 = h_0^2 d_0 j x_{18,20} = h_0^2 d_0 P d_0 P R_2 = \\
& h_0^2 d_0 P e_0 R_1 = h_0^2 d_0 x' P^2 j = h_0^2 d_0 Q_1 P^2 i = h_0^2 d_0 P^2 d_0 R_2 = \\
& h_0^2 e_0 i x_{18,20} = h_0^2 e_0 P d_0 R_1 = h_0^2 e_0 x' P^2 i = h_0^2 g P^3 R_2 = \\
& h_0^2 i P d_0 P Q_1 = h_0^2 i x' P^2 e_0 = h_0^2 i Q_1 P^2 d_0 = h_0^2 j x' P^2 d_0 = \\
& h_0^2 k P^3 Q_1 = h_0^2 P d_0^2 R_2 = h_0^2 P d_0 x' P j = h_0^2 B_4 P^4 e_0 = \\
& h_0^2 B_{21} P^3 j = h_0^2 P^2 D_1 P^3 e_0 = h_0^2 x_{13,35} P^3 d_0 = h_0 h_2 d_0 i x_{18,20} = \\
& h_0 h_2 d_0 P d_0 R_1 = h_0 h_2 d_0 x' P^2 i = h_0 h_2 e_0 P^3 R_2 = h_0 h_2 g x_{25,24} = \\
& h_0 h_2 i x' P^2 d_0 = h_0 h_2 j P^3 Q_1 = h_0 h_2 P e_0 P^2 R_2 = h_0 h_2 B_4 P^4 d_0 = \\
& h_0 h_2 Q_1 P^3 j = h_0 h_2 P j P^2 Q_1 = h_0 h_2 P^2 e_0 P R_2 = \\
& h_0 h_2 R_2 P^3 e_0 = h_0 h_2 P^2 D_1 P^3 d_0 = h_0 h_2 P Q_1 P^2 j = h_0 d_0^2 P h_2 R_1 = \\
& h_0 d_0 i P^2 h_2 x' = h_0 d_0 B_4 P^4 h_2 = h_0 d_0 R_1 P^3 e_0 = h_0 d_0 P^3 h_2 P^2 D_1 = \\
& h_0 e_0 P h_2 P^2 R_2 = h_0 e_0 P^2 h_2 P R_2 = h_0 e_0 R_1 P^3 d_0 = h_0 e_0 P^3 h_2 R_2 = \\
& h_0 f_0 P d_0 x_{18,20} = h_0 f_0 x' P^3 d_0 = h_0 g P^2 h_2 R_1 = h_0 P h_2 i P d_0 x' = \\
& h_0 P h_2 j P^2 Q_1 = h_0 P h_2 k x_{18,20} = h_0 P h_2 P e_0 P R_2 = \\
& h_0 P h_2 B_4 P^3 d_0 = h_0 P h_2 Q_1 P^2 j = (\text{continued})
\end{aligned}$$



Stem 109 continued

$$\begin{aligned}
31 \quad (1) \quad & \text{(continued)} = h_0Ph_2B_{21}P^2i = h_0Ph_2PjPQ_1 = \\
& h_0Ph_2P^2d_0P^2D_1 = h_0Ph_2P^2e_0R_2 = h_0iB_2P^3d_0 = \\
& h_0iB_{21}P^3h_2 = h_0jP^2h_2PQ_1 = h_0jQ_1P^3h_2 = h_0kx'P^3h_2 = \\
& h_0B_2Pd_0P^2i = h_0Pd_0P^2h_2P^2D_1 = h_0Pd_0B_4P^3h_2 = \\
& h_0Pd_0R_1P^2e_0 = h_0Pe_0P^2h_2R_2 = h_0Pe_0R_1P^2d_0 = \\
& h_0P^2h_2B_4P^2d_0 = h_0P^2h_2Q_1Pj = h_1d_0^2P^3Q_1 = h_1d_0Pd_0P^2Q_1 = \\
& h_1d_0Pe_0x_{18,20} = h_1d_0x'P^3e_0 = h_1d_0Q_1P^3d_0 = h_1d_0P^2d_0PQ_1 = \\
& h_1e_0Pd_0x_{18,20} = h_1e_0x'P^3d_0 = h_1gP^4Q_1 = h_1Pd_0^2PQ_1 = \\
& h_1Pd_0x'P^2e_0 = h_1Pd_0Q_1P^2d_0 = h_1Pe_0x'P^2d_0 = h_1B_{21}P^4e_0 = \\
& h_1x_{10,27}P^4d_0 = h_1x_{10,28}P^4d_0 = h_2^2d_0P^3R_2 = h_2^2e_0x_{25,24} = \\
& h_2^2iP^3Q_1 = h_2^2Pd_0P^2R_2 = h_2^2x'P^3j = h_2^2Pjx_{18,20} = \\
& h_2^2P^2d_0PR_2 = h_2^2P^2e_0R_1 = h_2^2R_2P^3d_0 = h_2^2PQ_1P^2i = \\
& h_2d_0Ph_2P^2R_2 = h_2d_0P^2h_2PR_2 = h_2d_0R_1P^3d_0 = \\
& h_2d_0P^3h_2R_2 = h_2e_0P^2h_2R_1 = h_2f_0P^4Q_1 = h_2Ph_2iP^2Q_1 = \\
& h_2Ph_2jx_{18,20} = h_2Ph_2Pd_0PR_2 = h_2Ph_2Pe_0R_1 = \\
& h_2Ph_2x'P^2j = h_2Ph_2Q_1P^2i = h_2Ph_2P^2d_0R_2 = \\
& h_2iP^2h_2PQ_1 = h_2iQ_1P^3h_2 = h_2jx'P^3h_2 = h_2B_2P^4j = \\
& h_2Pd_0P^2h_2R_2 = h_2Pd_0R_1P^2d_0 = h_2P^2h_2x'Pj = h_2x_{13,35}P^4h_2 = \\
& d_0^2Ph_1P^2Q_1 = d_0^2P^2h_1PQ_1 = d_0^2R_1P^3h_2 = d_0^2Q_1P^3h_1 = \\
& d_0e_0Ph_1x_{18,20} = d_0e_0x'P^3h_1 = d_0Ph_1Pd_0PQ_1 = d_0Ph_1x'P^2e_0 = \\
& d_0Ph_1Q_1P^2d_0 = d_0Ph_2^2PR_2 = d_0Ph_2P^2h_2R_2 = \\
& d_0Ph_2R_1P^2d_0 = d_0B_1P^4e_0 = d_0Pd_0P^2h_1Q_1 = d_0Pd_0P^2h_2R_1 = \\
& d_0Pe_0P^2h_1x' = d_0x_{10,27}P^4h_1 = d_0x_{10,28}P^4h_1 = e_0Ph_1x'P^2d_0 = \\
& e_0Ph_2^2R_1 = e_0B_1P^4d_0 = e_0Pd_0P^2h_1x' = e_0B_{21}P^4h_1 = \\
& f_0Ph_2P^3Q_1 = f_0P^2h_2P^2Q_1 = f_0Q_1P^4h_2 = f_0P^3h_2PQ_1 = \\
& gPh_1P^3Q_1 = gP^2h_1P^2Q_1 = gR_1P^4h_2 = gQ_1P^4h_1 = \\
& gP^3h_1PQ_1 = Ph_1Pd_0^2Q_1 = Ph_1Pd_0Pe_0x' = Ph_1B_{21}P^3e_0 = \\
& Ph_1x_{10,27}P^3d_0 = Ph_1x_{10,28}P^3d_0 = Ph_2^2iPQ_1 = Ph_2^2Pd_0R_2 = \\
& Ph_2^2x'Pj = Ph_2iP^2h_2Q_1 = Ph_2jP^2h_2x' = Ph_2B_2P^3j = \\
& Ph_2Pd_0^2R_1 = Ph_2P^3h_2x_{13,35} = D_2P^6h_2 = Pc_0iR_1 = jB_2P^4h_2 = \\
& B_1Pd_0P^3e_0 = B_1Pe_0P^3d_0 = B_1P^2d_0P^2e_0 = B_2P^2h_2P^2j = \\
& B_2PjP^3h_2 = Pd_0x_{10,27}P^3h_1 = Pd_0x_{10,28}P^3h_1 = Pe_0B_{21}P^3h_1 = \\
& P^2h_1B_{21}P^2e_0 = P^2h_1x_{10,27}P^2d_0 = P^2h_1x_{10,28}P^2d_0 = \\
& P^2h_2^2x_{13,35} = B_5P^5h_2 = PD_2P^5h_2 = P^3c_0x_{16,33}
\end{aligned}$$

Stem 110

- 6 (1)  $h_2h_4g_3 = h_2h_6g_2 = h_3h_6f_1 = h_4^2e_2$   
7 (1)  $h_0h_2h_4g_3 = h_0h_2h_6g_2 = h_0h_3h_6f_1 = h_0h_4^2e_2 = h_3^2h_6p = c_2p'$   
8 (1)  $h_3x_{7,90} = h_4x_{7,79}$   
9 (1)  $h_1h_6B_1$   
10 (100)  $x_{10,102}$   
(001)  $h_2x_{9,102}$   
(011)  $h_3^2x_{8,83} = g_2r_1$   
11 (10)  $h_1x_{10,100} = h_4x_{10,73} = c_1x_{8,75} = g_2x_{7,40} = D_1D_2$   
(01)  $h_0h_2x_{9,102} = h_2^2x_{9,97} = h_6e_0r$   
(11)  $h_0h_3^2x_{8,83} = h_0g_2r_1 = pm_1$   
13 (10)  $x_{13,88}$   
(01)  $h_1x_{12,86}$   
14 (100)  $h_2x_{13,85} = h_5x_{13,42} = c_1x_{11,61} = f_0x_{10,65}$   
(001)  $h_1x_{13,87} = h_6Pu$   
(011)  $h_6Q$   
15 (10)  $x_{15,78}$   
(01)  $h_0h_6Q$   
16 (1000)  $x_{16,77}$   
(0100)  $x_{16,78}$   
(0010)  $d_0x_{12,64} = e_0x_{12,60} = gx_{12,55}$   
(0001)  $h_0^2h_6Q$   
17 (10)  $h_0d_0x_{12,64} = h_0e_0x_{12,60} = h_0gx_{12,55} = h_2d_0x_{12,60} = h_2e_0x_{12,55} =$   
 $h_5x_{16,35} = h_6d_0P^2e_0 = h_6e_0P^2d_0 = h_6Pd_0Pe_0 = B_2x_{10,27} =$   
 $B_2x_{10,28} = Q_2x'$   
(01)  $h_0^3h_6Q = h_0x_{16,78}$   
18 (1000)  $x_{18,77}$   
(0100)  $x_{18,78}$   
(0010)  $h_1x_{17,79}$   
(0001)  $h_0^4h_6Q = h_0^2d_0x_{12,64} = h_0^2e_0x_{12,60} = h_0^2gx_{12,55} = h_0^2x_{16,78} =$   
 $h_0h_2d_0x_{12,60} = h_0h_2e_0x_{12,55} = h_0h_5x_{16,35} = h_0h_6d_0P^2e_0 =$   
 $h_0h_6e_0P^2d_0 = h_0h_6Pd_0Pe_0 = h_0B_2x_{10,27} = h_0B_2x_{10,28} =$   
 $h_0Q_2x' = h_2^2d_0x_{12,55} = h_2h_5x_{16,32} = h_2h_6d_0P^2d_0 = h_2h_6Pd_0^2 =$   
 $h_2Ph_2x_{12,64} = h_2B_2B_{21} = h_5d_0R_2 = h_6d_0^2P^2h_2 = h_6d_0Ph_2Pd_0 =$   
 $h_6gP^3h_2 = c_0x_{15,65} = d_0B_2^2$   
19 (1000)  $grB_4 = wB_{23}$   
(0100)  $Px_{15,65}$   
(0010)  $h_0x_{18,77}$   
(0001)  $h_0x_{18,78} = h_2x_{18,72} = d_0x_{15,58}$

