Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_

**Spiral 23: Due 5-12-2017 NO CALCULATORS!!!!!!!**

***Set up an inequality to solve each problem and graph the solution on a number line. Points will be deducted for not following directions. Show ALL work to receive credit!!!***

1. Ms. Ward decided that she would spend no more than $120 to buy a jacket and a skirt. If the price of the jacket was $20 more than 3 times the price of the skirt. Find the highest possible price of the skirt?
2. Mr. Diaz wishes to save at least $1500 in 12 months. If she saved $300 during the first 4 months, what is the least possible average amount that she must save in each of the remaining 8 months?
3. The dance committee hired a DJ for the fall dance. The DJ charges $125 per hour plus $55 for an assistant. The committee wants to keep the total cost under $600. What is the maximum amount of hours the DJ will play at the dance?
4. The length of a rectangle is 5 times its width. The perimeter of the rectangle is at most 104 meters. Find the greatest possible dimensions of this rectangle. (You do not have to graph this solution)
5. Al earns $5.95 per hour working after school. He needs at least $215 for his holiday shopping. How many hours must he work to reach his goal?

6) Mrs. Smith wrote "Eight less than three times a number is greater than fifteen" on the board. If *x* represents the number, which inequality is a correct translation of this statement? Solve and graph the correct inequality.

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| 1) |  |
| 2) |  |
| 3) |  |
| 4) |  |

1. Stephanie weighs 3 times as much as Rachel. Both weights are whole numbers and the sum of their eights is less than 160 pounds. Find the greatest possible weight for each girl.
2. Mary is planning to give 6 friends a book and some candy. Each book was $4.50. She wants to spend no more than $39.00. How many pieces of candy can she give to each friend if the candy is $0.25 for each piece?
3. Kim has joined a music club. She pays a fee of $5.00 each month and then can download songs for $0.58 each. If she can spend no more than $13.00 this month, how many songs can she download?
4. You earn $2.00 for every magazine subscription you sell plus a salary of $10 each week. How many subscriptions do you need to sell each week to earn at least $40 each week?