

Solving Quadratics Review

Solve each equation by factoring.

1) $r(r + 1) = 0$

2) $(x - 4)(x - 7) = 0$

3) $(4p - 7)(2p + 3) = 0$

4) $x^2 + 10x + 24 = 0$

5) $x^2 + 3x - 10 = 0$

6) $14b^2 + 42 = 61b$

7) $14x^2 - 25x - 25 = 0$

Solve each equation with the quadratic formula.

8) $6x^2 - 3 = 3$

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

Solve each equation by taking square roots.

10) $v^2 = 1$

11) $a^2 = 36$

12) $-x^2 = -67$

13) $v^2 - 7 = 64$

14) $7r^2 - 4 = 45$

15) $-2 - 10x^2 = -188$

Solve each equation by completing the square.

16) $m^2 + 16m - 57 = 0$

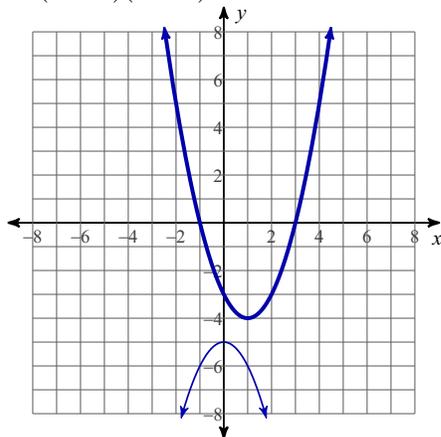
17) $r^2 + 18r + 71 = 6$

18) $4b^2 = -3 - 8b$

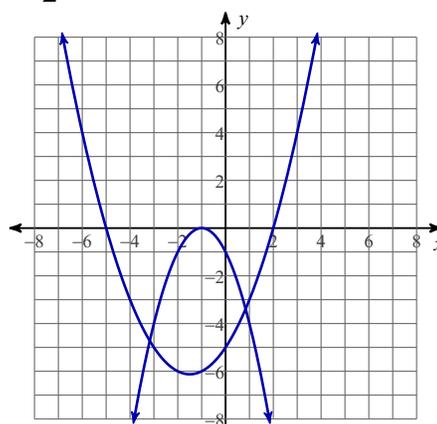
19) $10m^2 + 20m - 30 = 0$

Solve by graphing.

20) a. $(x + 1)(x - 3)$ and b. $-x^2 - 5$



21) a. $\frac{1}{2}(x - 2)(x + 5)$ and b. $-(x + 1)^2$



Answers to Solving Quadratics Review (ID: 1)

1) $\{-1, 0\}$

2) $\{4, 7\}$

3) $\left\{\frac{7}{4}, -\frac{3}{2}\right\}$

4) $\{-4, -6\}$

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

6) $\left\{\frac{7}{2}, \frac{6}{7}\right\}$

7) $\left\{-\frac{5}{7}, \frac{5}{2}\right\}$

8) $\{1, -1\}$

9) $\left\{\frac{1 + \sqrt{37}}{6}, \frac{1 - \sqrt{37}}{6}\right\}$

10) $\{1, -1\}$

11) $\{6, -6\}$

12) $\{\sqrt{67}, -\sqrt{67}\}$

13) $\{\sqrt{71}, -\sqrt{71}\}$

14) $\{\sqrt{7}, -\sqrt{7}\}$

15) $\left\{\frac{\sqrt{465}}{5}, -\frac{\sqrt{465}}{5}\right\}$

16) $\{3, -19\}$

17) $\{-5, -13\}$

18) $\{-0.5, -1.5\}$

19) $\{1, -3\}$

20)

21)