

Name: _____
Date Started: _____ Date Completed: _____ Score: _____

Learning Activity Sheet
Dividing Polynomials Using Synthetic Division

Use synthetic division to find the quotient and remainder.

1. $(2x^4 + x^3 - 3) \div (x + 2)$

4. $(5x^3 - 3x^2 - 10x + 24) \div (x + 3)$

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

5. $(2x^3 + 5x^2 - 50x + 28) \div (2x - 7)$

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

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

9. $(x^5 - 1) \div (x - 1)$

7. $(4x^4 - 5x^2 + 8x - 12) \div (2x - 3)$

10. $(3y^5 + 13y - 10) \div (y^3 - 2y)$

8. $(2x^3 - 4x^2 - 3x - 3) \div (x + 1)$