

$$1.) \quad \begin{array}{r} x + 6 = 11 \\ -6 \quad -6 \end{array}$$

$$\boxed{x = 5}$$

$$2.) \quad \frac{4x}{4} = \frac{32}{4}$$

$$\boxed{x = 8}$$

$$3.) \quad \left(\frac{x}{5}\right) = (-3) \cdot 5$$

$$\boxed{x = -15}$$

$$4.) \quad \begin{array}{r} x - 8 = 13 \\ +8 \quad +8 \end{array}$$

$$\boxed{x = 21}$$

$$5.) \quad \frac{72}{9} = \frac{9x}{9} \quad \boxed{x = 8}$$

$$6.) \quad \begin{array}{r} -9 = x - 4 \\ +4 \quad +4 \end{array} \quad \boxed{x = -5}$$

$$7.) \quad (13) = \left(\frac{x}{-4}\right) \cdot -4$$

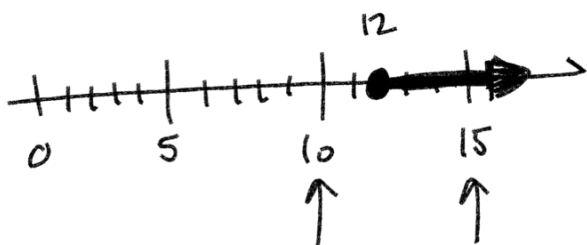
$$\boxed{x = -52}$$

$$8.) \quad \begin{array}{r} -18 = x + 5 \\ -5 \quad -5 \\ -18 + (-5) = -23 \end{array}$$

$$\boxed{x = -23}$$

Inequalities

$$x \geq \$12$$



>
greater
than

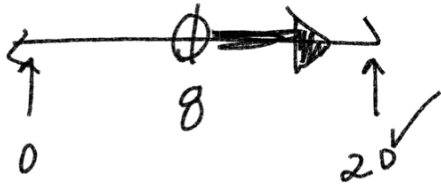
<
less
than

≥
greater
than
or
equal to

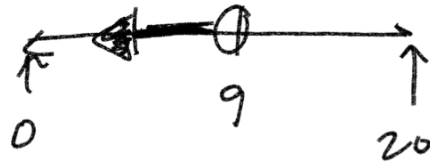
≤
less than
or equal to



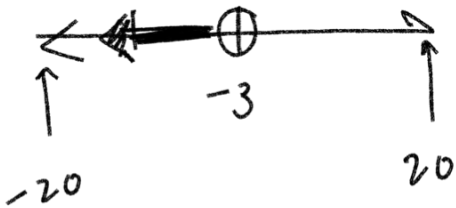
1.) $x > 8$



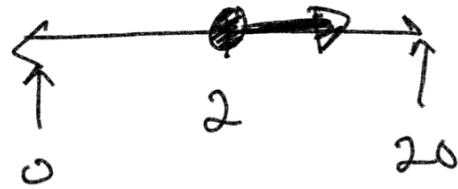
2.) $x < 9$



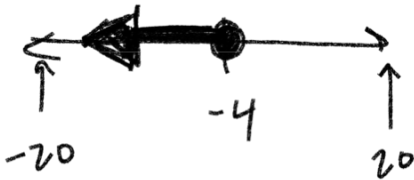
3.) $-3 > x$



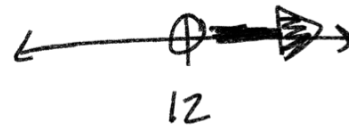
4.) $2 \leq x$



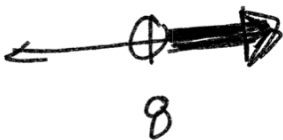
1.) $x \leq -4$



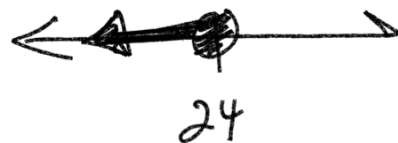
2.) $x > 12$



3.) $8 < x$ $x > 8$



4.) $24 \geq x$

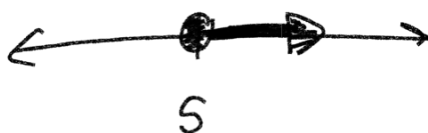


hw/a9

$$\begin{array}{r} x + 3 = 8 \\ -3 \quad -3 \\ \hline x = 5 \end{array}$$

$$\begin{array}{r} x + 3 \geq 8 \\ -3 \quad -3 \\ \hline x \geq 5 \end{array}$$

hw/a10



flip

$$\begin{array}{r} -5x < 10 \\ -5 \quad \downarrow \quad -5 \\ \hline x > -2 \end{array}$$

* Whenever you multiply or divide by a negative, you flip the inequality

Do we flip

$$\begin{array}{r} 2x < -12 \\ \textcircled{2} \quad \textcircled{2} \\ \hline x < -6 \end{array}$$

no flip

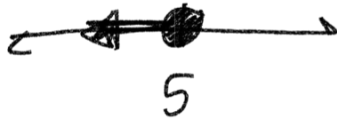
$$\begin{array}{r} (-2) \left(\frac{x}{-2} \right) > (6)(-2) \\ \hline x < -12 \end{array}$$

flip!

$$\begin{array}{r} -3x \leq -18 \\ \textcircled{-3} \quad \textcircled{-3} \\ \hline x \geq 6 \end{array}$$

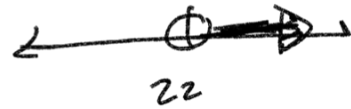
flip!

$$1.) \frac{8x}{8} \leq \frac{40}{8} \quad x \leq 5$$



$$2.) \begin{array}{r} 12 < x - 10 \\ +10 & +10 \end{array}$$

$$22 < x$$



$$3.) \begin{array}{r} x + 4 \geq 17 \\ -4 \quad -4 \end{array}$$
$$x \geq 13$$



$$4.) \begin{array}{r} \left(\frac{x}{-6}\right) > (3)(-6) \end{array}$$

$$x < -18$$

$$5.) \frac{9x}{9} < \frac{-72}{9}$$

$$x < -8$$

