

## Basic Skills 1

Date \_\_\_\_\_ Period \_\_\_\_\_

Simplify each sum.

1)  $(-3 + 4n^4 - n^3) + (7n^3 - 8n^2 - 8)$

Simplify each difference.

2)  $(2p^2 + 8p^3 - 8p) - (5p + p^2 - 6p^3)$

Find each product.

3)  $(x + 2)(5x + 2)$

Factor each completely.

4)  $9r^2 - 1$

Solve each equation.

5)  $-3(3 - 4x) = -57$

6)  $-3(x + 2) = -6 - 4x$

Solve each equation by factoring.

7)  $p^2 + p - 2 = 0$

8)  $3v^2 + 13v - 10 = 0$

Solve each equation by taking square roots.

9)  $64x^2 + 8 = 9$

Solve each equation with the quadratic formula.

10)  $3v^2 - v - 6 = 0$