Assignment 6-7

Inequalities in Context
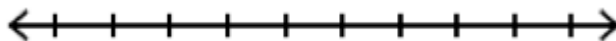
Unit 6

NO WORK = NO CREDIT

WORK IN PENCIL ONLY!

DIRECTIONS for each situation below:

   a) Solve each story problem. Remember to show your work.

   b) Write the solution set (give an inequality and graph).

   c) Explain what your answer means in context of the situation.

1) Kimberly took her 6 nieces and nephews to a hockey game. She wants to buy them snacks. How much can each child spend on snacks if Kimberly wants to spend no more than $30 total (don't worry about tax)?

Solution set: _____

Explain solution in context: _____

2) The school is running a carnival to make money. Tickets sell for $0.50 each, and they need to buy supplies for the carnival that cost $50. How many tickets must they sell to raise at least $200 in profit?

Solution set: _____

Explain solution in context: _____

3) Danny likes to play video games. His mom says that he can play no more than 7 hours a week. If he plays his favorite online game for 4 ½ hours during the weekend, how long can he play each day during the week?

Solution set: _____

Explain solution in context: _____

Solve the following equations and inequalities. You do NOT need to graph them this time!

4. $4(x+5)=12$	5. $-2(x+4)<8$
6. $-4y-17 \geq 13$	7. $\frac{w}{5}+11 \leq -3$
8. $\frac{x}{-5}-2>-13$	9. $\frac{1}{2}>\frac{1}{4}x-5$

10. You have a bag of 24 marbles: 3 red, 10 yellow, 6 blue, and 5 green. Find the probability if you were to pick out **one marble** from the bag.   Find P(yellow or red)

11. You are rolling a six-sided die and flipping a coin, what is the probability that you will flip heads or roll an odd?