

HW: Worksheet

**Warm up:**

Write  $<$ ,  $>$ , or  $=$  to compare the two numbers.

1)  $5 \underline{>} 2$

2)  $-7 \underline{<} 10$

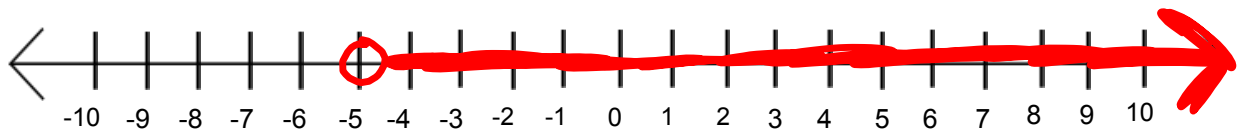
3)  $3 \underline{>} -6$

*Inequalities*

$$x < 3$$



$$x > -5$$



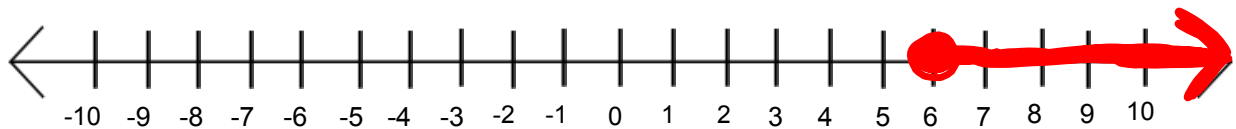
$\leq$

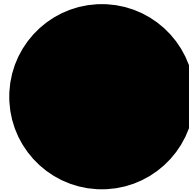
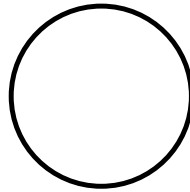
less than or equal to