continued

- Stem 110    continued
- 20 (100)  $h_0Px_{15,65} = h_2P^2x_{11,61} = P^2h_2x_{11,61}$   
(010)  $h_0^2x_{18,77}$   
(001)  $h_0^2x_{18,78} = h_0h_2x_{18,72} = h_0d_0x_{15,58} = h_2^2x_{18,68}$   
(101)  $R_1Q_1$
- 21 (100)  $e_0x_{17,57} = gx_{17,52}$   
(010)  $h_0^2Px_{15,65} = h_0h_2P^2x_{11,61} = h_0P^2h_2x_{11,61} = h_0R_1Q_1 =$   
 $h_1x'Q_1 = h_2x'R_1 = Ph_1Px_{12,60} = B_1PQ_1 = P^2h_1x_{12,60}$   
(001)  $h_0^3x_{18,77}$
- 22 (100)  $g^4r = g^2m^2 = gr^3 = gw^2 = rmw$   
(010)  $d_0^2e_0B_{23} = d_0^2gx_{10,27} = d_0^2gx_{10,28} = d_0e_0^2x_{10,27} = d_0e_0^2x_{10,28} =$   
 $d_0e_0gB_{21} = d_0g^2Q_1 = e_0^3B_{21} = e_0^2gQ_1 = e_0g^2x' = gPe_0B_{23} =$   
 $rx_{16,37} = ix_{15,47} = jx_{15,43} = ux_{13,35} = vP^2D_1 = wR_2 = B_4Pv$   
(001)  $h_0^4x_{18,77} = h_4x_{21,43}$
- 23 (10)  $Ph_1x_{18,63}$   
(01)  $h_0^5x_{18,77} = h_0h_4x_{21,43}$
- 24 (10)  $d_0^2x_{16,38} = d_0e_0x_{16,35} = d_0gx_{16,32} = e_0^2x_{16,32} = ix_{17,50} =$   
 $Pd_0x_{16,48} = Pe_0x_{16,42}$   
(01)  $h_0^6x_{18,77} = h_0^2h_4x_{21,43}$
- 25 (100)  $d_0^2e_0gw = d_0^2e_0rm = d_0^2g^2v = d_0^2grl = d_0e_0^3w = d_0e_0^2gv = d_0e_0^2rl =$   
 $d_0e_0g^2u = d_0e_0grk = d_0g^2rj = d_0gmz = d_0jm^2 = d_0klm = d_0l^3 =$   
 $e_0^4v = e_0^3gu = e_0^3rk = e_0^2grj = e_0^2mz = e_0g^2ri = e_0glz = e_0im^2 =$   
 $e_0jlm = e_0k^2m = e_0kl^2 = g^3Pv = g^2kz = g^2Pe_0w = grmPe_0 =$   
 $gilm = gjkm = gjl^2 = gk^2l = r^2Pv = ruz = ivw = juw = jv^2 =$   
 $kuv = lu^2$   
(010)  $d_0^3P^2D_1 = d_0^2e_0R_2 = d_0^2iB_{21} = d_0^2jQ_1 = d_0^2kx' = d_0^2Pd_0B_4 =$   
 $d_0e_0iQ_1 = d_0e_0jx' = d_0gix' = d_0lPQ_1 = d_0Pe_0x_{13,35} =$   
 $d_0x_{10,27}Pj = d_0x_{10,28}Pj = e_0^2ix' = e_0gPR_2 = e_0kPQ_1 =$   
 $e_0Pd_0x_{13,35} = e_0Pe_0P^2D_1 = e_0B_4P^2e_0 = e_0B_{21}Pj = g^2R_1 =$   
 $gjPQ_1 = gPd_0P^2D_1 = gPe_0R_2 = gB_4P^2d_0 = gQ_1Pj =$   
 $iPd_0B_{23} = iPe_0x_{10,27} = iPe_0x_{10,28} = jPd_0x_{10,27} = jPd_0x_{10,28} =$   
 $jPe_0B_{21} = kPd_0B_{21} = kPe_0Q_1 = lPd_0Q_1 = lPe_0x' =$   
 $mPd_0x' = Pe_0^2B_4$   
(001)  $h_0^7x_{18,77} = h_0^3h_4x_{21,43}$
- 26 (1)  $h_0^8x_{18,77} = h_0^4h_4x_{21,43}$
- 27 (01)  $h_0^9x_{18,77} = h_0^5h_4x_{21,43}$   
(11)  $iPx_{16,35} = Pjx_{16,32}$
- continued

Stem 110 continued

- 28 (100)  $zx_{18,20}$   
(010)  $rP^3Q_1 = i^2PQ_1 = ix'Pj = B_4P^3j = x_{13,35}P^2i$   
(110)  $d_0^5g^2 = d_0^4e_0^2g = d_0^3e_0^4 = d_0^3iw = d_0^3jv = d_0^3ku = d_0^2e_0g^2Pe_0 =$   
 $d_0^2e_0iv = d_0^2e_0ju = d_0^2g^3Pd_0 = d_0^2giu = d_0^2r^2Pd_0 = d_0^2rik =$   
 $d_0^2rj^2 = d_0^2lPv = d_0^2mPu = d_0^2z^2 = d_0e_0^3gPe_0 = d_0e_0^2g^2Pd_0 =$   
 $d_0e_0^2iu = d_0e_0rij = d_0e_0kPv = d_0e_0lPu = d_0e_0wPj = d_0gri^2 =$   
 $d_0gjPv = d_0gkPu = d_0gvPj = d_0rlPj = d_0rPe_0z = d_0ilz =$   
 $d_0jkz = d_0jPe_0w = d_0kPd_0w = d_0kPe_0v = d_0lPd_0v =$   
 $d_0lPe_0u = d_0mPd_0u = e_0^5Pe_0 = e_0^4gPd_0 = e_0^2ri^2 = e_0^2jPv =$   
 $e_0^2kPu = e_0^2vPj = e_0g^3P^2e_0 = e_0giPv = e_0gjPu = e_0guPj =$   
 $e_0r^2P^2e_0 = e_0rkPj = e_0rPd_0z = e_0ikz = e_0iPe_0w = e_0j^2z =$   
 $e_0jPd_0w = e_0jPe_0v = e_0kPd_0v = e_0kPe_0u = e_0lPd_0u =$   
 $e_0mP^2v = g^4P^2d_0 = g^3Pe_0^2 = g^2iPu = gr^2P^2d_0 = grjPj =$   
 $gijz = giPd_0w = giPe_0v = gjPd_0v = gjPe_0u = gkPd_0u =$   
 $glP^2v = gmP^2u = r^2Pe_0^2 = rilPe_0 = rimPd_0 = rjkPe_0 =$   
 $rjlPd_0 = rk^2Pd_0 = i^2km = i^2l^2 = ij^2m = ijkl = ik^3 = j^3l =$   
 $j^2k^2 = lwP^2e_0 = mPe_0Pv = mvP^2e_0 = mwP^2d_0 = mzPj$   
(001)  $h_0^{10}x_{18,77} = h_0^6h_4x_{21,43} = h_0iPx_{16,35} = h_0Pjx_{16,32} = f_0P^2x_{16,32} =$   
 $Ph_2ix_{16,32} = P^3h_2x_{15,41} = x_{13,34}P^2i$   
(011)  $d_0iPR_2 = d_0jR_1 = e_0iR_1 = iPd_0R_2 = kP^2R_2 = P^2d_0x_{16,37} =$   
 $P^2e_0x_{16,33} = P^2D_1P^2j$
- 29 (10)  $h_0rP^3Q_1 = h_0i^2PQ_1 = h_0ix'Pj = h_0B_4P^3j = h_0zx_{18,20} =$   
 $h_0x_{13,35}P^2i = h_1^2ux_{18,20} = h_1^2x'P^2u = h_1Ph_1x'Q = h_1Ph_1x'Pu =$   
 $h_1B_1P^3u = h_1P^2h_1ux' = h_1P^3h_1x_{15,42} = h_1P^3h_1x_{15,43} =$   
 $h_3P^3x_{16,35} = f_0ix_{18,20} = f_0x'P^2i = D_3P^6h_1 = Ph_1^2ux' =$   
 $Ph_1qx_{18,20} = Ph_1B_1P^2u = Ph_1P^2h_1x_{15,42} = Ph_1P^2h_1x_{15,43} =$   
 $Ph_2rx_{18,20} = Ph_2i^2x' = Ph_2B_4P^2i = rx'P^3h_2 = qx'P^3h_1 =$   
 $iB_2P^2i = iB_4P^3h_2 = B_1P^2h_1Q = B_1P^2h_1Pu = B_1uP^3h_1 =$   
 $PD_3P^5h_1 = X_1P^4e_0 = P^2D_3P^4h_1$   
(01)  $h_0^{11}x_{18,77} = h_0^7h_4x_{21,43} = h_0^2iPx_{16,35} = h_0^2Pjx_{16,32} =$   
 $h_0f_0P^2x_{16,32} = h_0Ph_2ix_{16,32} = h_0P^3h_2x_{15,41} = h_0x_{13,34}P^2i =$   
 $h_1e_0P^2x_{16,32} = h_1P^2e_0x_{16,32} = e_0P^2h_1x_{16,32} = Ph_1Pe_0x_{16,32} =$   
 $W_1P^3e_0$   
(11)  $h_0d_0iPR_2 = h_0d_0jR_1 = h_0e_0iR_1 = h_0iPd_0R_2 = h_0kP^2R_2 =$   
 $h_0P^2d_0x_{16,37} = h_0P^2e_0x_{16,33} = h_0P^2D_1P^2j = h_1d_0P^2x_{16,35} =$   
 $h_1Pd_0Px_{16,35} = h_1P^2d_0x_{16,35} = h_2d_0iR_1 = h_2jP^2R_2 =$   
 $h_2PjPR_2 = h_2P^2d_0x_{16,33} = h_2R_2P^2j = h_2P^2D_1P^2i =$   
 $d_0Ph_1Px_{16,35} = d_0P^2h_1x_{16,35} = d_0P^2h_2x_{16,33} = d_0R_1P^2j =$   
 $e_0R_1P^2i = f_0Pd_0R_1 = Ph_1Pd_0x_{16,35} = Ph_2jPR_2 = Ph_2kR_1 =$   
 $Ph_2Pd_0x_{16,33} = Ph_2PjR_2 = Pc_0x_{22,39} = iP^2h_2P^2D_1 =$   
 $iR_1P^2e_0 = jP^2h_2R_2 = jR_1P^2d_0 = Pd_0R_1Pj = P^3h_1x_{16,42}$

Stem 111

- 5 (1)  $h_3h_6c_2 = h_5e_2$
- 8 (1)  $h_6B_2$
- 9 (1000)  $x_{9,107}$   
 (0010)  $x_{9,109}$   
 (0001)  $h_0h_6B_2$   
 (0101)  $h_3^2x_{7,81} = h_4x_{8,83} = g_2n_1 = g_2Q_3$
- 10 (10)  $h_0x_{9,107}$   
 (01)  $h_0^2h_6B_2 = h_0x_{9,109} = h_1^2h_6B_1$   
 (11)  $h_3x_{9,97}$
- 11 (10)  $h_1x_{10,102}$   
 (01)  $h_0^2x_{9,107} = h_0h_3x_{9,97}$
- 12 (10)  $h_2x_{11,91} = f_0x_{8,78} = gx_{8,75} = CA' = CA$   
 (01)  $h_0^3x_{9,107} = h_0^2h_3x_{9,97} = h_3^2x_{10,76}$
- 13 (1)  $h_0^4x_{9,107} = h_0^3h_3x_{9,97} = h_0h_3^2x_{10,76} = h_3x_{12,80} = h_4x_{12,64} =$   
 $h_6d_0^2g = h_6d_0e_0^2 = g_2x_{9,40} = xx_{8,51}$
- 14 (10)  $d_0x_{10,76}$   
 (01)  $h_1x_{13,88}$
- 15 (1000)  $gx_{11,61}$   
 (0100)  $x_{15,81}$   
 (0010)  $x_{15,82}$   
 (0001)  $h_0d_0x_{10,76} = h_1^2x_{13,87} = h_1h_6Q = h_1h_6Pu = h_2x_{14,82} = h_5x_{14,42} =$   
 $h_6Ph_1u = c_0x_{12,78}$
- 16 (0011)  $h_2x_{15,74} = h_6d_0Pj = h_6iPe_0 = h_6jPd_0 = D_2x'$   
 (1000)  $grA' = grA = mx_{9,51} = x_{7,40}w$   
 (0100)  $h_1x_{15,78}$   
 (0010)  $h_0gx_{11,61} = h_2e_0x_{11,61} = f_0x_{12,60}$   
 (0001)  $h_0x_{15,81} = h_0x_{15,82} = h_4x_{15,58}$
- 17 (010)  $h_0^2gx_{11,61} = h_0h_2e_0x_{11,61} = h_0f_0x_{12,60} = h_1d_0x_{12,64} =$   
 $h_1e_0x_{12,60} = h_1gx_{12,55} = h_2^2d_0x_{11,61} = h_2f_0x_{12,55} = h_2B_2B_4 =$   
 $h_5x_{16,37} = B_1B_{23}$   
 (110)  $h_1x_{16,77}$   
 (001)  $h_0^2x_{15,81} = h_0^2x_{15,82} = h_0h_4x_{15,58}$   
 (011)  $h_0h_2x_{15,74} = h_0h_6d_0Pj = h_0h_6iPe_0 = h_0h_6jPd_0 = h_0D_2x' =$   
 $h_2^2x_{15,68} = h_2h_6iPd_0 = h_6d_0Ph_2i = h_6f_0P^2d_0 = h_6kP^2h_2 = Q_2R_1$
- 18 (1)  $h_2x_{17,76}$
- 19 (10)  $h_1^2x_{17,79} = h_3x_{18,68} = Ph_1x_{14,74}$   
 (01)  $h_0h_2x_{17,76} = h_1x_{18,78} = e_0x_{15,56}$

