

Name \_\_\_\_\_

## Solving Quadratic Equations by Factoring Worksheet 1

Solve each equation by factoring.

1.  $x^2 + 9x + 20 = 0$

2.  $x^2 + x - 42 = 0$

3.  $x^2 - 2x - 15 = 0$

4.  $x^2 - 11x - 12 = 0$

5.  $x^2 - 64 = 0$

6.  $x^2 + 18x + 81 = 0$

7.  $x^2 - 15x = -44$

8.  $x^2 - 63 = 2x$

9.  $x^2 + 15x = -36$

10.  $x^2 = -8x + 20$

11.  $x^2 - 17x + 72 = 0$

12.  $x^2 - 12x = -36$

Name \_\_\_\_\_

## Solving Quadratic Equations by Factoring Worksheet 1 Answers

Solve each equation by factoring.

1.  $x^2 + 9x + 20 = 0$

$$(x + 4)(x + 5) = 0$$

$$x = -4, -5$$

2.  $x^2 + x - 42 = 0$

$$(x + 7)(x - 6) = 0$$

$$x = -7, 6$$

3.  $x^2 - 2x - 15 = 0$

$$(x + 3)(x - 5) = 0$$

$$x = -3, 5$$

4.  $x^2 - 11x - 12 = 0$

$$(x + 1)(x - 12) = 0$$

$$x = -1, 12$$

5.  $x^2 - 64 = 0$

$$(x + 8)(x - 8) = 0$$

$$x = -8, 8$$

6.  $x^2 + 18x + 81 = 0$

$$(x + 9)^2 = 0$$

$$x = -9$$

7.  $x^2 - 15x = -44$

$$(x - 4)(x - 11) = 0$$

$$x = 4, 11$$

8.  $x^2 - 63 = 2x$

$$(x + 7)(x - 9) = 0$$

$$x = -7, 9$$

9.  $x^2 + 15x = -36$

$$(x + 12)(x + 3) = 0$$

$$x = -12, -3$$

10.  $x^2 = -8x + 20$

$$(x + 10)(x - 2) = 0$$

$$x = -10, 2$$

11.  $x^2 - 17x + 72 = 0$

$$(x - 8)(x - 9) = 0$$

$$x = 8, 9$$

12.  $x^2 - 12x = -36$

$$(x - 6)^2 = 0$$

$$x = 6$$