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Consider the differential equation

$$y' = y(y - 1)(y - 3)$$

1. Find the equilibrium (constant) solutions.
2. Draw the phase line and sketch representative solutions.
3. If $y(0) = 2$, find

$$\lim_{t \rightarrow \infty} y(t) \quad \text{and} \quad \lim_{t \rightarrow -\infty} y(t)$$