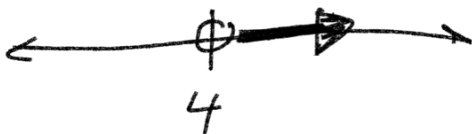


$$1.) \quad \underbrace{6 - 5r - 8 < -22}$$

$$\begin{array}{r} -5r - 2 < -22 \\ +2 \qquad +2 \end{array}$$

$$\frac{-5r}{-5} < \frac{-20}{-5}$$

$$\boxed{r > 4}$$



$$2.) \quad \begin{array}{r} 4 - 4r \geq -10 - 6r \\ +6r \qquad +6r \end{array}$$

$$\begin{array}{r} 4 + 2r \geq -10 \\ -4 \qquad -4 \end{array}$$

$$\frac{2r}{2} \geq \frac{-14}{2}$$

$$\boxed{r \geq -7}$$



$$3.) \quad \underbrace{-7x + 5 - 3x \leq -5}$$

$$\begin{array}{r} -10x + 5 \leq -5 \\ -5 \qquad -5 \end{array}$$

$$\frac{-10x}{-10} \leq \frac{-10}{-10}$$

$$\boxed{x \geq 1}$$

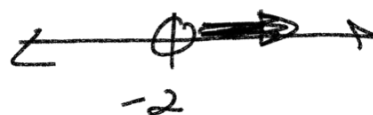


$$4.) \quad \begin{array}{r} -1 + 6n > -11 + n \\ +1 \qquad +1 \end{array}$$

$$\begin{array}{r} 6n > -10 + n \\ -n \qquad -n \end{array}$$

$$\frac{5n}{5} > \frac{-10}{5}$$

$$\boxed{n > -2}$$



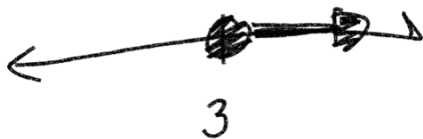
$$8(1-5n) \leq -112$$

$$\begin{array}{r} 8 - 40n \leq -112 \\ -8 \qquad -8 \end{array}$$

$$\begin{array}{r} -40n \leq -120 \\ \frac{-40n}{-40} \leq \frac{-120}{-40} \end{array}$$

flip!

$$\boxed{n \geq 3}$$



$$2n - 29 \leq -(6n + 8) + 5n$$

$$2n - 29 \leq -6n - 8 + 5n$$

$$\begin{array}{r} 2n - 29 \leq -n - 8 \\ +n \qquad +n \end{array}$$

$$\begin{array}{r} 3n - 29 \leq -8 \\ +29 \qquad +29 \end{array}$$

$$\begin{array}{r} 3n \leq 21 \\ \frac{3n}{3} \leq \frac{21}{3} \end{array}$$

$$n \leq 7$$



Compound Inequalities

$$\begin{array}{r} b + 9 < 3 \\ -9 \quad -9 \end{array}$$

$$\boxed{b < -6}$$

$$\boxed{\text{or}} \quad 3\left(\frac{b}{3}\right) > (0)^3$$

$$\boxed{b > 0}$$

divergent



$$m - 9 \leq -5$$

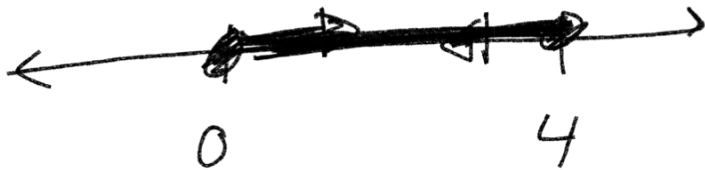
$$+9 \quad +9$$

$$m \leq 4$$

and $\left(\frac{m}{7}\right) \geq (0)$

$$m \geq 0$$

convergent



$$8 \geq x - 2 \geq -4$$

$$+2 \quad +2 \quad +2$$

$$8 \geq x - 2$$

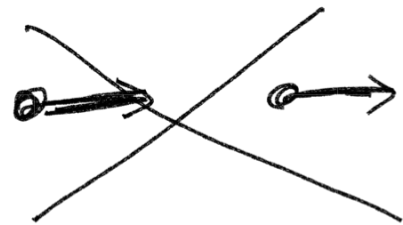
$$x - 2 \geq -4$$

$$10 \geq x \geq -2$$

$$10 \geq x$$

$$x \geq -2$$

~~$$x \leq 10$$~~



$$1.) \quad \begin{array}{ccc} x - 7 \leq -3 & \text{and} & 4x \geq 8 \\ +7 & & \frac{4}{4} \\ x \leq 4 & & x \geq 2 \end{array}$$



$$2.) \quad \begin{array}{ccc} x + 8 < 5 & \text{or} & 5\left(\frac{x}{5}\right) > (2)5 \\ -8 & & \\ x < -3 & & x > 10 \end{array}$$



$$3.) \quad \begin{array}{ccc} 8 \geq 2x + 2 \geq -4 \\ -2 & & -2 \end{array}$$

$$\frac{6}{2} \geq \frac{2x}{2} \geq \frac{-6}{2}$$

$$3 \geq x \geq -3$$

