

Assignment: Quadratics

Date _____

Find the value that completes the square and then rewrite as a perfect square.

1) $x^2 + 32x + \underline{\quad}$

2) $p^2 + 28p + \underline{\quad}$

3) $a^2 - 22a + \underline{\quad}$

4) $m^2 - 16m + \underline{\quad}$

Solve each equation by completing the square.

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

6) $n^2 - 2n - 15 = 0$

7) $k^2 - 8k - 88 = 0$

8) $x^2 - 2x - 99 = 0$

Solve each equation with the quadratic formula.

9) $3r^2 - 12 = 0$

10) $v^2 - 8v + 7 = 0$

11) $-5b^2 + 4b + 105 = 0$

12) $4x^2 - 7x - 2 = 0$

Answers to Assignment: Quadratics

1) $256; (x + 16)^2$

5) $\{5, -1\}$

8) $\{11, -9\}$

12) $\left\{2, -\frac{1}{4}\right\}$

2) $196; (p + 14)^2$

6) $\{5, -3\}$

9) $\{2, -2\}$

3) $121; (a - 11)^2$

7) $\{4 + 2\sqrt{26}, 4 - 2\sqrt{26}\}$

10) $\{7, 1\}$

4) $64; (m - 8)^2$

11) $\left\{-\frac{21}{5}, 5\right\}$

