

Practice**Dividing Polynomials****Simplify.**

1. $(-30x^3y + 12x^2y^2 - 18x^2y) \div (-6x^2y)$

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

3. $(4x^2 - 2x + 6)(2x - 3)^{-1}$

4. $(x^4 - 3x^3 + 5x - 6) \div (x + 2)$

5. $(6x^2 - x - 7) \div (3x + 1)$

6. $(2x^3 + 4x - 6) \div (x + 3)$

Use synthetic division to find each quotient.

7. $(2r^3 + 5r^2 - 2r - 15) \div (2r - 3)$

8. $(x^4 - 20) \div (x + 2)$