$\geq$

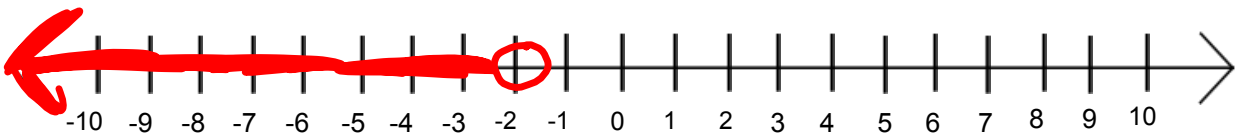
greater than or equal to

$$x \geq 6$$

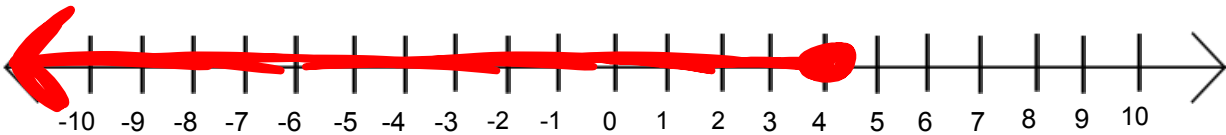




$$x < -2$$



$$x \leq 4$$



$$x > -9$$



$$-5 < 3$$

$$+7 \quad +7$$



$$\frac{2}{2} < \frac{10}{2}$$



$$1 < 5$$

$$+3 \quad +3$$



$$4 < 8$$

$$\times 3 \quad \times 3$$

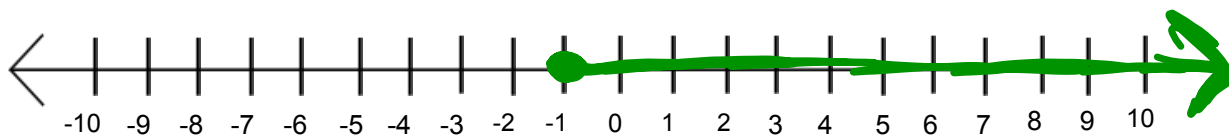


$$12 < 24$$

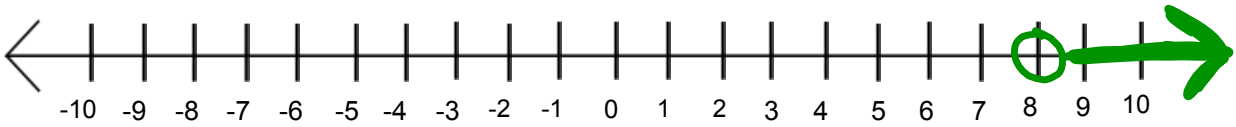
$$x + 5 \geq 4$$

$$\begin{array}{r} -5 \\ \hline \end{array}$$

$$x \geq -1$$

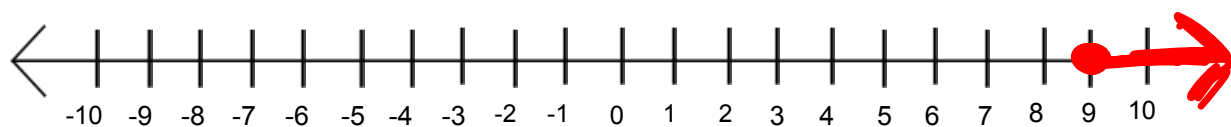


$$\begin{array}{r} 1 < x - 7 \\ +7 \quad \quad +7 \\ \hline 8 < x \\ x > 8 \end{array}$$





$$\begin{array}{r} 12 \leq 3 + x \\ -3 \quad -3 \\ \hline 9 \leq x \\ x \geq 9 \end{array}$$



$$1) x - 3 < 5$$

$$2) 7 + x \geq 10$$

$$3) x - 6 > -8$$

$$4) x + 5 \geq -2$$

$$5) 5 \leq x + 5$$

$$6) -9 \geq -7 + x$$

$$1) x - 3 < 5$$

$$+ 3 + 3$$

$$x < 8$$



$$2) 7 + x \geq 10$$

$$\begin{array}{r} -7 \\ -7 \end{array}$$

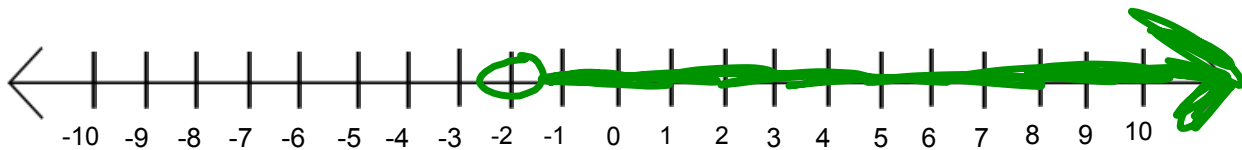
$$\underline{x \geq 3}$$



$$3) x - 6 > -8$$

$$+6 \quad +6$$

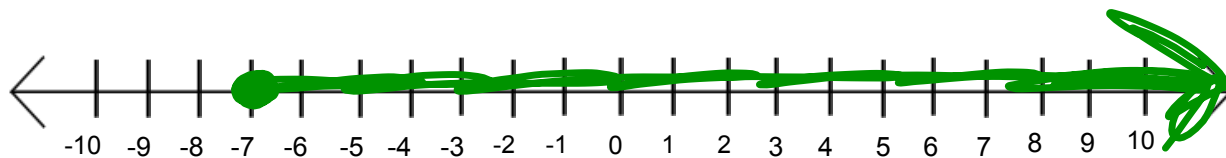
$$x > -2$$



$$4) x + 5 \geq -2$$

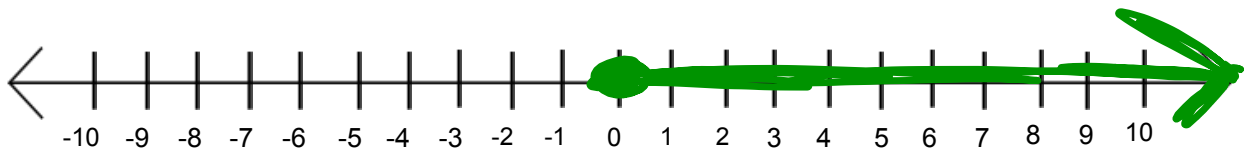
$$-5 \quad -5$$

$$x \geq -7$$



$$\begin{array}{r} 5) 5 \leq x + 5 \\ -5 \quad -5 \\ \hline 0 \leq x \end{array}$$

$$x \geq 0$$

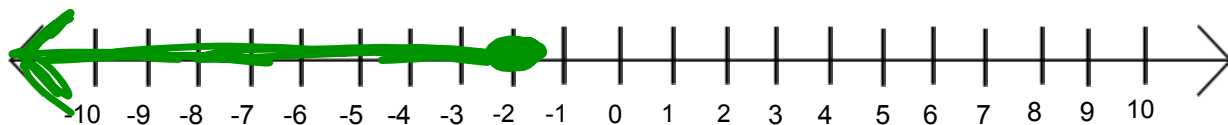


$$6) -9 \geq -7 + x$$

$$+7 \quad +7$$

$$\underline{-2 \geq x}$$

$$x \leq -2$$





February 15, 2022

