

## **Solving Quadratic Equations**

Name \_\_\_\_\_

Score \_\_\_\_

SQ:06

Solve each quadratic equation by factoring.

1) 
$$m^2 + 3m - 40 = 0$$

2) 
$$v(v + 21) = -108$$

3) 
$$k^2 + 14k + 49 = 0$$

4) 
$$y^2 - 4y - 5 = 0$$

5) 
$$t^2 - 70 = -3m$$

6) 
$$x^2 + 17 - 18 = 0$$

7) 
$$p^2 - 10p + 24 = 0$$

8) 
$$n^2 - 5n + 6 = 0$$

## Answer key

Solve each quadratic equation by factoring.

1) 
$$m^2 + 3m - 40 = 0$$

2) 
$$v(v + 21) = -108$$

$$m = 5$$
 and  $m = -8$ 

$$v = -12$$
 and  $v = -9$ 

3) 
$$k^2 + 14k + 49 = 0$$

4) 
$$y^2 - 4y - 5 = 0$$

$$k = -7$$
 and  $k = -7$ 

$$y = -1$$
 and  $y = 5$ 

5) 
$$t^2 - 70 = -3m$$

6) 
$$x^2 + 17 - 18 = 0$$

$$t = -10 \text{ and } t = 7$$

$$x = 1 \text{ and } x = -18$$

7) 
$$p^2 - 10p + 24 = 0$$

8) 
$$n^2 - 5n + 6 = 0$$

$$p = 6$$
 and  $p = 4$ 

$$n = 2$$
 and  $n = 3$