

## Warm Up

WEEK 1

\*Find Your Seat (seating chart on table)

\*Write down the steps to solve an equation

1)

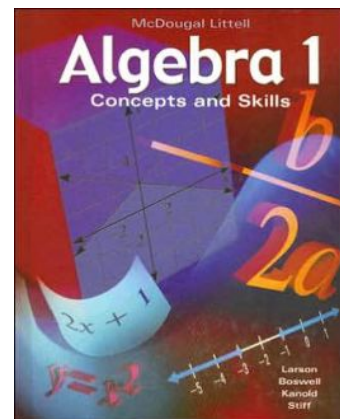
2)

3)

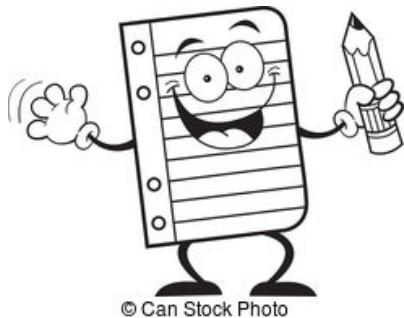
4)



**Ms. Engbrecht**  
Algebra Concepts



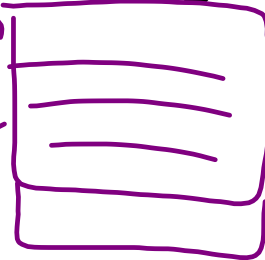
# Hall Passes



\*Before class

\*During Work Time

Alg.  
Passes  
Tri 2



**5 for the Trimester**

**BE HERE**  
**WORK HARD**  
**BE NICE**



# RESPECT

- Yourself
- Others
- Property



## Class Rules

- **No food or beverage**
- No electronics except your calculator  
**(No Phone, iPod, iPad, etc.)**
- Be on time (In your seat when bell rings)
- **Have a good attitude**
- Follow the rules set forth by the school

# GRADES

50% tests

30% quizzes

20% assignments



## Homework

- Expect it daily
- Typically due at the Beginning of next class

# Testing Procedure

- Review Day
- Test Day
- Outside of class Retake if you have all assignments done



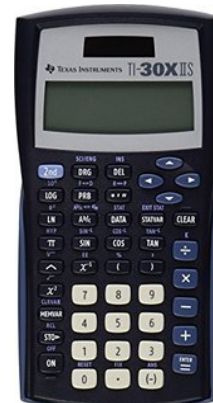
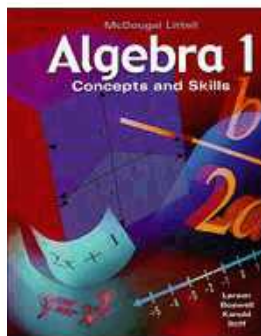
## Rules Continued...

- passes (only during work time)
- end of the hour (stay in your seat)
- sharpening pencils  
(do it before class or during work time)
- be prepared  
(notes in binder, book, pencils, paper)
- NO PHONE



