Introduction to Linear Inequalities

Name: _____ Date: _____

Instructions: Solve each inequality. Show your working and represent your solution on the number line provided.

Remember: When multiplying or dividing by a negative number, flip the inequality sign!

1. Solve: $x + 5 > 12$

Working:

_____

Solution: x _____

Number line:

0 5 10 15 20

2. Solve: $3x \leq 18$

Working:

_____

Solution: x _____

Number line:

0 3 6 9 12

3. Solve: $2x - 7 < 9$

Working:

_____

_____

Solution: x _____

Number line:

0 4 8 12 16

4. Solve: $-4x \geq 20$

Working:

_____

Solution: x _____

Number line:

-10 -5 0 5 10

5. Solve: $5x + 3 \geq 23$

Working:

_____

_____

Solution: x _____