## Warm Up

***Week 3***

Solve each equation.

1) $|10 - 4x| - 1 = 1$

$+1 \quad +1$

$|10 - 4x| = 2$

$10 - 4x = 2$ $\quad$ $10 - 4x = -2$

$-10 \quad -10$ $\quad$ $-10 \quad -10$

$\frac{-4x}{-4} = \frac{-8}{-4}$ $\quad$ $\frac{-4x}{-4} = \frac{-12}{-4}$

$x = 2$ OR $x = 3$

2) $|8x + 1| + 2 = 25$

$-2 \quad -2$

$|8x + 1| = 23$

$8x + 1 = 23$ $\quad$ $8x + 1 = -23$

$-1 \quad -1$ $\quad$ $-1 \quad -1$

$\frac{8x}{8} = \frac{22}{8}$ $\quad$ $\frac{8x}{8} = \frac{24}{8}$

$x = 11/4$ or $x = 3$

## Homework Questions?

# Self Scoring Scale

**4**- I can *summarize* the concepts and explain it to others.

**3**- I can *apply* the concepts to answer questions correctly.

**2**- I can *apply* the concepts but with some *mistakes*.

**1**- I *need help* to know how to apply the concepts.

**0**- I *can't* apply the concepts even with help.

# 6.3 Quiz

Was out of 25pts

A- 22.5

B- 20

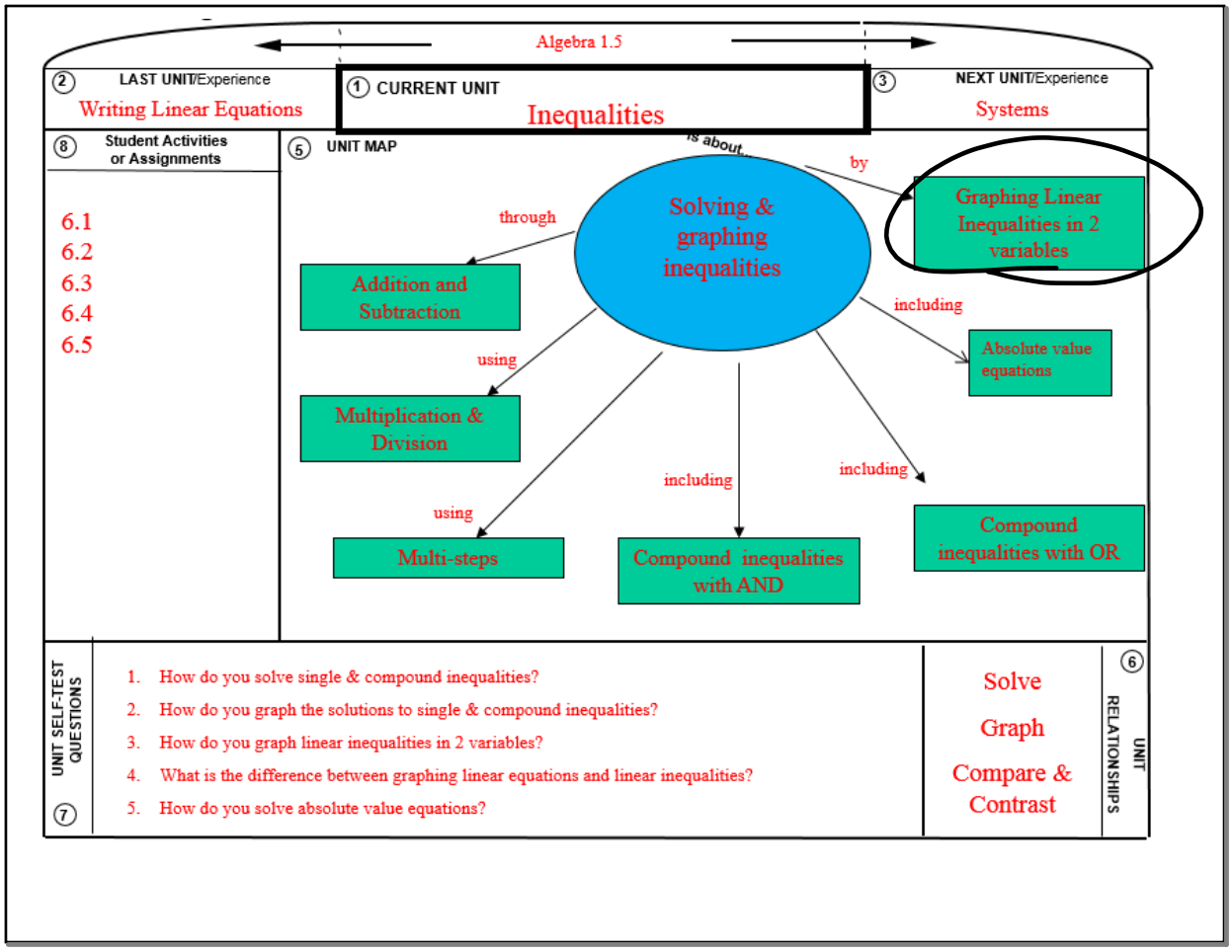
C- 17.5

D- 15

# 6.5 Graphing Linear Inequalities in Two Variables

**Goals:**
- Graph a linear inequality in two variables.
- Model a real-life situation using a linear inequality in two variables.

**EQ:** What is the difference between graphing < > and ≤ ≥ inequalities?



## Vocabulary

**Linear inequality:**

Can be written as follows:

$Ax + By \leq C$ OR $Ax + By \geq C$

**Solution of a linear inequality:**

An ordered pair $(x, y)$ that makes an inequality True

**Graph of a linear inequality:**

graph of the solutions

**Half-plane:**

The region on either side of a boundary line

***Example 1: Checking Solutions of a Linear Inequality***

Check whether the ordered pair is a solution of $8x - 4y \geq 3$.

*Sub in (x,y); Result; Solution or Not

a. (0, 0) (x, y)

$8(0) - 4(0) \geq 3$

$0 - 0 \geq 3$ (False)

$0 \geq 3$ No

Not a Soln.

b. (1, -1) (x, y)

$8(1) - 4(-1) \geq 3$

$8 + 4 \geq 3$

$12 \geq 3$ yes (True)

Soln

# 6.5 Day 1 HW

*Finish Graphing Other Lines wkst

*Review of Graphing wkst #1-27odd