

Solve each equation. Check for extraneous solutions.

$$\frac{x}{x+2} + \frac{5}{x-3} = \frac{25}{x^2 - x - 6}$$

Determine the values of x that cause the polynomial to be **a) zero**, **b) positive** or **c) negative**

$$f(x) = x^3 - x^2 - 2x$$

Using a sign chart, solve the polynomial inequality.

$$x^3 - 4x^2 - x + 4 \leq 0$$