continued

Stem 111 continued

- 21 (10)  $g^4n = g^2tm = gnr^2 = gNw = nmw = rtw = rmN$   
 (01)  $d_0e_0gB_4 = d_0lB_{23} = d_0mx_{10,27} = d_0mx_{10,28} = e_0^3B_4 = e_0kB_{23} =$   
 $e_0lx_{10,27} = e_0lx_{10,28} = e_0mB_{21} = g^2x_{13,35} = gjB_{23} = gkx_{10,27} =$   
 $gkx_{10,28} = glB_{21} = gmQ_1$
- 23 (1)  $d_0^2x_{15,41} = e_0x_{19,49} = ix_{16,48} = jx_{16,42} = kx_{16,38} = lx_{16,35} =$   
 $mx_{16,32}$
- 24 (100)  $d_0e_0g^4 = d_0e_0gr^2 = d_0e_0mw = d_0glw = d_0gmv = d_0rlm = e_0^3g^3 =$   
 $e_0^3r^2 = e_0^2lw = e_0^2mv = e_0gkw = e_0glv = e_0gmu = e_0rkm =$   
 $e_0rl^2 = g^2rz = g^2jw = g^2kv = g^2lu = grjm = grkl = ruv = m^2z$   
 (010)  $d_0^2rx' = d_0^2iB_4 = d_0e_0x_{16,37} = d_0gx_{16,33} = d_0jx_{13,35} = d_0kP^2D_1 =$   
 $d_0lR_2 = d_0zQ_1 = e_0^2x_{16,33} = e_0rPQ_1 = e_0ix_{13,35} = e_0jP^2D_1 =$   
 $e_0kR_2 = e_0B_4Pj = e_0zx' = giP^2D_1 = gjR_2 = rPd_0B_{21} =$   
 $rPe_0Q_1 = i^2B_{23} = ijx_{10,27} = ijx_{10,28} = ikB_{21} = ilQ_1 = imx' =$   
 $j^2B_{21} = jkQ_1 = jlx' = jPe_0B_4 = k^2x' = kPd_0B_4$   
 (001)  $h_1Ph_1x_{18,63} = P^2h_1x_{15,56}$
- 26 (1)  $d_0Px_{18,50} = e_0x_{22,39} = Pd_0x_{18,50}$
- 27 (10)  $d_0^4gm = d_0^3e_0^2m = d_0^3e_0gl = d_0^3g^2k = d_0^3ru = d_0^2e_0^3l = d_0^2e_0^2gk =$   
 $d_0^2e_0g^2j = d_0^2g^3i = d_0^2r^2i = d_0^2vz = d_0e_0^4k = d_0e_0^3gj = d_0e_0^2g^2i =$   
 $d_0e_0gmPe_0 = d_0e_0rPv = d_0e_0uz = d_0g^2lPe_0 = d_0g^2mPd_0 =$   
 $d_0grPu = d_0rjz = d_0rPd_0w = d_0rPe_0v = d_0ikw = d_0ilv =$   
 $d_0imu = d_0j^2w = d_0j^2v = d_0j^2u = d_0j^2k = d_0j^2l = d_0j^2m = d_0j^2n =$   
 $e_0^3mPe_0 = e_0^2glPe_0 = e_0^2gmPd_0 = e_0^2rPu = e_0g^3Pj = e_0g^2kPe_0 =$   
 $e_0g^2lPd_0 = e_0r^2Pj = e_0riz = e_0rPd_0v = e_0rPe_0u = e_0ijw =$   
 $e_0ikv = e_0ilu = e_0j^2v = e_0j^2u = e_0j^2k = e_0j^2l = e_0j^2m = e_0j^2n =$   
 $gi^2w = gijv = giku = gj^2u = gzPv = r^2jPe_0 = r^2kPd_0 =$   
 $ri^2m = rijl = rik^2 = rj^2k = jmPv = klPv = kmPu = kz^2 =$   
 $l^2Pu = lwPj = mvPj = Pe_0wz$   
 (01)  $rP^2R_2 = i^2R_2 = uP^2Q_1 = zR_1 = x'P^2v = Q_1 P^2u =$   
 $Pjx_{16,33} = PuPQ_1$   
 (11)  $vx_{18,20}$
- 29 (1)  $P^3x_{17,50}$

Stem 112

- 7 (1)  $x_{7,97}$
- 8 (100)  $x_{8,105}$   
 (001)  $h_0x_{7,97}$   
 (111)  $h_3x_{7,92} = h_4x_{7,81} = g_2d_2$
- 10 (10)  $x_{10,107}$   
 (01)  $h_1x_{9,107} = h_3x_{9,99}$
- 11 (10)  $h_4x_{10,76}$   
 (01)  $h_0x_{10,107} = h_2x_{10,100} = c_1x_{8,78} = e_0x_{7,79} = H_1C$
- 12 (1)  $h_0h_4x_{10,76} = h_1^2x_{10,102} = h_6d_0m = h_6e_0l = h_6gk = c_0x_{9,97} =$   
 $g_2G_{21}$
- 13 (10)  $x_{13,91}$   
 (01)  $h_2x_{12,86}$
- 14 (10)  $gx_{10,65}$   
 (01)  $x_{14,91}$
- 15 (1000)  $gnA' = gnA = gH_1r = tx_{9,51} = mx_{8,57} = x_{7,40}N$   
 (0100)  $h_2y_{14,83}$   
 (0010)  $h_1d_0x_{10,76} = h_6ij = c_0x_{12,80}$   
 (0001)  $h_0x_{14,91}$   
 (0101)  $h_2x_{14,84}$
- 16 (0011)  $h_0h_2y_{14,83} = gx_{12,58} = d_1x_{12,44} = D_2R_1$   
 (0100)  $Px_{12,80}$   
 (0010)  $h_0h_2x_{14,84} = h_1x_{15,82} = h_2^2x_{14,79}$   
 (0001)  $h_0^2x_{14,91} = h_1x_{15,81}$   
 (1001)  $h_3x_{15,68}$
- 17 (10)  $h_0h_3x_{15,68}$   
 (01)  $h_0Px_{12,80} = h_1^2x_{15,78} = Ph_1x_{12,78}$
- 18 (100)  $grx_{8,33} = gmQ_2 = wx_{9,39}$   
 (010)  $x_{18,83}$   
 (001)  $h_0^2h_3x_{15,68} = h_1^2x_{16,77} = d_1x_{14,42} = qx_{12,44}$
- 20 (01)  $Pd_0x_{12,55} = x'B_{21} = Q_1^2$   
 (11)  $e_0rB_{23} = e_0mB_4 = grx_{10,27} = grx_{10,28} = glB_4$
- 21 (1)  $h_0Pd_0x_{12,55} = h_0x'B_{21} = h_0Q_1^2 = h_2x'Q_1 = c_0x_{18,68} =$   
 $Ph_2Px_{12,60} = B_2PQ_1 = P^2h_2x_{12,60}$
- 22 (10)  $Px_{18,68}$   
 (01)  $d_0x_{18,60} = e_0x_{18,57} = gx_{18,55} = rx_{16,38} = kx_{15,41}$

continued

Stem 112 continued

- 23 (010)  $d_0^2x_{15,43} = d_0rP^2D_1 = d_0uB_{21} = d_0vQ_1 = d_0wx' = e_0rR_2 = e_0uQ_1 = e_0vx' = gux' = riB_{21} = rjQ_1 = rkk' = rPd_0B_4 = ikB_4 = j^2B_4 = lx_{16,37} = mx_{16,33} = Pe_0x_{15,47} = zx_{13,35} = x_{10,27}Pv = x_{10,28}Pv = B_{23}Pu$
- (110)  $e_0g^3m = e_0grw = e_0r^2m = g^4l = g^2rv = gr^2l = lmw = m^2v$
- (001)  $h_0Px_{18,68} = Ph_2x_{18,63}$
- 24 (1)  $h_0^2Px_{18,68} = h_0Ph_2x_{18,63}$
- 25 (10)  $e_0Px_{17,50} = ix_{18,50} = Pe_0x_{17,50}$
- (01)  $h_0^3Px_{18,68} = h_0^2Ph_2x_{18,63} = h_1^2Ph_1x_{18,63} = h_1P^2h_1x_{15,56} = e_0x_{21,43} = Ph_1^2x_{15,56}$
- (11)  $d_0Px_{17,52} = Pd_0x_{17,52}$
- 26 (10)  $d_0^3g^2r = d_0^3m^2 = d_0^2e_0^2gr = d_0^2e_0lm = d_0^2gkm = d_0^2gl^2 = d_0^2uw = d_0^2v^2 = d_0e_0^4r = d_0e_0^2km = d_0e_0^2l^2 = d_0e_0g^2z = d_0e_0gjm = d_0e_0gkl = d_0e_0uv = d_0g^2im = d_0g^2jl = d_0g^2k^2 = d_0gu^2 = d_0riw = d_0rjv = d_0rku = e_0^3gz = e_0^3jm = e_0^3kl = e_0^2gim = e_0^2gjl = e_0^2gk^2 = e_0^2u^2 = e_0g^2rPe_0 = e_0g^2il = e_0g^2jk = e_0riv = e_0rju = e_0m^2Pe_0 = e_0wPv = g^3rPd_0 = g^3ik = g^3j^2 = griu = glmPe_0 = gm^2Pd_0 = gvPv = gwPu = r^3Pd_0 = r^2ik = r^2j^2 = rlPv = rmPu = rz^2 = jwz = kvz = luz = Pd_0w^2 = Pe_0vw$
- (01)  $d_0^4Q_1 = d_0^3e_0x' = d_0^2gPQ_1 = d_0^2Pd_0x_{10,27} = d_0^2Pd_0x_{10,28} = d_0^2Pe_0B_{21} = d_0e_0^2PQ_1 = d_0e_0Pd_0B_{21} = d_0e_0Pe_0Q_1 = d_0gPd_0Q_1 = d_0gPe_0x' = d_0B_{23}P^2e_0 = e_0^2Pd_0Q_1 = e_0^2Pe_0x' = e_0gPd_0x' = e_0x_{10,27}P^2e_0 = e_0x_{10,28}P^2e_0 = e_0B_{23}P^2d_0 = g^2P^2Q_1 = gB_{21}P^2e_0 = gx_{10,27}P^2d_0 = gx_{10,28}P^2d_0 = Pd_0Pe_0B_{23} = Pe_0^2x_{10,27} = Pe_0^2x_{10,28} = uPR_2 = vR_1 = PuR_2$
- 28 (1)  $d_0Pd_0x_{16,32} = e_0P^2x_{16,35} = gP^2x_{16,32} = Pe_0Px_{16,35} = P^2d_0x_{16,38} = P^2e_0x_{16,35}$



Stem 113

- 7 (01)  $h_6C$   
(11)  $h_3C_1$
- 9 (1)  $x_{9,111}$
- 10 (1)  $x_{10,109}$
- 11 (10)  $h_6gr$   
(01)  $h_1^2x_{9,107} = h_1h_3x_{9,99} = h_3^2x_{9,86} = c_1x_{8,80} = e_1x_{7,53}$   
(11)  $h_1x_{10,107} = h_2^2x_{9,102} = f_0x_{7,79} = D_1A' = D_1A$
- 12 (1)  $gx_{8,78}$
- 13 (10)  $x_{13,93}$   
(01)  $Px_{9,99}$
- 14 (10)  $h_2x_{13,88}$   
(01)  $h_0Px_{9,99} = h_1x_{13,91} = h_6Pv = Ph_1x_{9,97}$
- 15 (01)  $h_1gx_{10,65} = h_2^2x_{13,85} = h_2h_5x_{13,42} = h_2c_1x_{11,61} = h_2f_0x_{10,65} =$   
 $h_4x_{14,67}$   
(11)  $h_3x_{14,79}$
- 16 (01)  $h_0h_3x_{14,79}$   
(11)  $e_0x_{12,64} = gx_{12,60}$
- 17 (0011)  $Q_2Q_1$   
(1011)  $h_2x_{16,77}$   
(0100)  $e_0gx_{9,51} = e_0rx_{7,40} = e_0A'm = e_0Am = gn x_{8,33} = grx_{7,34} =$   
 $gtQ_2 = gD_2m = gA'l = gAl = Nx_{9,39} = G_{21}w$   
(0010)  $h_0e_0x_{12,64} = h_0gx_{12,60} = h_1Px_{12,80} = h_2d_0x_{12,64} = h_2e_0x_{12,60} =$   
 $h_2gx_{12,55} = h_5x_{16,38} = h_6d_0^2Pd_0 = h_6e_0P^2e_0 = h_6gP^2d_0 =$   
 $h_6Pe_0^2 = Ph_1x_{12,80} = Pc_0x_{10,76} = B_2B_{23} = B_3x'$   
(1010)  $h_2x_{16,78}$   
(0001)  $h_0^2h_3x_{14,79} = h_1h_3x_{15,68}$
- 18 (10)  $x_{18,85}$   
(01)  $P^2x_{10,76}$
- 19 (1000)  $Pd_0x_{11,61}$   
(0100)  $h_1x_{18,83}$   
(0010)  $h_0x_{18,85} = h_2x_{18,78} = e_0x_{15,58}$   
(0001)  $h_0P^2x_{10,76}$   
(1001)  $ix_{12,55} = B_4x'$
- 20 (0011)  $h_0^2x_{18,85} = h_0h_2x_{18,78} = h_0e_0x_{15,58} = h_2^2x_{18,72} = h_2d_0x_{15,58}$   
(1000)  $h_6P^3j$   
(0100)  $B_2R_2 = R_1B_{21}$   
(0111)  $h_0Pd_0x_{11,61} = h_2Px_{15,65} = Ph_2x_{15,65}$   
(0110)  $h_0ix_{12,55} = h_0B_4x'$   
(0001)  $h_0^2P^2x_{10,76}$

