Write an inequality to model each situation and then graph the inequality on the number line.
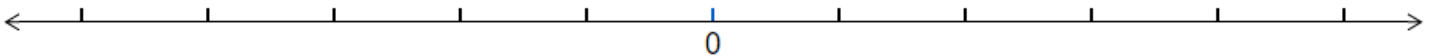
1) Robert will spend ***more than*** 10 hours snapchatting with his girlfriend.
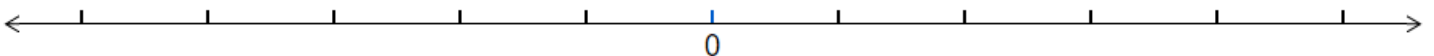
Inequality _____

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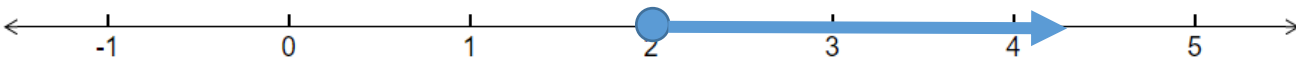
Inequality _____

3) The temperature is supposed to be below 40° Friday night. **Inequality** _____

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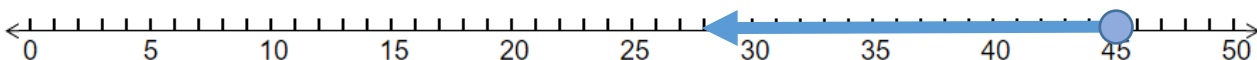

5) What inequality is graphed on the number line? **Inequality** _____

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 $r = 12$

Write an inequality to model each situation and then graph the inequality on the number line.
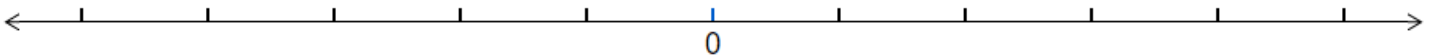
1) Robert will spend **more than** 10 hours snapchatting with his girlfriend.
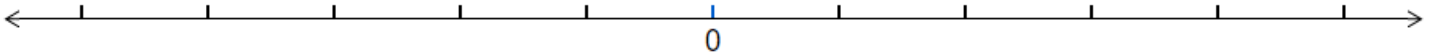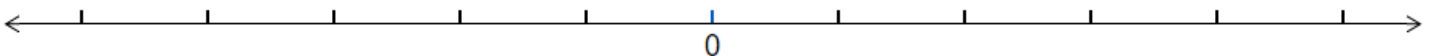
Inequality x > 10

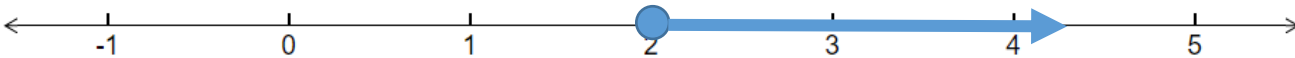2) Your little sister spent at least 20 minutes pushing her baby doll in its stroller.

Inequality x ≥ 20

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

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

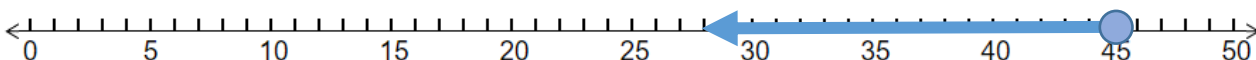5) What inequality is graphed on the number line? **Inequality x ≠ 7**

6) What inequality is graphed on the number line? **Inequality x > 28**

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 $m = 17$ **TRUE**

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**