

## Algebra 2

### Worksheet 4.3

Use Long Division to simplify.

1.  $2x^2 - 9x - 5 \div x - 5$

2.  $3x^2 - 13x + 12 \div x - 3$

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

4.  $3x^3 + 6x^2 - 2x - 7 \div x + 4$

5.  $4x^3 - 6x^2 - 5x - 1 \div x - 3$

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

Use Synthetic Division to simplify.

7.  $2x^3 - 7x^2 - 24x + 45 \div x - 5$

8.  $3x^3 + 17x^2 + 18x - 8 \div x + 4$

9.  $4x^4 + 2x^2 - 3x + 1 \div x + 3$

10.  $3x^5 + x^4 - x^2 + 2x - 6 \div x - 4$