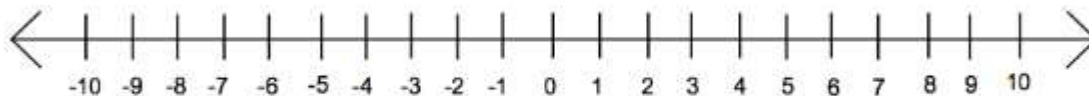


Unit 3 Linear Equations
Day 8 Absolute Value Equations and Inequalities
(PH 3-6)

Name: _____
Date: _____ Hour: _____

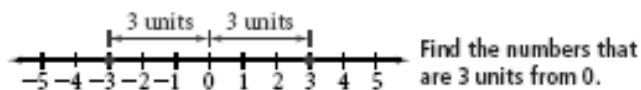
Recall that the absolute value of a number is its distance from zero on a number line.



Review: 1. $|7| =$ _____ 2. $|-9| =$ _____ 3. $|0| =$ _____ 4. $-|2| =$ _____

Since absolute value represents distance, it can never be negative.

Solve: $|x| = 3$



The two solutions of the equation are _____ and _____ .

Example 1: Solve and check.

a. $|x| - 3 = 5$

b. $4 = 3|w| - 2$

c. $|3c - 6| = 9$

d. $|5x - 1| = 14$



Example 2: Is there a solution to the equation $2|n| = -15$? Explain.