# **Chapter 6: Solving Linear Inequalities Study Guide**

#### **6.1-6.3:** Solve Inequalities by Multiplication and Division:

Solve each inequality and graph your solution on a number line.

Ex: 
$$2x - 1 \ge 7$$

Ex: 
$$-5 \ge 2x - 3$$

Ex: 
$$18 > -4x + 2$$

#### **6.3\*:** Solve Multi-Step Inequalities:

Solve each inequality.

Ex: 
$$6(2x+3) \ge 9(x+2)$$

Ex: 
$$3(4x-2) < 2(6x-2)$$

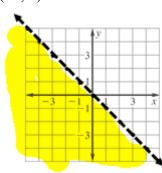
Ex: 
$$-2(x+4) \ge -2x-3$$

Ex: 
$$-4(x-2) \ge -x + 16$$

### 6.7: Graph Linear Inequalities in Two Variables:

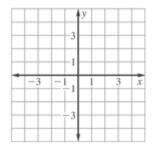
Decide if an ordered pair is a solution to an inequality.

Ex: 
$$\frac{3}{4}x - \frac{1}{3}y < 6$$
; (-8, 12)



## Graph linear inequalities in two variables.

**Ex:** 
$$y \ge 3x - 4$$



Ex: 
$$x < y$$

