Polynomial Function

Solve each equation Using Factoring Techniques

1) $x^3 - 2x^2 = 5x - 6$

2) $27x^3 - 1 = 0$

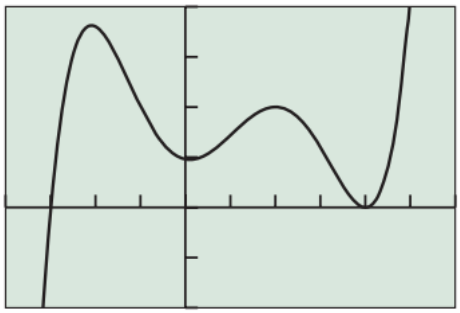
3) $x^4 - 4x^2 - 45 = 0$

Find all the *roots* of each equation.

4) $2x^3 + x^2 + x - 1 = 0$

5) $3x^3 + 4x^2 - 12x - 16 = 0$

6)



[–4, 6] by [–100, 200]

The solution of $(x + 3)(x^2 + 1)(x - 4)^2 > 0$ is

The solution of $(x + 3)(x^2 + 1)(x - 4)^2 \geq 0$ is

The solution of $(x + 3)(x^2 + 1)(x - 4)^2 < 0$ is

The solution of $(x + 3)(x^2 + 1)(x - 4)^2 \leq 0$ is