continued

Stem 113 continued

- 21 (100)  $gx_{17,57}$   
(010)  $h_0^2 P d_0 x_{11,61} = h_0 h_2 P x_{15,65} = h_0 P h_2 x_{15,65} = h_0 B_2 R_2 =$   
 $h_0 R_1 B_{21} = h_1 P d_0 x_{12,55} = h_1 x' B_{21} = h_1 Q_1^2 = h_2^2 P^2 x_{11,61} =$   
 $h_2 P^2 h_2 x_{11,61} = h_2 R_1 Q_1 = d_0 P h_1 x_{12,55} = d_0 B_1 x' = P h_2^2 x_{11,61} =$   
 $P^2 h_1 x_{12,64}$   
(001)  $h_0^3 P^2 x_{10,76} = h_3 x'^2 = x x_{16,32}$   
(011)  $h_0^2 i x_{12,55} = h_0^2 B_4 x'$   
(111)  $rx_{15,41}$
- 22 (100)  $x_{22,71}$   
(010)  $d_0^2 g B_{23} = d_0 e_0^2 B_{23} = d_0 e_0 g x_{10,27} = d_0 e_0 g x_{10,28} = d_0 g^2 B_{21} =$   
 $d_0 u B_4 = e_0^3 x_{10,27} = e_0^3 x_{10,28} = e_0^2 g B_{21} = e_0 g^2 Q_1 = g^3 x' =$   
 $j x_{15,47} = k x_{15,43} = v x_{13,35} = w P^2 D_1$   
(001)  $h_0^4 P^2 x_{10,76} = h_0^3 i x_{12,55} = h_0^3 B_4 x' = h_0 h_3 x'^2 = h_0 x x_{16,32} =$   
 $h_0 r x_{15,41} = g_2 x_{18,20} = x i x'$   
(011)  $r^2 x' = r i B_4$
- 23 (10)  $h_0 x_{22,71}$   
(01)  $h_0^5 P^2 x_{10,76} = h_0^4 i x_{12,55} = h_0^4 B_4 x' = h_0^2 h_3 x'^2 = h_0^2 x x_{16,32} =$   
 $h_0^2 r x_{15,41} = h_0 g_2 x_{18,20} = h_0 x i x' = h_0 r^2 x' = h_0 r i B_4 = h_3 r x_{16,32} =$   
 $h_3 i x_{15,41} = i^2 x_{9,40} = x_{8,51} P^2 i$   
(11)  $h_1 P x_{18,68} = P h_1 x_{18,68}$
- 24 (10)  $d_0^2 x_{16,42} = d_0 e_0 x_{16,38} = d_0 g x_{16,35} = e_0^2 x_{16,35} = e_0 g x_{16,32} =$   
 $i x_{17,52} = j x_{17,50} = P e_0 x_{16,48}$   
(01)  $h_0^6 P^2 x_{10,76} = h_0^5 i x_{12,55} = h_0^5 B_4 x' = h_0^3 h_3 x'^2 = h_0^3 x x_{16,32} =$   
 $h_0^3 r x_{15,41} = h_0^2 g_2 x_{18,20} = h_0^2 x i x' = h_0^2 r^2 x' = h_0^2 r i B_4 = h_0^2 x_{22,71} =$   
 $h_0 h_3 r x_{16,32} = h_0 h_3 i x_{15,41} = h_0 i^2 x_{9,40} = h_0 x_{8,51} P^2 i = h_3 x x_{18,20} =$   
 $h_3 r i x' = h_3 i^2 B_4 = P h_2 x_{19,58}$
- 25 (10)  $d_0^2 g^2 w = d_0^2 g r m = d_0 e_0^2 g w = d_0 e_0^2 r m = d_0 e_0 g^2 v = d_0 e_0 g r l =$   
 $d_0 g^3 u = d_0 g^2 r k = d_0 r^2 u = d_0 k m^2 = d_0 l^2 m = e_0^4 w = e_0^3 g v =$   
 $e_0^3 r l = e_0^2 g^2 u = e_0^2 g r k = e_0 g^2 r j = e_0 g m z = e_0 j m^2 = e_0 k l m =$   
 $e_0 l^3 = g^3 r i = g^2 l z = g i m^2 = g j l m = g k^2 m = g k l^2 = r^3 i = r v z =$   
 $i w^2 = j v w = k u w = k v^2 = l u v = m u^2$   
(01)  $d_0^3 x_{13,35} = d_0^2 e_0 P^2 D_1 = d_0^2 g R_2 = d_0^2 i x_{10,27} = d_0^2 i x_{10,28} =$   
 $d_0^2 j B_{21} = d_0^2 k Q_1 = d_0^2 l x' = d_0^2 P e_0 B_4 = d_0 e_0^2 R_2 = d_0 e_0 i B_{21} =$   
 $d_0 e_0 j Q_1 = d_0 e_0 k x' = d_0 e_0 P d_0 B_4 = d_0 g i Q_1 = d_0 g j x' =$   
 $d_0 m P Q_1 = d_0 B_{23} P j = e_0^2 i Q_1 = e_0^2 j x' = e_0 g i x' =$   
 $e_0 l P Q_1 = e_0 P e_0 x_{13,35} = e_0 x_{10,27} P j = e_0 x_{10,28} P j = g^2 P R_2 =$   
 $g k P Q_1 = g P d_0 x_{13,35} = g P e_0 P^2 D_1 = g B_4 P^2 e_0 = g B_{21} P j =$   
 $i P e_0 B_{23} = j P d_0 B_{23} = j P e_0 x_{10,27} = j P e_0 x_{10,28} = k P d_0 x_{10,27} =$   
 $k P d_0 x_{10,28} = k P e_0 B_{21} = l P d_0 B_{21} = l P e_0 Q_1 = m P d_0 Q_1 =$   
 $m P e_0 x'$
- 27 (1)  $d_0 i x_{16,32} = j P x_{16,35} = P j x_{16,35} = P^2 d_0 x_{15,41}$

Stem 114

- 6 (1)  $G_1$
- 9 (10)  $x_{9,112}$   
 (11)  $h_2h_6B_2$
- 10 (10)  $h_2x_{9,107} = h_3x_{9,102} = h_6gn$   
 (01)  $h_1x_{9,111} = h_2x_{9,109} = c_1x_{7,79} = D_1H_1$   
 (11)  $h_4x_{9,86}$
- 12 (10)  $gx_{8,80}$   
 (01)  $x_{12,93}$
- 14 (100)  $Q_2^2$   
 (010)  $e_0x_{10,76}$   
 (001)  $h_1Px_{9,99} = D_3x' = Ph_1x_{9,99}$
- 15 (10)  $x_{15,90}$   
 (01)  $h_0Q_2^2$
- 16 (10)  $h_2gx_{11,61} = h_5x_{15,41} = h_6d_0^2i = h_6e_0Pj = h_6jPe_0 = h_6kPd_0 =$   
 $f_0x_{12,64} = D_2Q_1 = Ax'$   
 (01)  $h_0x_{15,90} = h_2x_{15,82}$
- 17 (1)  $h_0h_2gx_{11,61} = h_0h_5x_{15,41} = h_0h_6d_0^2i = h_0h_6e_0Pj = h_0h_6jPe_0 =$   
 $h_0h_6kPd_0 = h_0f_0x_{12,64} = h_0D_2Q_1 = h_0Ax' = h_1e_0x_{12,64} =$   
 $h_1gx_{12,60} = h_2^2e_0x_{11,61} = h_2^2x_{15,74} = h_2h_6d_0Pj = h_2h_6iPe_0 =$   
 $h_2h_6jPd_0 = h_2f_0x_{12,60} = h_2D_2x' = h_6d_0Ph_2j = h_6e_0Ph_2i =$   
 $h_6f_0P^2e_0 = h_6lP^2h_2 = c_0x_{14,79} = Ph_2x_{12,78} = B_2B_5 =$   
 $B_2PD_2 = B_3R_1$
- 18 (100)  $x_{18,87}$   
 (010)  $ix_{11,61}$   
 (011)  $Px_{14,79}$
- 19 (0011)  $h_0ix_{11,61}$   
 (1000)  $h_1P^2x_{10,76} = P^2h_1x_{10,76}$   
 (1011)  $X_1x'$   
 (0010)  $h_0Px_{14,79}$   
 (0110)  $h_1x_{18,85} = h_2^2x_{17,76} = f_0x_{15,58} = gx_{15,56}$   
 (0101)  $h_0x_{18,87} = B_4R_1$
- 20 (10)  $h_0^2Px_{14,79} = h_1^2x_{18,83} = Ph_1x_{15,68}$   
 (101)  $gx_{16,54} = nx_{15,41} = rx_{14,46} = mx_{13,42}$   
 (011)  $h_0^2ix_{11,61} = h_0^2x_{18,87} = h_0B_4R_1 = h_0X_1x' = h_3P^2x_{11,61}$
- 21 (10)  $d_0g^2B_4 = d_0mB_{23} = e_0^2gB_4 = e_0lB_{23} = e_0mx_{10,27} = e_0mx_{10,28} =$   
 $gkB_{23} = glx_{10,27} = glx_{10,28} = gmB_{21} = rx_{15,43}$   
 (01)  $h_0^3ix_{11,61} = h_0^3x_{18,87} = h_0^2B_4R_1 = h_0^2X_1x' = h_0h_3P^2x_{11,61} =$   
 $h_3x'R_1 = g_2R_1 = xx_{16,33} = rx_{15,42}$

continued

Stem 114 continued

- 22 (1)  $h_0^4 i x_{11,61} = h_0^4 x_{18,87} = h_0^3 B_4 R_1 = h_0^3 X_1 x' = h_0^2 h_3 P^2 x_{11,61} =$   
 $h_0 h_3 x' R_1 = h_0 g_2 R_1 = h_0 x x_{16,33} = h_0 r x_{15,42} = x i R_1 = r^2 R_1 =$   
 $r i X_1 = y x_{16,32} = i^2 G_{21} = x_{9,40} Q$
- 23 (01)  $h_0^5 i x_{11,61} = h_0^5 x_{18,87} = h_0^4 B_4 R_1 = h_0^4 X_1 x' = h_0^3 h_3 P^2 x_{11,61} =$   
 $h_0^2 h_3 x' R_1 = h_0^2 g_2 R_1 = h_0^2 x x_{16,33} = h_0^2 r x_{15,42} = h_0 x i R_1 =$   
 $h_0 r^2 R_1 = h_0 r i X_1 = h_0 y x_{16,32} = h_0 i^2 G_{21} = h_0 x_{9,40} Q =$   
 $h_1 x_{22,71} = h_3 x R_1 = h_3 r x_{16,33} = h_3 i x_{15,42} = h_3 B_4 Q = c_0 x'^2 =$   
 $y i x' = P^2 c_0 x_{12,55}$
- (11)  $d_0 e_0 x_{15,41} = g x_{19,49} = j x_{16,48} = k x_{16,42} = l x_{16,38} = m x_{16,35}$
- 24 (01)  $d_0^2 r Q_1 = d_0^2 j B_4 = d_0 e_0 r x' = d_0 e_0 i B_4 = d_0 g x_{16,37} = d_0 k x_{13,35} =$   
 $d_0 l P^2 D_1 = d_0 m R_2 = d_0 z B_{21} = e_0^2 x_{16,37} = e_0 g x_{16,33} =$   
 $e_0 j x_{13,35} = e_0 k P^2 D_1 = e_0 l R_2 = e_0 z Q_1 = g r P Q_1 = g i x_{13,35} =$   
 $g j P^2 D_1 = g k R_2 = g B_4 P j = g z x' = r P d_0 x_{10,27} = r P d_0 x_{10,28} =$   
 $r P e_0 B_{21} = i j B_{23} = i k x_{10,27} = i k x_{10,28} = i l B_{21} = i m Q_1 =$   
 $j^2 x_{10,27} = j^2 x_{10,28} = j k B_{21} = j l Q_1 = j m x' = k^2 Q_1 = k l x' =$   
 $k P e_0 B_4 = l P d_0 B_4$
- (11)  $d_0 g^5 = d_0 g^2 r^2 = d_0 g m w = d_0 r m^2 = e_0^2 g^4 = e_0^2 g r^2 = e_0^2 m w =$   
 $e_0 g l w = e_0 g m v = e_0 r l m = g^2 k w = g^2 l v = g^2 m u = g r k m =$   
 $g r l^2 = r u w = r v^2$
- 26 (1)  $d_0 P x_{18,55} = e_0 P x_{18,50} = g x_{22,39} = P d_0 x_{18,55} = P e_0 x_{18,50}$

Stem 115

- 6 (1)  $h_6D_1$
- 8 (1)  $h_2x_{7,97}$
- 9 (1)  $h_2x_{8,105} = h_6gd_1$
- 10 (1)  $h_1x_{9,112} = h_3^2x_{8,93} = g_2x_{6,47} = D_3G$
- 11 (1)  $x_{11,101}$
- 13 (10)  $x_{13,95}$   
(01)  $D_2Q_2$
- 14 (10)  $h_0x_{13,95}$   
(01)  $h_0D_2Q_2 = h_2^2x_{12,86} = h_4x_{13,73} = gx_{10,73} = D_3R_1$
- 15 (10)  $h_1^2Px_{9,99} = h_1D_3x' = h_1Ph_1x_{9,99} = h_3x_{14,82} = h_6rPd_0 = h_6ik =$   
 $h_6j^2 = c_0x_{12,85} = d_0x_{11,80} = H_1x' = GX_1 = x_{6,53}u = B_1PD_3$   
(01)  $h_0^2x_{13,95} = h_2x_{14,91}$
- 16 (10)  $Px_{12,85}$   
(01)  $h_1x_{15,90} = h_2^2y_{14,83} = h_2^2x_{14,84} = A'R_1 = AR_1$
- 17 (10)  $x_{17,93}$   
(01)  $x_{17,94}$
- 18 (1)  $h_0x_{17,94} = h_3x_{17,76}$
- 19 (10)  $x_{19,86}$   
(01)  $h_0^2x_{17,94} = h_0h_3x_{17,76} = rx_{13,46} = ix_{12,58} = X_1R_1$
- 20 (1000)  $grB_{23} = gmB_4$   
(0100)  $x'x_{10,27}$   
(0111)  $Pe_0x_{12,55} = x'x_{10,28}$   
(0010)  $h_1^2P^2x_{10,76} = h_1P^2h_1x_{10,76} = h_1X_1x' = Ph_1^2x_{10,76} = B_1W_1$   
(0001)  $h_0^3x_{17,94} = h_0^2h_3x_{17,76} = h_0rx_{13,46} = h_0ix_{12,58} = h_0X_1R_1 =$   
 $h_3^2x_{18,63}$   
(0101)  $d_0Px_{12,60} = Pd_0x_{12,60} = Q_1B_{21}$
- 21 (1)  $h_0^4x_{17,94} = h_0^3h_3x_{17,76} = h_0^2rx_{13,46} = h_0^2ix_{12,58} = h_0^2X_1R_1 =$   
 $h_0h_3^2x_{18,63} = h_0d_0Px_{12,60} = h_0Pd_0x_{12,60} = h_0Pe_0x_{12,55} =$   
 $h_0x'x_{10,28} = h_0Q_1B_{21} = h_2Pd_0x_{12,55} = h_2x'B_{21} = h_2Q_1^2 =$   
 $h_3ix_{13,46} = h_3R_1^2 = c_0x_{18,72} = d_0Ph_2x_{12,55} = d_0B_2x' = G_{21}Q =$   
 $P^2h_2x_{12,64}$
- 22 (10)  $d_0x_{18,63}$   
(01)  $e_0x_{18,60} = gx_{18,57} = rx_{16,42} = lx_{15,41}$
- 23 (100)  $g^4m = g^2rw = gr^2m = m^2w$   
(010)  $d_0^2x_{15,47} = d_0e_0x_{15,43} = d_0rx_{13,35} = d_0ux_{10,27} = d_0ux_{10,28} =$   
 $d_0vB_{21} = d_0wQ_1 = d_0B_4z = e_0rP^2D_1 = e_0uB_{21} = e_0vQ_1 =$   
 $e_0wx' = grR_2 = guQ_1 = gv x' = rix_{10,27} = rix_{10,28} = rjB_{21} =$   
 $rkQ_1 = rl x' = rPe_0B_4 = ilB_4 = jkB_4 = mx_{16,37} = B_{23}Pv$   
(001)  $h_0d_0x_{18,63} = h_2Px_{18,68} = Ph_2x_{18,68}$

continued

Stem 115 continued

- 24 (1)  $h_0^2 d_0 x_{18,63} = h_0 h_2 P x_{18,68} = h_0 P h_2 x_{18,68} = h_2 P h_2 x_{18,63} = P^2 h_2 x_{15,58}$
- 25 (10)  $d_0^2 x_{17,50} = e_0 P x_{17,52} = g P x_{17,50} = i x_{18,55} = j x_{18,50} = P d_0 x_{17,57} = P e_0 x_{17,52}$
- (01)  $P h_1 x'^2 = B_1 x_{18,20} = x_{12,55} P^3 h_1$
- (11)  $u x_{16,32}$

