R. Bruner Math 2250, Fall 2008, Quiz 8 Halloween, 2008

Let P_2 be the vector space of polynomials whose degree is 2 or less.

- 1. Show that $\{(x-1)^2, x^2, (x+1)^2\}$ is linearly independent.
- 2. Show that this set of polynomials spans P_2 .