

Dividing Polynomials

1. $\frac{2x^2-5x-3}{x-3}$

2. $\frac{x^2-8x+16}{x-4}$

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

4. $(x^3 - 8) \div (x - 2)$

5. $\frac{x^3+2x-3}{x-1}$

6. $\frac{-2x^3-6x^2-x-3}{x+3}$

Factor the polynomials below completely. (*Use the rational root theorem to help you find the first root.*)

7. $x^3 + x^2 - 5x + 3$

8. $x^3 + x^2 - 4x - 4$