

Name _____

Using the Quadratic Formula

Date _____ Period ____

Solve each equation with the quadratic formula.

$$1) m^2 - 5m - 14 = 0$$

$$2) b^2 - 4b + 4 = 0$$

$$3) 2m^2 + 2m - 12 = 0$$

$$4) 2x^2 - 3x - 5 = 0$$

$$5) x^2 + 4x + 3 = 0$$

$$6) 2x^2 + 3x - 20 = 0$$

$$7) 4b^2 + 8b + 7 = 4$$

$$8) 2m^2 - 7m - 13 = -10$$

$$9) 2x^2 - 3x - 15 = 5$$

$$10) x^2 + 2x - 1 = 2$$

$$11) 2k^2 + 9k = -7$$

$$12) 5r^2 = 80$$

$$13) 2x^2 - 36 = x$$

$$14) 5x^2 + 9x = -4$$

$$15) k^2 - 31 - 2k = -6 - 3k^2 - 2k$$

$$16) 9n^2 = 4 + 7n$$

$$17) 8n^2 + 4n - 16 = -n^2$$

$$18) 8n^2 + 7n - 15 = -7$$

Using the Quadratic Formula

Date _____ Period _____

Solve each equation with the quadratic formula.

$$1) m^2 - 5m - 14 = 0$$

$$\{7, -2\}$$

$$2) b^2 - 4b + 4 = 0$$

$$\{2\}$$

$$3) 2m^2 + 2m - 12 = 0$$

$$4) 2x^2 - 3x - 5 = 0$$

$$\{2, -3\}5$$

$$\left. \begin{array}{l} \\ \\ , -1 \\ \end{array} \right\}$$

2

$$5) x^2 + 4x + 3 = 0$$

$$6) 2x^2 + 3x - 20 = 0$$

$$\{-1, -3\}5$$

$$\left. \begin{array}{l} \\ \\ , -4 \\ \end{array} \right\}$$

2

$$7) 4b^2 + 8b + 7 = 4$$

$$8) 2m^2 - 7m - 13 = -10$$

$$\left. \begin{array}{ccccccc} -1 & -3 & & 7 & + & 73 & \\ \end{array} \right\}$$

$$\left\{ \frac{-}{2}, \frac{-}{2} \right\}$$

$$\left\{ \frac{\sqrt{-}}{2}, \frac{\sqrt{-}}{2} \right\}$$

-1-

$$9) 2x^2 - 3x - 15 = 0$$

$$\left\{ \frac{5}{4}, \frac{-3}{4} \right\}$$

2

$$15) k^2 - 31 - 2k = -6 - 3k^2 - 2k$$

$$\left\{ \frac{5}{2}, \frac{5}{-2} \right\}$$

2 2

$$11) 2k^2 + 9k = -7$$

$$\left\{ \frac{7}{-1}, \frac{-7}{-1} \right\}$$

2

$$17) 8n^2 + 4n - 16 = -n^2,$$

$$\left\{ \frac{\sqrt{-}}{2}, \frac{\sqrt{-}}{2} \right\}$$

$\frac{-2+2}{9} \frac{37}{9} \frac{-2-2}{9} \frac{37}{9}$

$$13) 2x^2 - 36 = x$$

$$\left\{ \frac{9}{1}, \frac{-4}{-3} \right\}$$

$$10) x^2 + 2x - 1 = 2$$

$$\{1, -3\}$$

$$12) 5r^2 = 80$$

$$\{4, -4\}$$

$$14) 5x^2 + 9x = -4$$

$$\left\{ \begin{array}{l} 4 \\ - \quad -, -1 \\ 5 \end{array} \right\}$$

$$16) 9^{n_2} = 4 + 7n,$$

$$\left\{ \begin{array}{c} \sqrt{} \quad \sqrt{} \\ \quad \quad \quad \end{array} \right\}$$

$$\begin{array}{r} 7 + 193 \\ 18 \end{array} \quad \begin{array}{r} 7 - 193 \\ 18 \end{array}$$

$$18) 8n^2 + 7n - 15 =$$

$$\left\{ \begin{array}{c} \sqrt{} -7, \quad \sqrt{} \\ \quad \quad \quad \end{array} \right\}$$

$$\begin{array}{r} -7 + 305 \\ 16 \end{array} \quad \begin{array}{r} -7 - 305 \\ 16 \end{array}$$

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