**Math 6 - Unit 4: Equations & Inequalities** Name:

*Inequalities Practice*

 Class Period: 1 2 3 4 Date:

***Write an inequality to model each situation and then graph the inequality on the number line.***

1) Robert will spend ***more than*** 10 hours snapchatting with his girlfriend.

**Inequality \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



2) Your little sister spent at least 20 minutes pushing her baby doll in its stroller.

**Inequality \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



3) The temperature is supposed to be below 40⁰ Friday night. **Inequality \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



4) What inequality is graphed on the number line? **Inequality \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



5) What inequality is graphed on the number line? **Inequality \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



6) What inequality is graphed on the number line? **Inequality \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



7) What inequality is graphed on the number line? **Inequality \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



Use substitution to determine whether the value given for the variable is a solution to the given inequality. Write TRUE or FALSE and Show all work to get credit.

8) $15-m \geq 4$ *if m* = 11 9) $15 \leq \frac{a}{10}$ *if a* = 153

10) $8 > \frac{64}{r}$ *if r* = 16 11) $76 \geq 19h$ *if h* = 4

12) $22<19+h$ *if h* = 5 13) $124\leq 15z$ *if z* = 5

14) $2v>24$ *if v* = 12 15) $\frac{n}{5}<16$ *if n* = 57

16) $\frac{72}{m}<12$ *if m* = 17 17) $29-u \geq 9$ *if u* = 20

18) $a+16>30$ *if a* = 14 19) $38>32+z$ *if z* = 13

20) $16-j<3$ *if j* = 13 21) $21\geq 7r$ *if r* = 3

22) $10h\leq 62$ *if h* = 11 23) $\frac{30}{k}\leq 6$ *if k* = 3

24) $28+d>37$ *if d* = 6 25) $17\geq \frac{w}{4}$ *if w* = 78

26) $15\leq 22-g$ *if g = 19* 27) $18r\leq 198$ *if r* = 12

**Math 6 - Unit 4: Equations & Inequalities** Name:

*Inequalities Practice* ***Answer Key***

 Class Period: 1 2 3 4 Date:

***Write an inequality to model each situation and then graph the inequality on the number line.***

1) Robert will spend ***more than*** 10 hours snapchatting with his girlfriend.

**Inequality x > 10**



2) Your little sister spent at least 20 minutes pushing her baby doll in its stroller.

**Inequality x ≥ 20**



3) The temperature is supposed to be below 40⁰ Friday night. **Inequality x < 40**



4) What inequality is graphed on the number line? **Inequality x ≥ 2**



5) What inequality is graphed on the number line? **Inequality x ≠ 7**



6) What inequality is graphed on the number line? **Inequality x > 26**



7) What inequality is graphed on the number line? **Inequality x ≤ 45**



Use substitution to determine whether the value given for the variable is a solution to the given inequality. Write TRUE or FALSE and Show all work to get credit.

8) $15-m \geq 4$ *if m* = 11 **TRUE** 9) $15 \leq \frac{a}{10}$ *if a* = 153 **TRUE**

10) $8 > \frac{64}{r}$ *if r* = 16 **TRUE** 11) $76 \geq 19h$ *if h* = 4 **TRUE**

12) $22<19+h$ *if h* = 5 **TRUE** 13) $124\leq 15z$ *if z* = 5 **FALSE**

14) $2v>24$ *if v* = 12 **FALSE** 15) $\frac{n}{5}<16$ *if n* = 57 **TRUE**

16) $\frac{72}{m}<12$ *if m* = 17 **FALSE** 17) $29-u \geq 9$ *if u* = 20 **TRUE**

18) $a+16>30$ *if a* = 14 **FALSE** 19) $38>32+z$ *if z* = 13 **FALSE**

20) $16-j<3$ *if j* = 13 **FALSE** 21) $21\geq 7r$ *if r* = 3 **TRUE**

22) $10h\leq 62$ *if h* = 11 **FALSE** 23) $\frac{30}{k}\leq 6$ *if k* = 3 **FALSE**

24) $28+d>37$ *if d* = 6 **FALSE** 25) $17\geq \frac{w}{4}$ *if w* = 78 **FALSE**

26) $15\leq 22-g$ *if g = 19* **FALSE** 27) $18r\leq 198$ *if r* = 12 **FALSE**