

Bell Work

1.) Simplify:

$$-6x - 4 - 4x + 12$$

2.) Solve:

$$-6x - 4 - 4x + 12 = 0$$

3.) Solve:

$$-6x - 4 = -4x + 12$$

From Last Time...

From Last Time

Page 37-38 #3-5, 10, 27, 31, 35, 44

Mixed Review

Page 40 #72, 75, 78



ALGEBRA 3

Day 9



From Last Time: 1.5 Solving Inequalities

- **Linear Inequality:** linear equation with inequality symbol ($<$, $>$, \geq , \leq) instead of the equals sign ($=$)

*Remember you solve inequalities the same way you normally would with an $=$ sign except....

If you have to *Multiply or Divide* both sides by the same *negative* number, then you must *reverse* the inequality.

WHY does this rule exist?!? How else could we solve??

Examples from last time

Solve and Graph the Following:

1.) $5 - 2x \leq 17$

2.) $\frac{2n}{5} - 3 \geq 7$ or $-\frac{n}{3} + 4 > 9$

3.) $1 \leq 2x - 5 \leq 7$

Quick Check for Understanding

- How would you describe the difference in your solution if there is a $>$, $<$ compared to a \geq , \leq ? How are inequalities different from equations?
- How does your answer change if there are multiple inequalities instead of just one in the problem?
- Any questions before the quiz?

Unit 1 Quiz 1: Level 2

1.) Simplify

$$6a + 4b - 6b + 6a + 10$$

2.) Solve for x

$$5x - 11 > 29$$

3.) Solve for w

$$\frac{3w}{4} + 7 = 16$$

4.) Solve for a

$$4d = ab - c$$

Unit 1 Quiz 1: Level 3

5.) Solve for m

$$2m + 4 + 3m = -2(m - 5)$$

6.) Insert () to make the following true
using order of operations

$$8 - 3 \cdot 2 + 4 \cdot 3 = 22$$

Unit 1 Quiz 1:

Level 4

7.) *Write an equation and solve the following.*

A swimming pool either charges \$3 a day to enter, or you can purchase a pass for \$82, and then it will only costs \$1 a day to enter.

How many times would you have to go to the pool to justify buying the pass?

For Next Time...

Page 53 #1, 6, 8, 11, 13,
15, 17, 19, 20, 22, 25