Stem 116

- 8 (1)  $h_2 h_6 C$
- 11 (1)  $h_6 x'$
- 12 (10)  $D_2^2$
- (01)  $h_0 h_6 x'$
- 13 (100)  $x_{13,97}$
- (010)  $h_0 D_2^2 = h_3 x_{12,86}$
- (001)  $h_0^2 h_6 x'$
- 14 (1)  $h_1 x_{13,95}$
- 15 (1000)  $h_2^2 x_{13,88} = h_3 x_{14,84} = H_1 R_1$
- (1100)  $h_3 y_{14,83}$
- (0010)  $x_{15,96}$
- (0001)  $x_{15,97}$
- 16 (1000)  $x_{16,95}$
- (0100)  $g x_{12,64}$
- (0010)  $h_0 h_3 y_{14,83}$
- (0001)  $h_0 x_{15,96}$
- 17 (1000)  $g^2 x_{9,51} = g r x_{7,40} = g A' m = g A m$
- (0100)  $h_0 x_{16,95}$
- (0010)  $h_0 g x_{12,64} = h_1 P x_{12,85} = h_2 e_0 x_{12,64} = h_2 g x_{12,60} = h_4 P x_{12,60} = h_5 x_{16,42} = h_6 d_0^2 P e_0 = h_6 d_0 e_0 P d_0 = h_6 g P^2 e_0 = c_0 x_{14,82} = P h_1 x_{12,85} = Q_2 B_{21} = B_3 Q_1 = x_{7,33} x' = x_{7,34} x'$
- (0001)  $h_0^2 x_{15,96}$
- 18 (1000)  $P x_{14,82}$
- (0100)  $h_1 x_{17,93} = h_2^2 x_{16,77} = h_2^2 x_{16,78} = f_0 x_{14,67} = d_1 x_{14,46} = r x_{12,48} = t x_{12,44} = x_{8,32} R_1 = x_{8,33} R_1$
- (0111)  $h_3 x_{17,79}$
- (0010)  $h_0^2 x_{16,95}$
- (0001)  $h_0^3 x_{15,96} = h_3 x_{17,80}$
- 19 (0011)  $h_0 h_3 x_{17,79}$
- (1000)  $i x_{12,60} = j x_{12,55} = B_4 Q_1$
- (0010)  $h_0^3 x_{16,95}$
- (0110)  $h_4 x_{18,63}$
- (0001)  $h_0^4 x_{15,96} = h_0 h_3 x_{17,80} = h_2 P^2 x_{10,76} = P^2 h_2 x_{10,76}$
- (1001)  $d_0 x_{15,65} = P e_0 x_{11,61}$
- (0101)  $h_2 x_{18,85} = g x_{15,58}$

continued

- Stem 116    continued
- 20 (0011)  $h_0^2 h_3 x_{17,79}$   
(1011)  $h_0 i x_{12,60} = h_0 j x_{12,55} = h_0 B_4 Q_1 = h_2 i x_{12,55} = h_2 B_4 x'$   
(1100)  $Ph_2 x_{15,68} = B_2 P^2 D_1 = R_1 x_{10,28}$   
(0010)  $h_0^4 x_{16,95} = r P^3 h_5^2$   
(1111)  $h_6 d_0 P^2 i = h_6 i P^2 d_0 = R_1 x_{10,27}$   
(1010)  $h_0 d_0 x_{15,65} = h_0 P e_0 x_{11,61} = h_2 P d_0 x_{11,61} = d_0 P h_2 x_{11,61}$   
(0110)  $h_0 h_2 x_{18,85} = h_0 g x_{15,58} = h_2^2 x_{18,78} = h_2 e_0 x_{15,58} = c_0 x_{17,76}$   
(0001)  $h_0^5 x_{15,96} = h_0^2 h_3 x_{17,80} = h_0 h_2 P^2 x_{10,76} = h_0 P^2 h_2 x_{10,76}$   
(0101)  $h_0 h_4 x_{18,63}$
- 21 (100)  $h_0^2 d_0 x_{15,65} = h_0^2 P e_0 x_{11,61} = h_0 h_2 P d_0 x_{11,61} = h_0 d_0 P h_2 x_{11,61} =$   
 $h_0 P h_2 x_{15,68} = h_0 B_2 P^2 D_1 = h_0 R_1 x_{10,28} = h_1 d_0 P x_{12,60} =$   
 $h_1 P d_0 x_{12,60} = h_1 x' x_{10,27} = h_1 Q_1 B_{21} = h_2^2 P x_{15,65} =$   
 $h_2 P h_2 x_{15,65} = h_2 B_2 R_2 = h_2 R_1 B_{21} = d_0 P h_1 x_{12,60} = d_0 B_1 Q_1 =$   
 $d_0 B_2 R_1$   
(010)  $h_0^5 x_{16,95} = h_0 r P^3 h_5^2 = h_3^2 x_{19,58}$   
(001)  $h_0^6 x_{15,96} = h_0^3 h_3 x_{17,80} = h_0^2 h_2 P^2 x_{10,76} = h_0^2 P^2 h_2 x_{10,76} =$   
 $h_1^3 P^2 x_{10,76} = h_1^2 P^2 h_1 x_{10,76} = h_1^2 X_1 x' = h_1 P h_1^2 x_{10,76} = h_1 B_1 W_1 =$   
 $h_3 x' Q_1 = D_3 P^2 u = P h_1 G x' = P h_1 B_1 X_1 = x x_{16,35} = q x_{15,42} =$   
 $q x_{15,43} = P D_3 Q = P D_3 P u = x_{8,75} P^3 h_1 = u P^2 D_3$   
(101)  $h_0^2 i x_{12,60} = h_0^2 j x_{12,55} = h_0^2 B_4 Q_1 = h_0 h_2 i x_{12,55} = h_0 h_2 B_4 x' =$   
 $h_1 P e_0 x_{12,55} = h_1 x' x_{10,28} = e_0 P h_1 x_{12,55} = e_0 B_1 x'$   
(011)  $h_0^3 h_3 x_{17,79} = h_0^2 h_4 x_{18,63}$   
(111)  $h_0 h_6 d_0 P^2 i = h_0 h_6 i P^2 d_0 = h_0 R_1 x_{10,27} = h_2 h_6 P^3 j = h_6 P h_2 P^2 j =$   
 $h_6 j P^3 h_2 = h_6 P^2 h_2 P j$
- 22 (100)  $g^4 t = g^2 n w = g^2 r N = g n r m = g r^2 t = t m w = m^2 N$   
(010)  $x_{22,78}$   
(001)  $d_0 e_0 g B_{23} = d_0 g^2 x_{10,27} = d_0 g^2 x_{10,28} = d_0 v B_4 = e_0^3 B_{23} =$   
 $e_0^2 g x_{10,27} = e_0^2 g x_{10,28} = e_0 g^2 B_{21} = e_0 u B_4 = g^3 Q_1 = r^2 Q_1 =$   
 $r j B_4 = k x_{15,47} = l x_{15,43} = w x_{13,35}$
- 23 (1)  $h_0 x_{22,78} = h_1 d_0 x_{18,63} = h_2 x_{22,71} = d_0 x_{19,58} = P h_1 x_{18,72} =$   
 $P d_0 x_{15,56}$
- 24 (1)  $d_0^2 x_{16,48} = d_0 e_0 x_{16,42} = d_0 g x_{16,38} = e_0^2 x_{16,38} = e_0 g x_{16,35} =$   
 $g^2 x_{16,32} = i x_{17,57} = j x_{17,52} = k x_{17,50}$

Stem 117

- 7 (1)  $h_2G_1 = h_6G$
- 10 (10)  $x_{10,113}$   
 (01)  $x_{10,114}$
- 11 (100)  $x_{11,103}$   
 (010)  $h_0x_{10,113}$   
 (001)  $h_0x_{10,114} = h_6R_1$
- 12 (1000)  $x_{12,96}$   
 (0100)  $h_1h_6x'$   
 (0010)  $h_0^2x_{10,113}$   
 (0001)  $h_0^2x_{10,114} = h_0h_6R_1$
- 13 (10)  $h_0^3x_{10,113}$   
 (01)  $h_0^3x_{10,114} = h_0^2h_6R_1 = h_0x_{12,96}$
- 14 (0010)  $h_0^4x_{10,113}$   
 (1010)  $gx_{10,76}$   
 (0110)  $h_3x_{13,88}$   
 (0001)  $h_0^4x_{10,114} = h_0^3h_6R_1 = h_0^2x_{12,96}$
- 15 (100)  $x_{15,98}$   
 (010)  $h_0^5x_{10,113} = h_1^2x_{13,95} = h_4x_{14,74} = c_0x_{12,86}$   
 (001)  $h_0^5x_{10,114} = h_0^4h_6R_1 = h_0^3x_{12,96} = h_3h_6Q = h_5P^3h_5^2$
- 16 (10000)  $g^2x_{8,57} = gn x_{7,40} = gH_1m = gtA' = gtA = rx_{10,60}$   
 (01000)  $h_2x_{15,90}$   
 (00011)  $h_4x_{15,65} = h_6d_0^2j = h_6d_0e_0i = h_6gPj = h_6kPe_0 = h_6lPd_0 =$   
 $D_2B_{21} = AQ_1 = A''x'$   
 (10011)  $Q_2B_4$   
 (00100)  $Px_{12,86}$   
 (00001)  $h_0^6x_{10,114} = h_0^5h_6R_1 = h_0^4x_{12,96} = h_0h_3h_6Q = h_0h_5P^3h_5^2 = d_0x_{12,78}$   
 (00010)  $h_1x_{15,96} = h_1x_{15,97} = h_3x_{15,78} = c_0x_{13,87}$

continued



- Stem 117    continued
- 17 (0011)  $h_3x_{16,78} = x_{7,34}R_1$   
(1000)  $Px_{13,87}$   
(0100)  $h_1x_{16,95}$   
(0010)  $h_0h_2x_{15,90} = h_2^2x_{15,82} = c_0y_{14,83} = c_0x_{14,84} = c_1x_{14,67} =$   
 $e_0x_{13,73} = e_1x_{13,42} = nx_{12,48} = Cx_{11,35}$   
(0110)  $h_3x_{16,77}$   
(0001)  $h_0^7x_{10,114} = h_0^6h_6R_1 = h_0^5x_{12,96} = h_0^2h_3h_6Q = h_0^2h_5P^3h_5^2 =$   
 $h_0h_4x_{15,65} = h_0h_6d_0^2j = h_0h_6d_0e_0i = h_0h_6gPj = h_0h_6kPe_0 =$   
 $h_0h_6lPd_0 = h_0d_0x_{12,78} = h_0D_2B_{21} = h_0AQ_1 = h_0A''x' =$   
 $h_0Q_2B_4 = h_1gx_{12,64} = h_2^2gx_{11,61} = h_2h_5x_{15,41} = h_2h_6d_0^2i =$   
 $h_2h_6e_0Pj = h_2h_6jPe_0 = h_2h_6kPd_0 = h_2f_0x_{12,64} = h_2D_2Q_1 =$   
 $h_2Ax' = h_4Ph_2x_{11,61} = h_6d_0f_0Pd_0 = h_6d_0Ph_2k = h_6e_0Ph_2j =$   
 $h_6gPh_2i = h_6mP^2h_2 = B_2PA = x_{7,33}R_1$
- 18 (10)  $yx_{11,61}$   
(01)  $Px_{14,84}$
- 19 (0011)  $h_2Px_{14,79} = Ph_2x_{14,79}$   
(1000)  $g^3Q_2 = grx_{9,39} = gmx_{8,33} = r^2Q_2$   
(0010)  $h_0jx_{11,61} = h_1Px_{14,82} = h_2ix_{11,61} = Ph_1x_{14,82}$   
(0110)  $h_2x_{18,87}$   
(0001)  $h_0Px_{14,84}$   
(0101)  $h_3x_{18,77}$
- 21 (10)  $e_0g^2B_4 = e_0mB_{23} = glB_{23} = gmx_{10,27} = gmx_{10,28} = rx_{15,47}$   
(01)  $x_{21,84}$
- 23 (1)  $d_0gx_{15,41} = e_0^2x_{15,41} = rx_{17,50} = kx_{16,48} = lx_{16,42} = mx_{16,38}$

