

**NAME** \_\_\_\_\_ **DATE** \_\_\_\_\_ **PER.** \_\_\_\_\_

**SOLVING QUADRATIC EQUATIONS BY FACTORING – Day 1**

**Solve.**

1.  $(y - 5)(y - 7) = 0$

2.  $y^2 - 9 = 0$

3.  $w^2 - 2w = 63$

4.  $2n^2 - 40n = 0$

5.  $y^2 - 3y + 2 = 0$

6.  $x^2 - 9x - 36 = 0$

7.  $0 = x^2 + 14x + 48$

8.  $m^2 - 36 = 16m$

9.  $r^2 + 9 = 10r$

10.  $y^2 = 17y - 72$

**Find the dimension indicated.**

11. The area of a rectangle is represented by the equation  $w^2 + 4w = 60$ , where  $w$  is the width of the rectangle. Find the width.

12. The area of a triangle is represented by the equation  $h^2 - h = 12$ , where  $h$  is the height of the triangle. Find the height.

**REVIEW. Show all work.**

13) \_\_\_\_\_

Determine the area of a rectangle whose dimensions are  $(3x + 2)$  and  $(2x + 1)$ .