

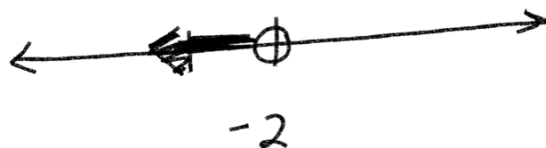
$$2(5t - 25) + 5t < -80$$

$$10t - 50 + 5t < -80$$

$$15t - 50 < -80$$

$$\frac{15t}{15} < \frac{-30}{15}$$

$$t < -2$$



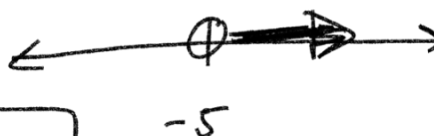
$$38 + 7t > -3(t + 4)$$

$$38 + 7t > -3t - 12$$

$$38 + 10t > -12$$

$$\frac{10t}{10} > \frac{-50}{10}$$

$$t > -5$$



$$\frac{7 + 2a}{-7} > \frac{9}{-7} \quad \text{or}$$

$$\frac{2a}{2} > \frac{2}{2}$$

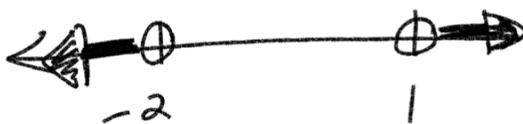
$$a > 1$$

$$\frac{-4a}{-4} > \frac{8}{-4}$$

$$a < -2$$

"or"

divergent



$$-4d \begin{matrix} +3 \\ -3 \end{matrix} > \begin{matrix} 11 \\ -3 \end{matrix}$$

$$\frac{-4d > 8}{-4 \quad -4}$$

$$d < -2$$

"and"

$$2d \begin{matrix} -5 \\ +5 \end{matrix} > \begin{matrix} -11 \\ +5 \end{matrix}$$

converge

$$\frac{2d > -6}{2 \quad 2}$$

$$d > -3$$



*

$$-4d + 3 = 11$$

$$\quad -3 \quad -3$$

$$-4d = 8$$



"and"

$$\underbrace{-6 < 9 + 3y}_{-9 \quad -9}$$

and

$$9 + 3y < 6$$

$$\quad -9 \quad -9$$

$$\boxed{-6 < 9 + 3y < 6}$$

$$\begin{matrix} -9 & -9 \end{matrix}$$

$$\frac{-15 < 3y < -3}{3 \quad 3 \quad 3}$$

$$\frac{-15 < 3y}{3 \quad 3}$$

$$-5 < y < -1$$

$$\{-5 < y\}$$

$$y < -1$$

$$\begin{matrix} > < \\ 0 & \end{matrix} \quad \begin{matrix} \geq \leq \\ \bullet & \end{matrix}$$



$$x - 2 \leq -6 \quad \text{or} \quad 5 + x > 7$$

$$\begin{array}{cc} +2 & +2 \end{array}$$

$$\begin{array}{cc} -5 & -5 \end{array}$$

$$x \leq -4$$

$$x > 2$$

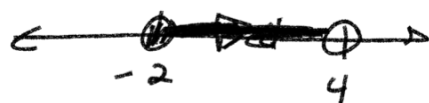


$$\begin{array}{ccc} * & & \\ \downarrow & & \\ -5 \leq 2x - 1 < 7 & & \\ +1 & +1 & +1 \end{array}$$

$$\begin{array}{ccc} -5 \leq 2x - 1 & & -2 \leq x < 4 \\ +1 & +1 & \\ -4 \leq 2x & & \end{array}$$

$$\frac{-4}{2} \leq \frac{2x}{2} < \frac{8}{2}$$

$$-2 \leq x < 4$$



$$\begin{array}{cc} 3x - 6 \geq -18 \\ +6 & +6 \end{array}$$

$$\frac{3x}{3} \geq \frac{-12}{3}$$

$$x \geq -4$$

and

converge

$$\begin{array}{cc} 10 + 2x < 14 \\ -10 & -10 \end{array}$$

$$\frac{2x}{2} < \frac{4}{2}$$

$$x < 2$$



HW
 ch 3.5 even
 ** Supplemental WS
 Online HW 16 }
 Quiz 16 } Feb 2nd
 HW/quiz 15 due Jan 26th