Stem 118

9	(10)	$x_{9,115}$
	(01)	$x_{9,116}$
10	(100)	$h_3x_{9,107}$
	(010)	$x_{10,116}$
	(001)	$h_0x_{9,116}$
11	(100)	$x_{11,106}$
	(010)	$h_0h_3x_{9,107} = h_3^2x_{9,97}$
	(001)	$h_0^2x_{9,116} = h_0x_{10,116}$
12	(100)	$x_{12,100}$
	(010)	$h_1x_{11,103}$
	(001)	$h_0^3x_{9,116} = h_0^2x_{10,116}$
13	(0011)	$h_0x_{12,100}$
	(1000)	$AQ_2$
	(0100)	$h_1^2h_6x' = h_6Ph_1B_1 = c_0x_{10,102} = d_0x_{9,97}$
	(1010)	$A'Q_2$
	(0001)	$h_0^4x_{9,116} = h_0^3x_{10,116}$
14	(0011)	$h_0^2x_{12,100}$
	(1000)	$x_{14,104}$
	(0010)	$h_0A'Q_2$
	(1111)	$Px_{10,102}$
	(0001)	$h_0^5x_{9,116} = h_0^4x_{10,116} = h_2x_{13,95}$
15	(10)	$h_1h_3x_{13,88} = H_1Q_1$
	(01)	$h_0^6x_{9,116} = h_0^5x_{10,116} = h_0^3x_{12,100} = h_0h_2x_{13,95} = h_0x_{14,104}$
16	(10)	$d_0x_{12,80}$
	(01)	$h_1x_{15,98} = h_3x_{15,81} = d_1x_{12,48} = e_1x_{12,44} = Q_2X_1$
17	(1)	$h_1Px_{12,86} = Ph_1x_{12,86}$
18	(010)	$h_1Px_{13,87} = h_5x_{17,50} = h_6P^2u = c_0x_{15,78} = Ph_1x_{13,87}$
	(110)	$e_0g^2A' = e_0g^2A = e_0mx_{7,40} = g^3D_2 = gnx_{9,39} = grG_{21} = gtx_{8,33} = glx_{7,40} = gmx_{7,34} = nrQ_2 = r^2D_2 = vx_{9,51}$
	(001)	$h_1^2x_{16,95} = h_1h_3x_{16,77} = h_2x_{17,93} = gx_{14,67} = d_1P^3h_5^2 = e_1x_{14,42} = qx_{12,48} = yx_{12,44} = x_{8,32}Q_1$
19	(1)	$Px_{15,78}$
20	(10)	$h_2x_{19,86}$
	(01)	$d_0^2x_{12,55} = e_0Px_{12,60} = Pd_0x_{12,64} = Pe_0x_{12,60} = x'B_{23} = Q_1x_{10,27} = Q_1x_{10,28} = B_{21}^2$

continued

Stem 118 continued

- 21 (1)  $h_0 d_0^2 x_{12,55} = h_0 e_0 P x_{12,60} = h_0 P d_0 x_{12,64} = h_0 P e_0 x_{12,60} =$   
 $h_0 x' B_{23} = h_0 Q_1 x_{10,27} = h_0 Q_1 x_{10,28} = h_0 B_{21}^2 = h_2 d_0 P x_{12,60} =$   
 $h_2 P d_0 x_{12,60} = h_2 P e_0 x_{12,55} = h_2 x' x_{10,27} = h_2 x' x_{10,28} =$   
 $h_2 Q_1 B_{21} = h_5 P x_{16,35} = h_6 d_0 P^3 e_0 = h_6 e_0 P^3 d_0 = h_6 P d_0 P^2 e_0 =$   
 $h_6 P e_0 P^2 d_0 = d_0 P h_2 x_{12,60} = d_0 B_2 Q_1 = e_0 P h_2 x_{12,55} = e_0 B_2 x'$
- 22 (100)  $g x_{18,60} = r x_{16,48} = m x_{15,41}$   
(010)  $e_0 x_{18,63}$   
(001)  $h_1 x_{21,84} = P h_1 x_{17,79}$   
(011)  $d_0 x_{18,68}$

Stem 119

- 9 (1)  $x_{9,117}$
- 10 (10)  $x_{10,118}$   
(01)  $h_0 x_{9,117} = h_1 x_{9,115} = h_4 x_{9,97}$
- 11 (1000)  $x_{11,109}$   
(0010)  $h_1 h_3 x_{9,107} = h_3^2 x_{9,99} = h_6 g t = g x_{7,83} = g_2 x_{7,53}$   
(0110)  $h_6 Q_1$   
(0001)  $h_1 x_{10,116}$
- 12 (100)  $D_2 A$   
(010)  $h_0 x_{11,109}$   
(001)  $h_0 h_6 Q_1 = h_2 h_6 x'$   
(111)  $H_1 Q_2 = D_2 A'$
- 13 (10000)  $g x_{9,86}$   
(00011)  $h_0^2 x_{11,109}$   
(01000)  $h_4 x_{12,80}$   
(00100)  $h_1 x_{12,100}$   
(00001)  $h_0^2 h_6 Q_1 = h_0 h_2 h_6 x'$   
(01001)  $d_0 x_{9,99}$   
(00010)  $h_0 D_2 A = h_1^2 x_{11,103} = h_2 D_2^2$
- 14 (10)  $x_{14,108}$   
(01)  $h_0^3 h_6 Q_1 = h_0^3 x_{11,109} = h_0^2 h_2 h_6 x' = h_0 d_0 x_{9,99} = h_1^3 h_6 x' =$   
 $h_1 h_6 P h_1 B_1 = h_1 c_0 x_{10,102} = h_1 d_0 x_{9,97} = h_3 x_{13,91} = h_6 d_0 v$
- 15 (100)  $x_{15,103}$   
(010)  $h_1 P x_{10,102} = P h_1 x_{10,102}$   
(001)  $h_0 x_{14,108} = h_3 x_{14,91} = D_2 X_1 = Q_2 x_{8,32}$
- 17 (1)  $h_2 x_{16,95} = h_3^2 x_{15,68} = Q_2 x_{10,27}$
- 18 (01)  $h_0 h_2 x_{16,95} = h_0 h_3^2 x_{15,68} = h_0 Q_2 x_{10,27} = p P^3 h_5^2 = y x_{12,45}$   
(11)  $P d_0 x_{10,76}$
- 19 (100)  $i x_{12,64} = j x_{12,60} = k x_{12,55} = B_4 B_{21}$   
(010)  $h_4 x_{18,68}$   
(001)  $h_0 P d_0 x_{10,76} = h_1^2 P x_{13,87} = h_1 h_5 x_{17,50} = h_1 h_6 P^2 u = h_1 c_0 x_{15,78} =$   
 $h_1 P h_1 x_{13,87} = h_2 P x_{14,82} = h_3 x_{18,83} = h_6 P h_1 Q = h_6 P h_1 P u =$   
 $h_6 P^2 h_1 u = P h_2 x_{14,82} = P c_0 x_{12,78}$
- (101)  $d_0^2 x_{11,61} = e_0 x_{15,65}$   
(111)  $d_0 x_{15,68}$

continued

- Stem 119    continued
- 20 (0011)  $h_0 d_0^2 x_{11,61} = h_0 e_0 x_{15,65} = h_0 i x_{12,64} = h_0 j x_{12,60} = h_0 k x_{12,55} =$   
 $h_0 B_4 B_{21} = h_2 d_0 x_{15,65} = h_2 i x_{12,60} = h_2 j x_{12,55} = h_2 P e_0 x_{11,61} =$   
 $h_2 B_4 Q_1 = e_0 P h_2 x_{11,61} = f_0 P x_{12,60} = B_2 x_{13,35} = x' B_5$
- (1000)  $x_{20,91}$
- (0100)  $h_1 P x_{15,78} = P h_1 x_{15,78}$
- (0010)  $h_0 d_0 x_{15,68} = h_6 d_0 P^2 j = h_6 e_0 P^2 i = h_6 i P^2 e_0 = h_6 j P^2 d_0 =$   
 $h_6 P d_0 P j = P h_2 x_{15,74} = x' P D_2 = R_1 B_{23}$
- (0001)  $h_0 h_4 x_{18,68} = h_2^2 x_{18,85} = h_2 h_4 x_{18,63} = h_2 g x_{15,58} = B_2 x_{13,34}$
- 21 (100)  $g^2 x_{13,42} = n x_{16,48} = t x_{15,41} = m x_{14,46}$
- (010)  $x_{21,87}$
- (001)  $h_0^2 d_0^2 x_{11,61} = h_0^2 d_0 x_{15,68} = h_0^2 e_0 x_{15,65} = h_0^2 i x_{12,64} = h_0^2 j x_{12,60} =$   
 $h_0^2 k x_{12,55} = h_0^2 B_4 B_{21} = h_0 h_2 d_0 x_{15,65} = h_0 h_2 i x_{12,60} =$   
 $h_0 h_2 j x_{12,55} = h_0 h_2 P e_0 x_{11,61} = h_0 h_2 B_4 Q_1 = h_0 h_6 d_0 P^2 j =$   
 $h_0 h_6 e_0 P^2 i = h_0 h_6 i P^2 e_0 = h_0 h_6 j P^2 d_0 = h_0 h_6 P d_0 P j =$   
 $h_0 e_0 P h_2 x_{11,61} = h_0 f_0 P x_{12,60} = h_0 P h_2 x_{15,74} = h_0 B_2 x_{13,35} =$   
 $h_0 x' B_5 = h_0 x' P D_2 = h_0 R_1 B_{23} = h_1 d_0^2 x_{12,55} = h_1 e_0 P x_{12,60} =$   
 $h_1 P d_0 x_{12,64} = h_1 P e_0 x_{12,60} = h_1 x' B_{23} = h_1 Q_1 x_{10,27} =$   
 $h_1 Q_1 x_{10,28} = h_1 B_{21}^2 = h_2^2 i x_{12,55} = h_2^2 P d_0 x_{11,61} = h_2^2 B_4 x' =$   
 $h_2 h_6 d_0 P^2 i = h_2 h_6 i P^2 d_0 = h_2 d_0 P h_2 x_{11,61} = h_2 P h_2 x_{15,68} =$   
 $h_2 B_2 P^2 D_1 = h_2 R_1 x_{10,27} = h_2 R_1 x_{10,28} = h_5 i R_2 = h_6 d_0 i P^2 h_2 =$   
 $h_6 f_0 P^3 d_0 = h_6 P h_2 i P d_0 = h_6 k P^3 h_2 = d_0 P h_1 x_{12,64} = d_0 B_1 B_{21} =$   
 $e_0 P h_1 x_{12,60} = e_0 B_1 Q_1 = e_0 B_2 R_1 = f_0 P h_2 x_{12,55} = f_0 B_2 x' =$   
 $g P h_1 x_{12,55} = g B_1 x' = P h_2 B_2 B_4 = i B_2^2$

Stem 120

8	(1)	$h_6Q_2$
9	(1)	$x_{9,118}$
10	(100)	$x_{10,120}$
	(001)	$h_0x_{9,118}$
	(011)	$h_1x_{9,117} = h_4x_{9,99}$
11	(100)	$x_{11,113}$
	(010)	$h_0x_{10,120} = h_2x_{10,114}$
	(001)	$h_0^2x_{9,118} = h_2x_{10,113}$
12	(10000)	$x_{12,106}$
	(00011)	$h_0^2x_{10,120} = h_0h_2x_{10,114} = h_1h_6Q_1 = h_1x_{11,109} = h_2h_6R_1$
	(01000)	$x_{12,107}$
	(00100)	$h_0x_{11,113}$
	(00001)	$h_0^3x_{9,118} = h_0h_2x_{10,113} = h_1^2x_{10,116}$
13	(1)	$h_0x_{12,106}$
14	(10)	$x_{14,110}$
	(01)	$h_0^2x_{12,106} = h_1^2x_{12,100} = h_3x_{13,93}$
16	(10)	$h_3^2x_{14,79} = D_2x_{10,27}$
	(11)	$h_4x_{15,68}$
17	(100)	$P^2x_{9,97}$
	(110)	$ix_{10,76}$
	(001)	$h_0h_3^2x_{14,79} = h_0h_4x_{15,68} = h_0D_2x_{10,27} = h_2^2x_{15,90} = gx_{13,73} = x_{7,40}R_1$
18	(100)	$rx_{12,55} = B_4^2$
	(110)	$d_0x_{14,79}$
	(001)	$h_0ix_{10,76} = h_0P^2x_{9,97}$
	(101)	$kx_{11,61}$
19	(100)	$h_0rx_{12,55} = h_0B_4^2 = h_3P^2x_{10,76} = x_{9,40}x'$
	(110)	$h_0d_0x_{14,79}$
	(001)	$h_0^2ix_{10,76} = h_0^2P^2x_{9,97}$
	(101)	$h_0kx_{11,61} = h_1Pd_0x_{10,76} = h_2jx_{11,61} = h_5x_{18,50} = h_6iPj = c_0Px_{12,80} = d_0Ph_1x_{10,76} = f_0x_{15,65} = Pc_0x_{12,80}$
	(011)	$h_2Px_{14,84} = Ph_2x_{14,84}$
20	(100)	$P^2x_{12,80}$
	(001)	$h_0^3ix_{10,76} = h_0^3P^2x_{9,97} = h_0^2rx_{12,55} = h_0^2B_4^2 = h_0h_3P^2x_{10,76} = h_0x_{9,40}x' = h_3ix_{12,55} = h_3B_4x' = g_2x_{16,32} = xx_{15,41}$
	(011)	$h_0^2d_0x_{14,79} = h_0h_2Px_{14,84} = h_0Ph_2x_{14,84} = h_1h_4x_{18,68} = h_1d_0x_{15,68} = h_2^2x_{18,87} = h_2^2Px_{14,79} = h_2Ph_2x_{14,79} = g^2x_{12,44} = d_1x_{16,48} = Ph_1x_{15,81} = Ph_1x_{15,82} = tx_{14,46} = R_1B_5 = Q_1x_{10,32}$

