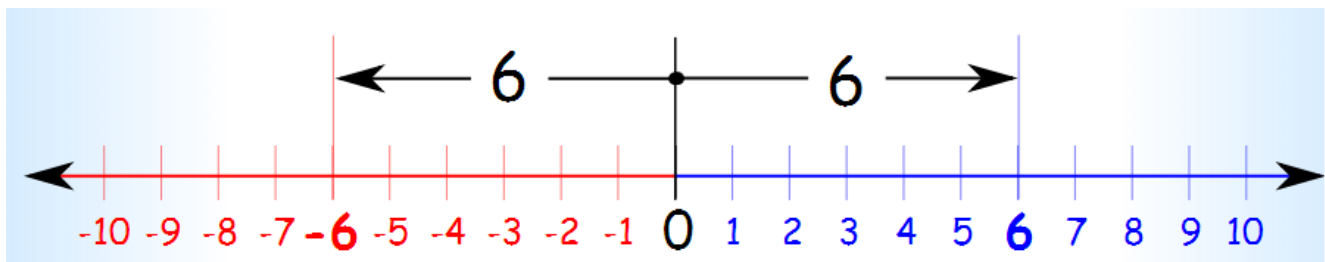


Unit 10 - More FUNctionsAbsolute Value EquationsAbsolute Value:

The measurement of the distance that a number is from zero.



$$|-6| = 6 \quad \text{AND} \quad |6| = 6$$

Evaluate Each Expression when $x = 2$

1) $|x| =$

2) $|x - 6| =$

3) $|6 - x| =$

4) $|-3x + 2| =$

5) $5|-x| =$

6) $-5|x| =$

Solving Absolute Value Equations

1. Isolate the Absolute Value Expression
2. Set the inside expression equal to the positive and negative versions of the other side.
3. Solve each equation separately.
4. Check you answer!

Example: $-4|2x - 10| + 17 = -31$

Practice:

1) $|x - 1| = 10$

2) $|x + 18| = 156$

3) $|2x + 8| = 42$

4) $|26 - 12x| = -86$

5) $|v + 8| - 5 = 2$

6) $|5x| + 5 = 45$

7) $3|-8x| + 8 = 80$

8) $6|1 - 5x| - 9 = 57$

9) $\frac{|7p + 4|}{8} = 3$

10) $5 - 8|-2n| = -75$

