

Solving Quadratic Equations

Date _____

Solve one by factoring, one with the quadratic formula and one by graphing.

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

2) $x^2 - 6x - 16 = 0$

3) $x^2 + 12x + 32 = 0$

Solve one by factoring, one with the quadratic formula and one by graphing.

4) $3x^2 - 13x + 14 = 0$

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

6) $2x^2 + 9x + 9 = 0$

Solve at least one by factoring, at least one with the quadratic formula and at least one by graphing. If you are factoring or using the quadratic formula, remember you need to start with the quadratic equalling zero.

7) $2a^2 + a = 0$

8) $5n^2 = -42n - 49$

9) $3n^2 - 8 = 23n$

10) $2n^2 - 5n = -2$

Answers to Solving Quadratic Equations

1) $\{4, -2\}$

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

3) $\{-8, -4\}$

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

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

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

7) $\left\{-\frac{1}{2}, 0\right\}$

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

9) $\left\{-\frac{1}{3}, 8\right\}$

10) $\left\{\frac{1}{2}, 2\right\}$