Inequalities

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write the inequality AND graph for each problem below:

1. Mrs. Bother’s kids will go trick-or-treating at no more than 100 houses on Halloween.
2. Ms. Dudek will make Mrs. Bothers bring her at least 20 pieces of candy from her children’s stash.
3. The temperature is supposed to be below 29 degrees tonight.
4. Mr. Shaw better send Mrs. Shaw at least a dozen roses for her birthday.
5. “5 SOS” concert tickets are at least $200.
6. A suit case must weigh less than 40 pounds to fly for free.
7. You must be 17 or older to go see the movie.
8. Shannon walked more than 20 miles for a charity.
9. You can drive no more than 55 miles per hour or you will get a speeding ticket.
10. To be the U.S. President you must be 35 years old or older.

For the following you must write an inequality and then solve it before you can graph it:

1. Nathaniel needs at least 15 lbs of chocolate to make her chocolate fountain work. He already has 8 pounds in his pantry, what is the smallest amount that he can get to make his chocolate fountain work?
2. Ms. Mincey wants to spend less than $80 on presents for her 2 brothers. What is the most amount of money she can spend on each of them?
3. An elevator can carry up to 2,500 lb. Suppose the weight of an average adult is 150 lb. At most how many average-sized adults can safely ride the elevator at the same time?
4. The total weight limit for a truck is 100,000 pounds. The truck weighs 36,000 pound when the truck is empty. What is the most that the truck’s load can weigh?
5. Ms. Mincey is saving to take a trip to Las Vegas that will at least cost $675. Ms. Sims gives her $145 toward the trip. How much money will she have to save?
6. Hippos can weigh up to 5,300 pounds. A baby hippos current weight is 2,200 pounds. How much weight can he gain?
7. Joseph is filling a box with books that weigh 2 pounds each. The most the box can hold is 15 pounds. How many books can Joseph put in the box?
8. Kross bought 3 cans of paint. The total was less than $60. How much was each can?