Stem 121

- 7 (10)  $x_{7,101}$   
 (01)  $h_6 D_2$
- 8 (1)  $h_0 h_6 D_2 = h_0 x_{7,101}$
- 9 (10)  $x_{9,119}$   
 (01)  $h_0^2 h_6 D_2 = h_0^2 x_{7,101} = h_1 h_6 Q_2$
- 10 (1)  $h_0 x_{9,119} = h_1 x_{9,118} = h_2 x_{9,116}$
- 11 (1)  $x_{11,116}$
- 12 (10)  $h_1 x_{11,113}$   
 (01)  $h_0 x_{11,116}$
- 13 (1)  $h_0^2 x_{11,116} = h_1 x_{12,106} = h_2 x_{12,100} = h_3 x_{12,93}$
- 14 (1)  $P x_{10,109}$
- 15 (10)  $h_4 x_{14,79}$   
 (01)  $h_1 x_{14,110}$
- 16 (100)  $d_0 x_{12,85} = e_0 x_{12,80}$   
 (010)  $x_{16,109}$   
 (001)  $h_0 h_4 x_{14,79}$
- 17 (1011)  $r x_{11,61}$   
 (0010)  $h_0 x_{16,109}$   
 (0001)  $h_0^2 h_4 x_{14,79} = h_1 h_4 x_{15,68} = Q_2 x_{10,32}$   
 (0101)  $P^2 x_{9,99}$
- 18 (100)  $g^3 A' = g^3 A = g m x_{7,40} = r^2 A' = r^2 A = w x_{9,51}$   
 (010)  $h_0 P^2 x_{9,99} = h_1 P^2 x_{9,97} = h_5 x_{17,52} = h_6 P^2 v = P h_1 x_{13,91} =$   
 $P^2 h_1 x_{9,97}$   
 (001)  $h_0^2 x_{16,109}$   
 (011)  $h_0 r x_{11,61} = G_{21} x' = B_4 X_1$
- 19 (1)  $h_0^3 x_{16,109} = h_0^2 r x_{11,61} = h_0 G_{21} x' = h_0 B_4 X_1 = h_3 i x_{11,61} =$   
 $h_3 x_{18,87} = x_{9,40} R_1$

Stem 122

- 8 (1)  $h_1x_{7,101} = D_3^2$
- 11 (10)  $h_6B_{21}$   
 (01)  $x_{11,118}$
- 12 (100)  $A^2$   
 (010)  $h_0h_6B_{21} = h_2h_6Q_1$   
 (001)  $h_0x_{11,118} = D_2A''$   
 (101)  $A'^2 = A'A$   
 (011)  $h_2x_{11,109}$   
 (111)  $h_5x_{11,61}$
- 13 (100)  $x_{13,113}$   
 (010)  $h_1^2x_{11,113} = h_4x_{12,85} = D_3X_1 = x_{6,53}B_1$   
 (001)  $h_0^2h_6B_{21} = h_0h_2h_6Q_1 = h_0h_2x_{11,109} = h_0h_5x_{11,61} = h_2^2h_6x' = h_6Ph_2B_2 = e_0x_{9,99}$
- 14 (1)  $h_0x_{13,113} = h_3D_2Q_2$
- 15 (10)  $x_{15,108}$   
 (01)  $x_{15,109}$
- 16 (100)  $nx_{11,61} = rx_{10,65}$   
 (010)  $x_{16,112}$   
 (001)  $h_0x_{15,109} = h_1^2x_{14,110}$
- 17 (10)  $g^3H_1 = gtx_{7,40} = nrA' = nrA = H_1r^2 = mx_{10,60} = Q_2B_{23} = Nx_{9,51} = x_{8,33}B_4 = x_{8,57}w$   
 (01)  $h_0x_{16,112}$
- 18 (100)  $Pe_0x_{10,76}$   
 (010)  $h_1P^2x_{9,99} = Ph_1Px_{9,99} = qx_{12,55} = PD_3x' = P^2h_1x_{9,99}$   
 (110)  $d_0x_{14,82}$   
 (001)  $h_0^2x_{16,112} = h_3x_{17,94} = xx_{13,46} = rx_{12,58} = G_{21}R_1$   
 (011)  $X_1^2$

Stem 123

8	(1)	$x_{8,113}$
9	(10)	$x_{9,121}$
	(01)	$h_0x_{8,113}$
10	(100)	$x_{10,124}$
	(110)	$h_6B_4$
	(001)	$h_0x_{9,121} = h_2x_{9,118}$
11	(10000)	$x_{11,119}$
	(01000)	$x_{11,120}$
	(00001)	$h_0^2x_{9,121} = h_0h_2x_{9,118}$
	(01100)	$h_5x_{10,65} = H_1A' = H_1A$
	(00010)	$h_0h_6B_4 = h_2x_{10,120}$
12	(100)	$x_{12,116}$
	(010)	$h_0x_{11,119}$
	(001)	$h_0^2h_6B_4 = h_0h_2x_{10,120} = h_1h_6B_{21} = h_2^2x_{10,114} = h_2x_{11,113} = h_6d_0B_1 = Ph_2x_{7,97}$
13	(100)	$x_{13,116}$
	(010)	$x_{13,117}$
	(001)	$h_0^2x_{11,119} = h_2x_{12,106} = h_3D_2^2 = h_5x_{12,58} = r_1Q_2$
14	(100)	$Q_2x_{7,40}$
	(001)	$h_0^3x_{11,119} = h_0h_2x_{12,106} = h_0h_3D_2^2 = h_0h_5x_{12,58} = h_0r_1Q_2 = h_1x_{13,113} = h_3^2x_{12,86} = h_3x_{13,97} = px_{10,63} = D_3x_{10,27} = H_1X_1 = qx_{8,75} = Ax_{8,32}$
	(101)	$rx_{8,78} = A'x_{8,33} = Ax_{8,33}$
	(011)	$h_0x_{13,116} = h_0x_{13,117}$
15	(100)	$x_{15,110}$
	(010)	$h_4x_{14,82} = d_1x_{11,61} = nx_{10,65} = Q_3Q_1$
	(001)	$h_0^2x_{13,116} = h_0^2x_{13,117}$
16	(010)	$h_0x_{15,110}$
	(110)	$h_1x_{15,109} = h_4x_{15,74} = c_0x_{13,95} = d_0x_{12,86}$
	(001)	$h_0^3x_{13,116} = h_0^3x_{13,117} = h_3x_{15,96}$
	(011)	$h_3^2y_{14,83} = A'x_{10,27}$
17	(1101)	$h_3x_{16,95}$
	(0011)	$h_0h_3^2y_{14,83} = h_0A'x_{10,27} = h_1x_{16,112} = e_1x_{13,46} = g_2x_{13,42} = nx_{12,58} = xx_{12,48} = qx_{11,61} = Q_2B_5 = Q_2PD_2 = x_{8,32}X_1$
	(0100)	$d_0x_{13,87}$
	(0010)	$h_0^2x_{15,110}$
	(0001)	$h_0^4x_{13,116} = h_0^4x_{13,117} = h_0h_3x_{15,96} = ix_{10,82}$
	(0101)	$jx_{10,76}$



<u>Stem 124</u>		
6	(1)	$x_{6,94}$
7	(100)	$x_{7,103}$
	(010)	$h_6A$
	(001)	$h_0x_{6,94}$
	(011)	$h_6A'$
8	(1)	$x_{8,114}$
9	(100)	$x_{9,123}$
	(010)	$x_{9,124}$
	(001)	$h_0x_{8,114}$
10	(00110)	$H_1^2$
	(10000)	$x_{10,127}$
	(01000)	$x_{10,128}$
	(00100)	$h_1x_{9,121}$
	(00001)	$h_0^2x_{8,114}$
	(00010)	$h_0x_{9,123} = h_2x_{9,119}$
	(00101)	$h_6X_1$
	(10000)	$x_{11,124}$
11	(00011)	$h_3x_{10,113}$
	(01000)	$x_{11,125}$
	(00100)	$x_{11,126}$
	(00001)	$h_0^3x_{8,114} = h_0h_6X_1 = h_3x_{10,114}$
	(00010)	$h_0x_{10,127}$
	(00110)	$h_0x_{11,125}$
12	(10000)	$h_1x_{11,120}$
	(01000)	$h_0x_{11,124}$
	(00011)	$h_0h_3x_{10,113}$
	(00100)	$h_0x_{11,126} = h_2x_{11,116} = px_{8,75} = n_1Q_2 = D_2r_1$
	(00001)	$h_0^4x_{8,114} = h_0^2h_6X_1 = h_0h_3x_{10,114} = h_3h_6R_1$
	(10100)	$Q_3Q_2$
	(00010)	$h_0^2x_{10,127} = h_1x_{11,119} = h_3x_{11,103}$
	13	(1000)
(1100)		$h_4x_{12,86}$
(1111)		$H_1x_{8,32}$
(0001)		$h_0^5x_{8,114} = h_0^3h_6X_1 = h_0^2h_3x_{10,113} = h_0^2h_3x_{10,114} = h_0^2x_{11,124} = h_0h_3h_6R_1 = h_3x_{12,96}$

continued

<u>Stem 124</u>	<u>continued</u>
14	(10000) $x_{14,117}$
	(00011) $h_1x_{13,116}$
	(01000) $x_{14,118}$
	(00001) $h_1x_{13,117} = h_4x_{13,87} = d_0x_{10,102}$
	(10100) $rx_{8,80}$
	(00010) $d_1x_{10,65}$
15	(0011) $h_0x_{14,118}$
	(1000) $x_{15,113}$
	(0100) $x_{15,114}$
	(0110) $h_4x_{14,84}$
	(0001) $h_0x_{14,117}$
	(0101) $h_3^2x_{13,88} = h_4y_{14,83} = H_1x_{10,27}$
16	(00110) $h_0x_{15,113}$
	(10000) $x_{16,117}$
	(00011) $h_0^2x_{14,118} = h_0h_4x_{14,84} = h_2h_4x_{14,79} = D_2PD_2$
	(01000) $h_1x_{15,110} = h_3x_{15,98} = d_1x_{12,58} = e_1x_{12,48} = g_2x_{12,44} = qx_{10,65} = x_{8,32}^2$
	(10011) $e_0x_{12,85} = gx_{12,80}$
	(00001) $h_0^2x_{14,117} = h_0x_{15,114}$

<u>Stem 125</u>		
5	(1)	$x_{5,77}$
6	(10)	$h_6 H_1$
	(01)	$h_0 x_{5,77}$
7	(1)	$h_0^2 x_{5,77} = h_1 x_{6,94}$
8	(10)	$x_{8,115}$
	(01)	$x_{8,116}$
9	(01101)	$h_6 x_{8,32}$
	(10000)	$x_{9,126}$
	(01000)	$h_5 x_{8,80}$
	(00001)	$h_0 x_{8,116}$
	(00010)	$x_{9,129}$
	(00101)	$h_6 x_{8,33}$
10	(10000)	$x_{10,132}$
	(01000)	$x_{10,133}$
	(00001)	$h_0^2 x_{8,116}$
	(00111)	$h_0 x_{9,126}$
	(00010)	$h_0 x_{9,129} = h_3 x_{9,116}$
11	(01101)	$h_1 x_{10,127}$
	(00011)	$h_0 x_{10,132}$
	(11000)	$h_6 x_{10,27} = h_6 x_{10,28}$
	(01011)	$Q_3 D_2$
	(00001)	$h_0^3 x_{8,116} = h_0^2 x_{9,126} = h_0 x_{10,133}$
	(00010)	$h_0^2 x_{9,129} = h_0 h_3 x_{9,116}$
	(01111)	$h_3 x_{10,116}$
12	(00101)	$h_1 x_{10,128} = h_4 x_{10,102}$
	(10000)	$x_{12,124}$
	(00011)	$h_0^3 x_{9,129} = h_0^2 h_3 x_{9,116} = h_0 h_3 x_{10,116}$
	(01000)	$x_{12,125}$
	(00100)	$h_0 h_6 x_{10,27} = h_0 h_6 x_{10,28} = h_2 h_6 B_{21} = h_6 d_0 B_2$
	(00001)	$h_0^4 x_{8,116} = h_0^3 x_{9,126} = h_0^2 x_{10,133}$
(00010)	$h_0^2 x_{10,132} = h_0 Q_3 D_2 = h_2 x_{11,118} = AA''$	

continued

- Stem 125      continued
- 13 (00011)  $h_0^4 x_{9,129} = h_0^3 h_3 x_{9,116} = h_0^2 h_3 x_{10,116} = h_2^2 x_{11,109} = h_2 h_5 x_{11,61} =$   
 $g x_{9,99}$   
(00100)  $h_0 x_{12,124}$   
(00001)  $h_0^5 x_{8,116} = h_0^4 x_{9,126} = h_0^3 x_{10,133} = h_0^2 h_6 x_{10,27} = h_0^2 h_6 x_{10,28} =$   
 $h_0 h_2 h_6 B_{21} = h_0 h_6 d_0 B_2 = h_2^2 h_6 Q_1 = c_0 x_{10,114} = d_0 x_{9,109}$   
(01001)  $n x_{8,80}$   
(00010)  $h_0^3 x_{10,132} = h_0^2 Q_3 D_2 = h_0 h_2 x_{11,118} = h_0 A A'' = h_0 x_{12,125} =$   
 $h_1^2 x_{11,120} = h_1 Q_3 Q_2 = h_2 D_2 A'' = h_2 A'^2 = h_2 A' A = f_0 x_{9,102} =$   
 $r x_{7,79}$   
(11001)  $h_3 x_{12,100}$
- 14 (001)  $h_0^2 x_{12,124} = h_0 h_3 x_{12,100} = h_3 A' Q_2 = p x_{10,65}$   
(011)  $h_1 h_4 x_{12,86} = c_0 x_{11,103} = D_3 x_{10,32}$   
(111)  $P x_{10,113}$
- 15 (00110)  $h_1 x_{14,118}$   
(10000)  $x_{15,117}$   
(11000)  $Q_2 G_{21}$   
(00100)  $x_{15,119}$   
(00001)  $h_0^3 x_{12,124} = h_0^2 h_3 x_{12,100} = h_0 h_3 A' Q_2 = h_0 p x_{10,65} = h_1^2 x_{13,116} =$   
 $h_1 d_1 x_{10,65} = h_3 x_{14,104} = D_2 x_{9,40} = A'' X_1 = x_{7,33} x_{8,32}$   
(00010)  $h_0 P x_{10,113}$

