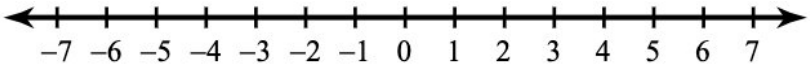
Solving for *x*: Lesson 15

Solving Absolute Value Equations: Notes

Name: _____

Absolute Value is shown with: _____

Official definition of *absolute value*: The distance away from _____



$|-3| = |3| =$ _____

Absolute Value:

- Turns the value inside _____ .
- If the inside is already _____ , the absolute value is powerless.

$|-45| =$ _____ $|87| =$ _____

Evaluate.

$-|-5| =$ _____ $|17-4| =$ _____ $|8-10| =$ _____

Solve: $|x+3| = 6$

Solving absolute value equations:

1. Get the absolute value by _____ .
2. Check if the absolute value equals a _____ number. If it does, there is _____ solution!
3. Branch into two equations:
   1) Copy without absolute value signs
   2) Copy absolute value = _____ answer
4. _____ both equations.

Solve for *x*: $\frac{|x-7|}{2} - 4 = 3$