

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. $m^2 - 36 = 16m$

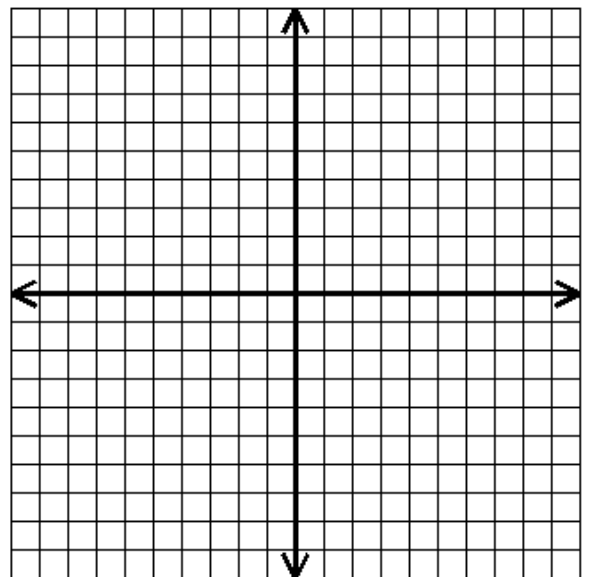
9. $r^2 + 9 = 10r$

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, and sketch a graph of the related quadratic function.



REVIEW. Show all work.

13) _____

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