## Every Day You Will NEED...

- Pencils
- Paper
- Binder (your notes)
- Textbook
- Calculator
- Planner



## ASK FOR HELP WHEN NEEDED

- \*Directed Study
- \*Before School (most days)
- \*After School



# Textbooks



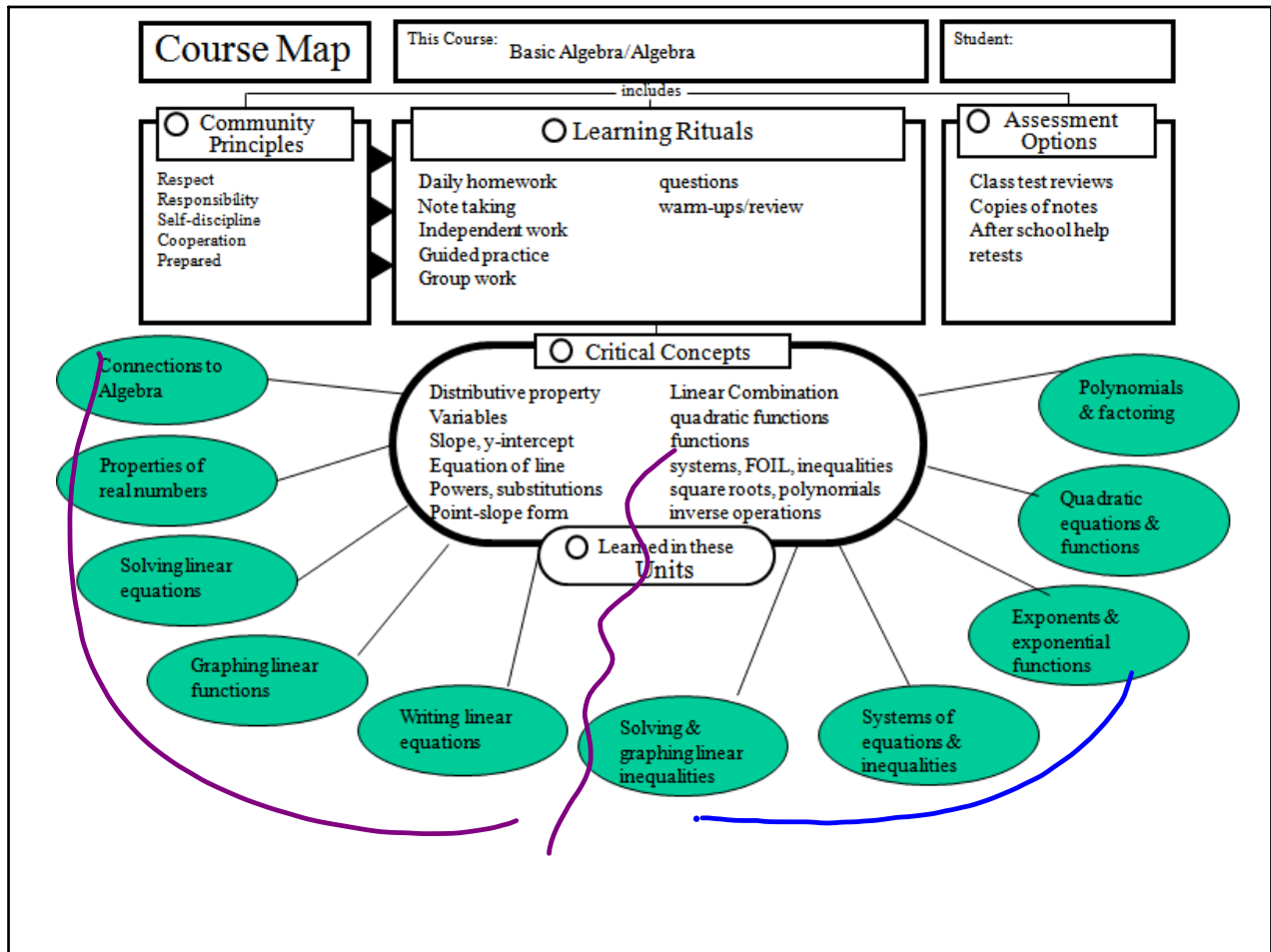
**\*COVER YOUR BOOK**

**- Bring In PAPER BAG if you need help**

## Due Friday

## Any Questions?





Variables & Equations wkst

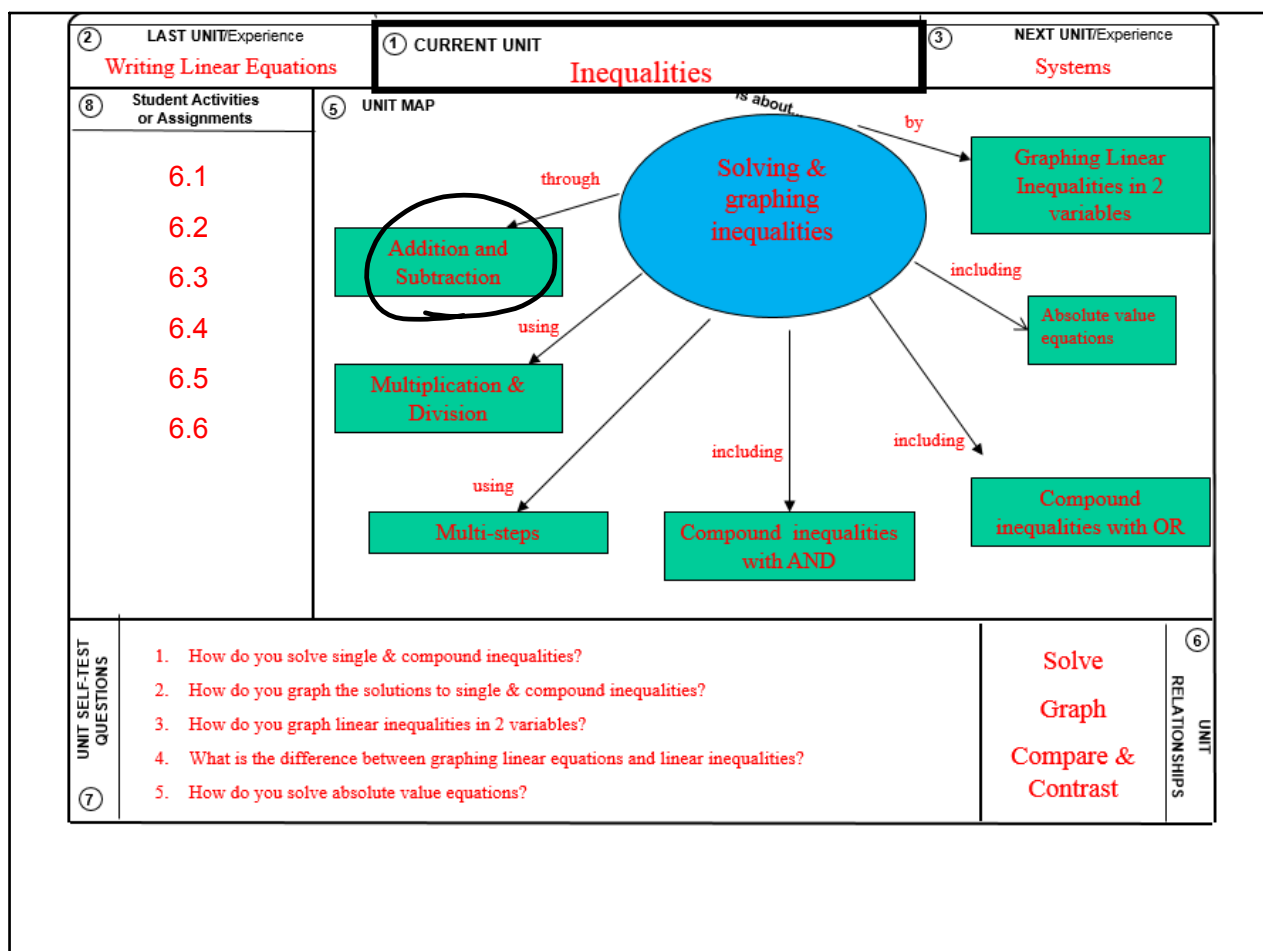
#11-20



# 6.1 Solving Inequalities Using Addition or Subtraction

**Goals:** • Solve and graph one-step inequalities in one variable using addition or subtraction.

**EQ:** What is the difference between  $<$  or  $>$  and  $\leq$  or  $\geq$  when graphing?



## Vocabulary

### Graph of an inequality:

The set of points on a number line that are solutions of the inequality

### Equivalent inequalities:

Two inequalities that have the same solution(s)

### Inequality Symbols:

$<$  Less than

$>$  Greater than

○ Endpoint NOT included

$\leq$  Less than or =

$\geq$  Greater than or =

● Endpoint IS Included

$$\begin{array}{l} 2 < 7 \\ 7 > 2 \end{array}$$

**Example 1: Graph an Inequality in One Variable**

INEQUALITY	VERBAL PHRASE	GRAPH
a. $b \geq -1$	$b$ is greater than or equal to $-1$	
b. $v < 3$	$v$ is less than 3	
c. $f \geq -2$	$f$ is greater than or equal to $-2$	

The properties are stated for  $>$  and  $<$  inequalities. They are also true for  $\geq$  and  $\leq$  inequalities.

