

# LT 3.6 Honors Skills Practice

## Solving Quadratic Equations by Factoring

Solve each equation by factoring.

1.  $64x^2 + 112x + 49 = 0$

$x = -7/8, -7/8$

2.  $289x^2 + 34x + 1 = 0$

$x = -1/17, -1/17$

3.  $121x^2 - 88x + 160 = 0$

$x = 4/11, 4/11$

4.  $x^2 - 20x + 100 = 0$

$x = 10, 10$

**Challenge: Factor**

5.  $144x^2 + 24xy + 9y^2 = 0$

$(12x + y)^2 = 0$

6.  $x^2 - 6xy + 9y^2 = 0$

$(x - 3y)^2 = 0$

Solve each equation by factoring.

7.  $5x^2 - 14x + 8 = 0$

$x = 4/5, 2$

8.  $7x^2 - 15x + 6 = 4$

$x = 1/7, 2$

9.  $4x^2 - 46 = 3$

$x = -7/2, +7/2$

10.  $11x^2 - 32x + 17 = 20$

$x = -1/11, 3$

11.  $4x^2 + 12x + 9 = 0$

$x = -3/2$

12.  $5x^2 - 11x - 3 = 2x + 3$

$x = -2/5, 3$