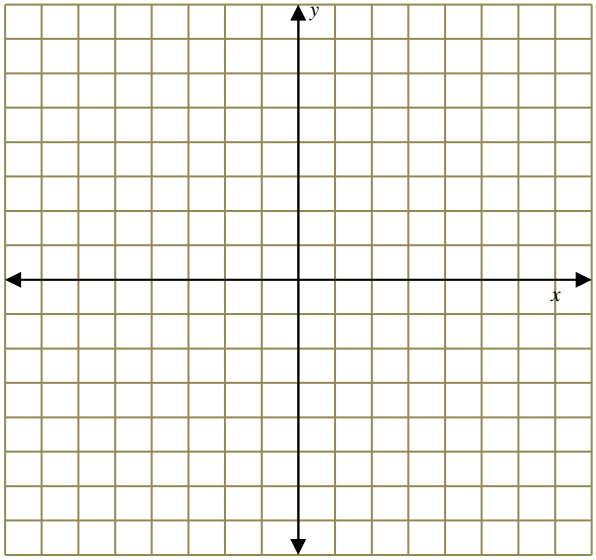
Lesson 2 Solving Absolute Value Equations

Solving an Absolute value Equation graphically

Solve, graphically.

1. $|x - 4| = 2$

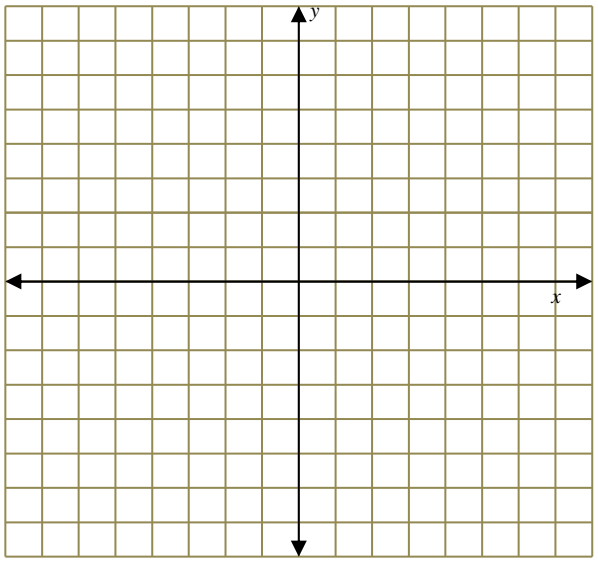


Identify the values of c for which the equation $|x - 4| = c$ has

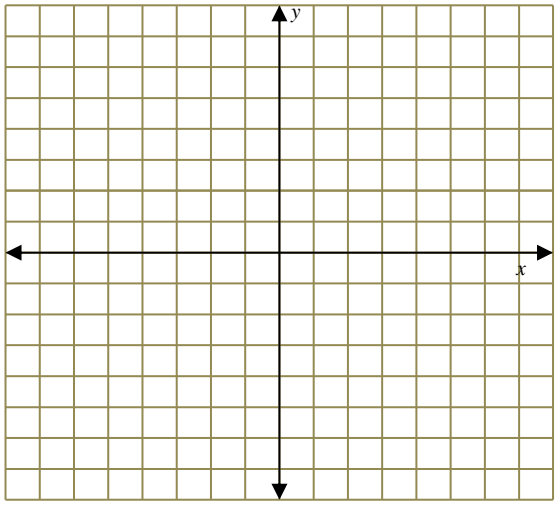
a.) one solution.

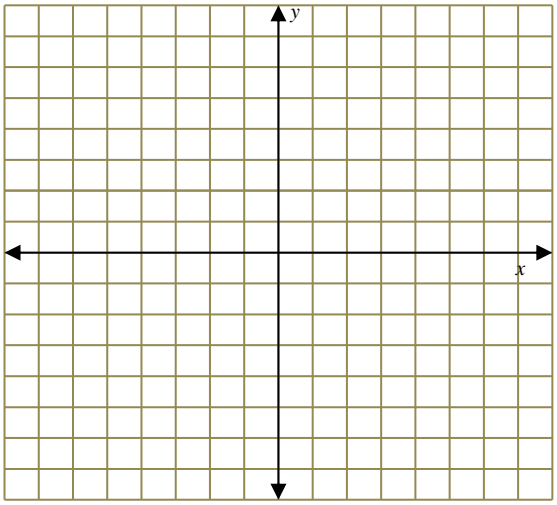
b.) no solution.

2. $|x^2 + 8x + 16| = 1$



An absolute value equation for the form $|ax^2 + bx + c| = d$ can have 0, 1, 2, 3, or 4 solutions. The number of solutions depends on the absolute value function graphed and the value of *d*.





Solving Absolute Value Equations Algebraically

1. $|3x + 1| = 7$

2. $2|2x - 1| = 4x$

3. $|x^2 - 3x| = -4x + 6$