

Name : _____

Score : _____

Teacher : _____

Date : _____

Solve Quadratic Equations by Completing the Square

Solve each equation by completing the square.

1) $10m^2 + 19m + 7 = 0$

6) $x^2 - 15x + 53 = -3$

2) $y^2 + 2y - 15 = 0$

7) $12p^2 + 8p - 61 = 23$

3) $10w^2 + 22w - 29 = 43$

8) $12p^2 - 44p = -24$

4) $12y^2 - 40y = -33$

9) $x^2 + 19x = -88$

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

10) $m^2 + 2m = 80$



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Solve Quadratic Equations by Completing the Square

Solve each equation by completing the square.

1) $10m^2 + 19m + 7 = 0$

$$m = \left\{ \frac{-7}{5}, \frac{-1}{2} \right\}$$

6) $x^2 - 15x + 53 = -3$

$$x = \{ 7, 8 \}$$

2) $y^2 + 2y - 15 = 0$

$$y = \{ -5, 3 \}$$

7) $12p^2 + 8p - 61 = 23$

$$p = \left\{ -3, \frac{7}{3} \right\}$$

3) $10w^2 + 22w - 29 = 43$

$$w = \left\{ \frac{9}{5}, -4 \right\}$$

8) $12p^2 - 44p = -24$

$$p = \left\{ 3, \frac{2}{3} \right\}$$

4) $12y^2 - 40y = -33$

$$y = \left\{ \frac{11}{6}, \frac{3}{2} \right\}$$

9) $x^2 + 19x = -88$

$$x = \{ -8, -11 \}$$

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

$$x = \{ 5, 4 \}$$

10) $m^2 + 2m = 80$

$$m = \{ 8, -10 \}$$

