

Solving Absolute Value Equations in One Variable

Solve each of the following equations for all values of the unknown.

1. $|x| = 231$

$x = -231$ or $x = 231$

2. $|4y| = 2$

$y = -1/2, y = 1/2$

3. $|x - 6| = 16$

$x = -10, x = 22$

4. $|5 - 2x| = 41$

$x = -18, x = 23$

5. $|x| = 2x + 6$

$x = -2$ only