*Objective:

Absolute value of a number is that number's distance from zero on a number line.

*Draw number line for |-5| = 5 and |5| = 5

*Absolute-Value Equations				
*Words	*Numbers			
*Graph	*Algebra			

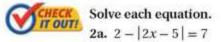
To solve absolute-value equations, isolate the absolute value expression and consider two cases.

CHECK	Solve each equation. Cl	heck your answer.
VIII OUT	1a. $ x - 3 = 4$	1b. $8 = x - 2.5 $

*Solving an Absolute-Value Equation					

If an absolute-value expression equals 0, there is one solution.

If an equation states that an absolute value is negative, there are no solutions.



2a.
$$2 - |2x - 5| = 7$$

2b.
$$-6 + |x - 4| = -6$$



3. Sydney Harbour Bridge is 134 meters tall. The height of the bridge can rise or fall by 180 millimeters because of changes in temperature. Write and solve an absolute-value equation to find the minimum and maximum heights of the bridge.

Inclass: p. 58 #44

Homework: p. 57-58 #15-41(odd)

Technology Lab – Solve Equations by Graphing (p. 31)