5-Minute Check

(over Lesson 6-4)

Transparency 6-5

BE-1A Monday 4-16-07 → Homework or Read

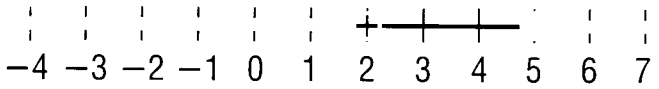
1. Graph the solution set of the compound inequality $b > 3$ or $b < 0$.

Solve each compound inequality. Then graph the solution set.

2. $3x \leq -6$ or $2x - 6 \geq 4$

3. $-5 \leq x - 1 \leq 2$

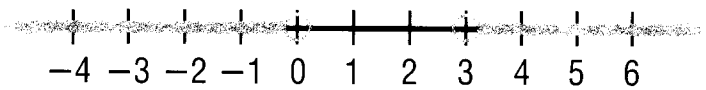
4. Write a compound inequality for the graph.



5. **Standardized Test Practice** One-half cup of popcorn kernels will make between 3 and 4 cups of popped popcorn. What is the greatest number of cups of popcorn you can make from $1\frac{1}{2}$ cups of popcorn kernels?

(A) 9 (B) $10\frac{1}{2}$ (C) 12 (D) $5\frac{1}{2}$

ANSWERS

1. 

2. $\{x \mid x < 2 \text{ or } x \geq 5\}$
3. $\{x \mid -4 \leq x \leq 3\}$
4. $x < 2$ or $x \geq 5$
5. C

Ch 6-5 Absolute Value Equations and Inequalities

Recall: $|x|$ means the absolute value of x. This means how far x is from zero. Distance is always positive.

$|5| = 5$

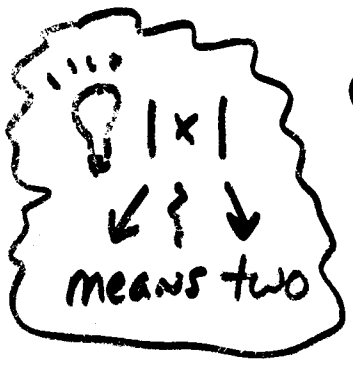
$|-5| = 5$

$|x| = (x)$ or $-(x)$

$|x| = 5$
$x = 5, x = -5$

To solve absolute value equations or absolute value inequalities:

1. get the absolute value by itself
2. solve the $^{+}( )$ and $^{-}( )$ equations using GRE and inequalities using GRI.
3. graph solution, "and" or "or"?



Ex 1 Pg 346 $|a-4|=3$

Ex 3 Pg 347 $|t+5|<9$

Ex 4 Pg 348 $|2x+8|\geq 6$

$|x|<N$ $\quad$ $|x|>N$

$|x|\leq N$ $\quad$ $|x|\geq N$

↑ $\quad$ ↑

INTERSECTION, "AND" $\quad$ UNION, "OR"

HW: Read Ch 6-5

Pg 348-349 #1, 3, 4, 5, 7 to 9