

#7

$$0 < \frac{5}{3}x - 2 \leq 4$$

$$3(0) < 3\left(\frac{5}{3}x\right) + 3(-2) \leq 3(4)$$

$$0 < 5x - 6 \leq 12$$

$$0 + 6 < 5x \leq 12 + 6$$

$$6 < 5x \leq 18$$

$$\frac{6}{5} < \frac{5}{5}x \leq \frac{18}{5}$$

$$\frac{6}{5} < x \leq \frac{18}{5}$$



$$\left(\frac{6}{5}, \frac{18}{5}\right]$$

#8

$$-4 < -7(x-1) < 10$$

$$-4 < -7x + 7 < 10$$

$$-4 - 7 < -7x < 10 - 7$$

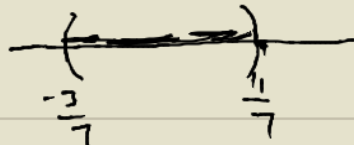
$$-11 < -7x < 3$$

$$\frac{-11}{-7} > \frac{-7x}{-7} > \frac{3}{-7}$$

$$\frac{11}{7} > x > -\frac{3}{7}$$

$$-\frac{3}{7} < x < \frac{11}{7}$$

SMALL \swarrow \searrow LARGE
 \swarrow \searrow
 CARE



$$\left(-\frac{3}{7}, \frac{11}{7}\right)$$

#9

$$4x \geq 9x + 10$$

$$\text{OR } x \leq 3x - 6$$

$$4x - 9x \geq 10$$

$$x - 3x < -6$$

$$-5x \geq 10$$

$$-2x < -6$$

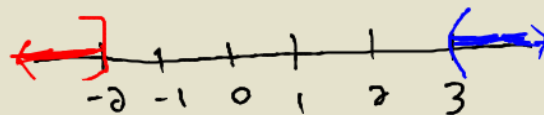
$$\frac{-5x}{-5} \leq \frac{10}{-5}$$

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

$$x \leq -2$$

OR

$$x > 3$$



$$(-\infty, -2] \cup (3, \infty)$$