

Quadratic formula

© 2017 Kuta Software LLC. All rights reserved.

Name _____

Date _____

Solve each equation with the quadratic formula.

1) $4r^2 - 83 = -3r - 7$

2) $4k^2 + 5 = -9k$

3) $-15x^2 + 11x + 50 = 3x - 10x^2 + 2$

4) $11x^2 + x - 86 = -8 + 9x^2$

5) $-r^2 - 6r - 51 = -6r^2 - 8r$

6) $5m^2 - 42 = m$

7) $8v^2 - 9v = 8$

8) $-x^2 + 8 = x^2$

9) $2a^2 + 10a = -12$

10) $4m^2 + 3m + 15 = 10m^2$

11) $13a^2 + a - 5 = -a + 3a^2$

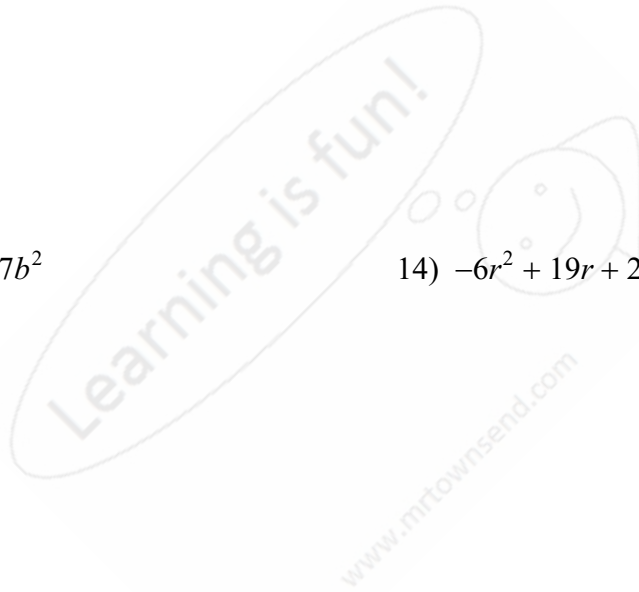
12) $8x^2 - 49 + 3x = 3x + 7x^2$

13) $-5b^2 + 9b - 45 = -7b^2$

14) $-6r^2 + 19r + 24 = 7 + 9r$

15) $5r^2 - 11 + 5r = 5r + 9$

16) $m^2 - 1 = 2 + 2m$



Answers to Quadratic formula

$$1) \left\{ 4, -\frac{19}{4} \right\}$$

$$2) \left\{ -1, -\frac{5}{4} \right\}$$

$$3) \left\{ -\frac{12}{5}, 4 \right\}$$

$$4) \left\{ 6, -\frac{13}{2} \right\}$$

$$5) \left\{ 3, -\frac{17}{5} \right\}$$

$$6) \left\{ 3, -\frac{14}{5} \right\}$$

$$7) \left\{ \frac{9 + \sqrt{337}}{16}, \frac{9 - \sqrt{337}}{16} \right\}$$

$$8) \{-2, 2\}$$

$$9) \{-2, -3\}$$

$$10) \left\{ \frac{1 - \sqrt{41}}{4}, \frac{1 + \sqrt{41}}{4} \right\}$$

$$11) \left\{ \frac{-1 + \sqrt{51}}{10}, \frac{-1 - \sqrt{51}}{10} \right\}$$

$$12) \{7, -7\}$$

$$13) \left\{ 3, -\frac{15}{2} \right\}$$

$$14) \left\{ \frac{5 - \sqrt{127}}{6}, \frac{5 + \sqrt{127}}{6} \right\}$$

$$15) \{2, -2\}$$

$$16) \{3, -1\}$$