<u>Stem 126</u>		
2	(1)	$h_6^2$
3	(1)	$h_0 h_6^2$
4	(10)	$D_{31}$
	(01)	$h_0^2 h_6^2$
5	(1)	$h_0^3 h_6^2$
6	(10)	$x_{6,97}$
	(01)	$h_0^4 h_6^2$
7	(01)	$h_0^5 h_6^2$
	(11)	$h_1 h_6 H_1$
8	(10000)	$x_{8,117}$
	(01000)	$x_{8,118}$
	(00100)	$x_{8,119}$
	(00110)	$h_6 x_{7,34}$
	(00010)	$x_{8,120}$
	(00001)	$h_0^6 h_6^2$
9	(10000)	$x_{9,131}$
	(01000)	$h_1 x_{8,115}$
	(00001)	$h_0 x_{8,118}$
	(00100)	$h_1 x_{8,116}$
	(01001)	$h_2 x_{8,113}$
	(00010)	$h_0 x_{8,117}$
	(00001)	$h_0^7 h_6^2$
10	(10000)	$x_{10,137}$
	(00011)	$h_0^2 x_{8,118} = h_0 h_2 x_{8,113} = h_1 x_{9,126} = h_1 x_{9,129} = d_2 D_2$
	(00001)	$h_0^8 h_6^2$
	(01001)	$h_0 x_{9,131}$
	(00101)	$h_0^2 x_{8,117} = h_1 h_5 x_{8,80} = h_1 h_6 x_{8,32} = h_3 x_{9,117}$
	(01010)	$h_2 x_{9,121}$
11	(10000)	$x_{11,134}$
	(00001)	$h_0^2 x_{9,131} = h_0 h_2 x_{9,121} = h_2^2 x_{9,118}$
	(00100)	$h_1 x_{10,133}$
	(01100)	$h_1 x_{10,132} = h_3 x_{10,118}$
	(00010)	$h_0 x_{10,137} = h_2 h_6 B_4 = d_0 x_{7,97}$
	(00001)	$h_0^9 h_6^2$

continued

<u>Stem 126</u>	<u>continued</u>
12 (00110)	$h_0x_{11,134} = h_1^2x_{10,127} = h_1^2x_{10,128} = h_1h_3x_{10,116} = h_1h_4x_{10,102} =$ $h_2h_5x_{10,65} = h_2H_1A' = h_2H_1A = c_0x_{9,115} = c_1x_{9,102} = nx_{7,79}$
(00011)	$h_0^2x_{10,137} = h_0h_2h_6B_4 = h_0d_0x_{7,97} = h_1h_6x_{10,27} = h_1h_6x_{10,28} =$ $h_2^2x_{10,120} = h_2x_{11,119} = h_6e_0B_1 = c_0x_{9,116} = d_0x_{8,105}$
(10011)	$d_1x_{8,80}$
(01011)	$h_3x_{11,109}$
(00001)	$h_0^{10}h_6^2$
13 (100)	$h_1x_{12,125}$
(010)	$h_0h_3x_{11,109} = h_3H_1Q_2 = h_3D_2A'$
(110)	$h_1x_{12,124}$
(001)	$h_0^{11}h_6^2$
14 (0100)	$x_{14,126}$
(0010)	$h_1h_3x_{12,100} = h_2x_{13,116} = qx_{8,80}$
(1010)	$D_2G_{21}$
(0001)	$h_0^{12}h_6^2$

<u>Stem 127</u>		
1	(1)	$h_7$
2	(1)	$h_0 h_7$
3	(10)	$h_1 h_6^2$
	(01)	$h_0^2 h_7$
4	(1)	$h_0^3 h_7$
5	(1)	$h_0^4 h_7$
6	(10)	$x_{6,99}$
	(01)	$h_0^5 h_7$
7	(00110)	$h_2 x_{6,94}$
	(10000)	$x_{7,109}$
	(01000)	$x_{7,110}$
	(00100)	$h_1 x_{6,97}$
	(00001)	$h_0^6 h_7$
	(00010)	$h_0 x_{6,99} = h_6 A''$
8	(0011010)	$h_2 h_6 A'$
	(0011000)	$h_2 h_6 A$
	(0001100)	$h_0 x_{7,109}$
	(0100000)	$x_{8,124}$
	(0000100)	$h_0 x_{7,110}$
	(0000001)	$h_0^7 h_7$
	(1001000)	$h_2 x_{7,103} = h_4 x_{7,97}$
	(0000010)	$h_0^2 x_{6,99} = h_0 h_2 x_{6,94} = h_0 h_6 A''$
9	(10000)	$h_1 x_{8,118} = h_1 x_{8,120}$
	(00100)	$h_0 x_{8,124}$
	(00001)	$h_0^8 h_7$
	(11100)	$h_1 x_{8,119}$
	(00010)	$h_0^2 x_{7,109} = h_1 x_{8,117}$
	(10010)	$h_3 h_6 Q_2 = h_5 x_{8,83}$
	(01010)	$h_2 x_{8,114}$
10	(010000)	$x_{10,143}$
	(000010)	$h_0^2 x_{8,124} = h_0 h_2 x_{8,114} = h_1 x_{9,131}$
	(101000)	$h_2 x_{9,123}$
	(001110)	$h_3 x_{9,118}$
	(000100)	$h_1^2 x_{8,116}$
	(000001)	$h_0^9 h_7$

continued

<u>Stem 127</u>	<u>continued</u>
11	(0100) $h_0x_{10,143}$
	(0010) $h_0h_3x_{9,118}$
	(1010) $h_0h_2x_{9,123} = h_1x_{10,137} = h_2^2x_{9,119} = h_2H_1^2 = h_2x_{10,127} =$ $h_4x_{10,107} = d_1x_{7,79} = D_3x_{7,40}$
	(0001) $h_0^{10}h_7$
12	(100) $h_1x_{11,134} = h_4^2x_{10,76} = c_0x_{9,117} = Q_3B_3$
	(010) $h_0^2x_{10,143} = h_2x_{11,124} = px_{8,80} = A'r_1$
	(110) $h_3x_{11,113}$
	(001) $h_0^{11}h_7$
13	(00110) $gx_{9,102}$
	(10110) $h_3x_{12,106}$
	(01000) $x_{13,132}$
	(00100) $h_5x_{12,64} = A'x_{7,40} = Ax_{7,40}$
	(00001) $h_0^{12}h_7$
	(00010) $h_0^3x_{10,143} = h_0h_2x_{11,124} = h_0h_3x_{11,113} = h_0px_{8,80} = h_0A'r_1 =$ $h_1d_1x_{8,80} = nx_{8,83} = rx_{7,81}$



<u>Stem 128</u>		
2	(1)	$h_1h_7$
4	(1)	$h_1^2h_6^2$
5	(1)	$x_{5,80}$
6	(1000)	$x_{6,101}$
	(0100)	$x_{6,102}$
	(0010)	$h_2x_{5,77}$
	(0001)	$h_0x_{5,80}$
7	(010)	$h_0x_{6,101}$
	(110)	$h_2h_6H_1$
	(001)	$h_0^2x_{5,80} = h_0h_2x_{5,77} = h_0x_{6,102} = h_1x_{6,99}$
8	(1)	$h_3h_6D_2 = h_3x_{7,101} = h_5x_{7,81}$
9	(100)	$h_2x_{8,115}$
	(010)	$h_1x_{8,124} = D_3Q_3$
	(001)	$h_0h_3h_6D_2 = h_0h_3x_{7,101} = h_0h_5x_{7,81}$
10	(0011)	$h_2h_6x_{8,33} = h_2x_{9,126}$
	(1000)	$x_{10,148}$
	(0100)	$x_{10,149}$
	(0010)	$h_2h_6x_{8,32} = h_4x_{9,111}$
	(0001)	$h_0^2h_3h_6D_2 = h_0^2h_3x_{7,101} = h_0^2h_5x_{7,81} = h_1^2x_{8,118} = h_1^2x_{8,119} = h_1^2x_{8,120} = h_1h_3h_6Q_2 = h_1h_5x_{8,83} = h_2h_5x_{8,80}$
11	(100)	$h_5x_{10,76} = h_6B_{23}$
	(010)	$h_0x_{10,148} = h_2x_{10,132} = px_{7,79} = H_1r_1 = n_1A' = Q_3A'$
	(001)	$h_0x_{10,149} = h_1x_{10,143}$
	(011)	$h_4x_{10,109} = Q_3A$
12	(10000)	$x_{12,137}$
	(00100)	$h_3x_{11,116}$
	(00001)	$h_0h_5x_{10,76} = h_0h_6B_{23} = h_2h_6x_{10,27} = h_2h_6x_{10,28} = h_6e_0B_2 = c_0x_{9,118}$
	(11001)	$H_1x_{7,40}$
	(00010)	$x_{12,140}$

Stem 129

3	(10)	$h_2h_6^2$
	(01)	$h_1^2h_7$
4	(1)	$h_0h_2h_6^2$
5	(100)	$H_{11}$
	(010)	$h_2D_{31}$
	(001)	$h_0^2h_2h_6^2 = h_1^3h_6^2$
7	(1)	$h_2x_{6,97}$
8	(10)	$h_6x_{7,40}$
	(01)	$x_{8,132}$
9	(0011)	$h_0h_6x_{7,40} = h_2h_6x_{7,34} = h_2x_{8,119}$
	(1000)	$x_{9,145}$
	(0100)	$x_{9,146}$
	(0001)	$h_0x_{8,132} = h_2x_{8,118}$
10	(100)	$x_{10,152}$
	(010)	$h_0x_{9,146} = h_2x_{9,131}$
	(001)	$h_0^2x_{8,132} = h_0h_2x_{8,118} = h_1^2x_{8,124} = h_1D_3Q_3 = h_2^2x_{8,113} =$ $h_4x_{9,112} = c_0x_{7,101} = d_2A$
11	(100000)	$x_{11,147}$
	(010000)	$x_{11,148}$
	(000011)	$h_0x_{10,152} = h_2x_{10,137} = e_0x_{7,97}$
	(001000)	$h_6B_5 = h_6PD_2$
	(000100)	$h_1x_{10,149}$
	(000001)	$h_0^2x_{9,146} = h_0h_2x_{9,131} = h_2^2x_{9,121}$

Stem 130

2	(1)	$h_2h_7$
3	(1)	$h_0h_2h_7$
4	(1)	$h_0^2h_2h_7 = h_1^3h_7$
6	(1)	$h_6n_1$
7	(1)	$x_{7,118}$
8	(10)	$x_{8,133}$
	(01)	$h_2x_{7,109}$
9	(100)	$h_3x_{8,113}$
	(010)	$h_1h_6x_{7,40} = h_2^2h_6A' = h_2^2h_6A$
	(001)	$h_0x_{8,133} = h_2x_{8,124}$
10	(10000)	$x_{10,155}$
	(00100)	$h_3x_{9,121}$
	(00001)	$h_0^2x_{8,133} = h_0h_2x_{8,124} = h_1x_{9,146} = h_2^2x_{8,114}$
	(01100)	$h_5x_{9,86} = h_6x_{9,39}$
	(00010)	$h_0h_3x_{8,113}$

Stem 131

7	(10)	$h_2x_{6,101}$
	(01)	$h_3x_{6,94}$
8	(0011)	$h_0h_2x_{6,101} = h_1x_{7,118} = h_3x_{7,103} = D_3p_1$
	(1000)	$h_2^2h_6H_1 = h_3h_6A$
	(0100)	$x_{8,136}$
	(0001)	$h_0h_3x_{6,94}$
	(1001)	$h_3h_6A'$
9	(00011)	$h_1x_{8,133}$
	(00100)	$x_{9,154}$
	(00001)	$h_0x_{8,136}$
	(01001)	$h_6G_{21}$
	(10010)	$h_3x_{8,114}$

Stem 132

4	(1)	$h_2^2h_6^2$
6	(100)	$h_3x_{5,77}$
	(010)	$x_{6,107}$
	(001)	$h_2H_{11}$
7	(010)	$h_0h_3x_{5,77}$
	(001)	$h_0x_{6,107}$
	(101)	$h_3h_6H_1$
8	(10000)	$x_{8,139}$
	(01000)	$x_{8,140}$
	(00100)	$h_2^2x_{6,97}$
	(00001)	$h_6^2x_{6,107}$
	(00010)	$h_0^2h_3x_{5,77} = h_1h_3x_{6,94} = h_5x_{7,88}$

Stem 133

3	(10)	$h_3h_6^2$
	(01)	$h_2^2h_7$
4	(1)	$h_0h_3h_6^2$
5	(01)	$h_0^2h_3h_6^2$
	(11)	$h_3D_{31}$
6	(1)	$h_0^3h_3h_6^2$
7	(100)	$x_{7,124}$
	(110)	$h_3x_{6,97}$
	(001)	$h_1x_{6,107}$

Stem 134

2	(1)	$h_3h_7$
3	(1)	$h_0h_3h_7$
4	(10)	$h_1h_3h_6^2$
	(01)	$h_0^2h_3h_7$
5	(10)	$h_6^2c_0$
	(01)	$h_0^3h_3h_7$
6	(1)	$x_{6,110}$

Stem 135

$$3 \quad (1) \quad h_1 h_3 h_7$$

$$4 \quad (1) \quad h_7 c_0$$

$$5 \quad (1) \quad h_1^2 h_3 h_6^2 = h_2^3 h_6^2$$

Stem 136

$$4 \quad (1) \quad h_1^2 h_3 h_7 = h_2^3 h_7$$

Stem 137Stem 138Stem 139Stem 140**References**

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