**PROPERTIES OF INEQUALITY****Addition Property of Inequality**

For all real numbers  $a$ ,  $b$ , and  $c$ :

If  $a > b$ , then \_\_\_\_\_.

If  $a < b$ , then \_\_\_\_\_.

**Subtraction Property of Inequality**

For all real numbers  $a$ ,  $b$ , and  $c$ :

If  $a > b$ , then \_\_\_\_\_.

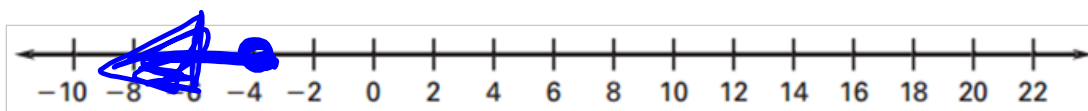
If  $a < b$ , then \_\_\_\_\_.

$+ \text{ same } \# \text{ to both sides}$

$- \text{ same } \# \text{ to both sides}$

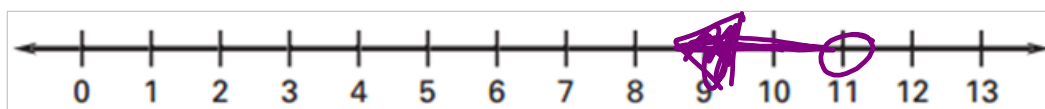
**Example 2: Use Subtraction to Solve an Inequality**Solve  $x + 11 \leq 7$ . Then graph the solution.

$$\begin{array}{r} -11 \quad -11 \\ \hline x \leq -4 \end{array}$$

**Example 3: Use Addition to Solve an Inequality**Solve  $-8 > n - 19$ . Then graph the solution.

$$\begin{array}{r} +19 \quad +19 \\ \hline 11 > n \end{array}$$

$$\star \quad n < 11$$



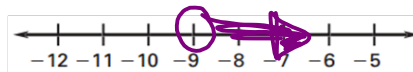
**Try It** Solve the inequality. Then graph the solution.

1.  $y + 5 \leq 8$



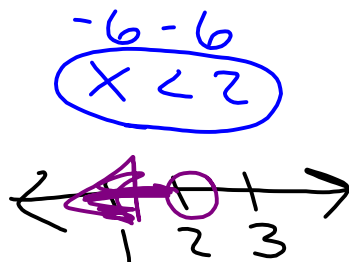
$$\begin{array}{r} y + 5 \leq 8 \\ -5 \quad -5 \\ \hline y \leq 3 \end{array}$$

2.  $x - 4 > -13$



$$\begin{array}{r} x - 4 > -13 \\ +4 \quad +4 \\ \hline x > -9 \end{array}$$

3.  $x + 6 < 8$



$$\begin{array}{r} x + 6 < 8 \\ -6 \quad -6 \\ \hline x < 2 \end{array}$$

4.  $-10 \geq a - 6$

$$\begin{array}{r} -10 \geq a - 6 \\ +6 \quad +6 \\ \hline -4 \geq a \end{array}$$

$$-4 \geq a$$

$$a \leq -4$$



## Summary

**EQ:** What is the difference between  $<$  or  $>$  and  $\leq$  or  $\geq$  when graphing?

$<$   $>$

$\leq$   $\geq$

is OR = to

○ dot

● dot

(on graphs)

## Homework

3-6 Practice wkst #1-16

\*Finish #11-20 on (p.10) wkst