Algebra1 Hwk # 15 Solving inequalities Fall 2014 Name:

When you are solving inequalities you take the same steps as you would if you were solving an equation. You will then be asked to graph your solution on a number line.

Solve each inequality and graph the solution.

1. $m - 2.5 > -8.4$ *Sol* : _____ *Graph* :

2. $3Q + 7 \leq Q + 3$ *Sol* : _____ *Graph* :

3. $3 - 2(w - 5) \geq 21$ *Sol* : _____ *Graph* :

4. $.9 + \frac{2}{3}A < 15$ *Sol* : _____ *Graph* :

5. $4R + 5(R - 6) \leq 10R - 38$ *Sol* : _____ *Graph* :

6. Solve this inequality. Just like equations, the solution to an inequality may be All Real Numbers or may have No Solution.

$3x + 2 - x + 4 < x + 2 + x - 5$ *Sol* :

The only difference between solving equations and solving inequalities is when you multiply or divide both sides of an inequality by a negative number the inequality symbol must be flipped. Solve and graph each inequality.

7. $2x - 5(x - 3) > 24$ *Sol* : _____ *Graph* :

8. $20 - \frac{C}{2} \leq 24$ *Sol* : _____ *Graph* :