

The Quadratic Formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Some problems cannot be solved by factoring. The quadratic formula can be used in this situation to find the quadratic roots.

Example: Solve $x^2 - 6x + 4 = 0$ by the quadratic formula.

More Practice!

1. $x^2 + 10x - 2 = 0$

2. $x^2 - 11 = 4x$

3. $x^2 - 8x = 20$

4. $x^2 - 5x - 36 = 0$

5. $x^2 + 6x + 10 = 0$

6. $-x^2 - 12x - 18 = 0$

$$7. -x^2 + 7x - 3 = 0$$

$$8. x^2 + 4x + 1 = 0$$

$$9. 2x = 7 - x^2$$

$$10. x^2 + 11x = 0$$

$$11. 2x^2 + 5x + 4 = 0$$

$$12. 2x^2 + 7x - 9 = 0$$

$$13. 2x^2 - 8 = 0$$

$$14. 4x^2 + 9 = 12x$$

$$15. 3x^2 - 1 = -8x$$

$$16. 3x^2 + 7x = x^2 - 2x + 15$$