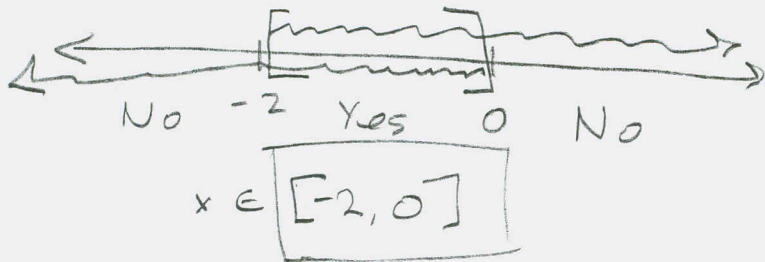


099  $\Sigma 2.5$  #s 14, 16, 20, 25, 40, 55

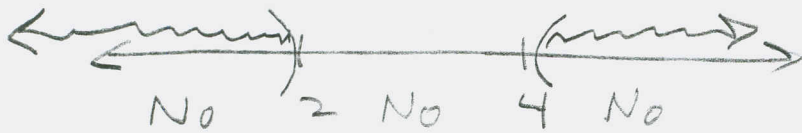
#s 13-18 solve the compound inequality. graph the sol'n set & write it in interval notation.

(14)  $x \leq 0$  and  $x \geq -2$



AND keep 'em both happy

(16)  $x < 2$  and  $x > 4$



$\emptyset$

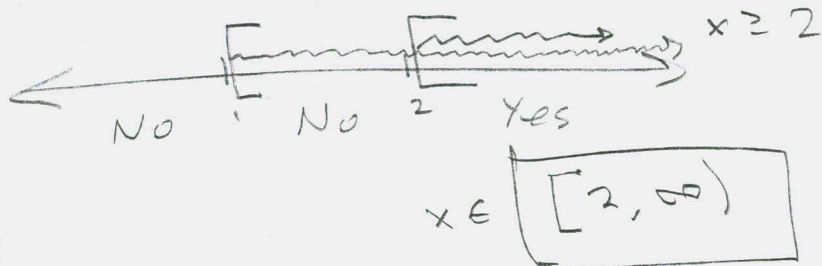
#s 19-32 Solve the compound inequality and give sol'n set as interval. (I still use a graph to "see" it.)

(20)  $x+2 \geq 3$  and  $5x-1 \geq 9$

$$\begin{array}{r} -2 = -2 \\ \hline x \geq 1 \end{array}$$

$$\begin{array}{r} +1 = +1 \\ \hline 5x \geq 10 \end{array}$$

$$x \geq \frac{10}{5} = 2$$



099  $\$ 2.5 \# \$ 25, 40, 55$

(25)  $5 < x - 6 < 11$

$+6 = +6 = +6$

This is also an "and"

$11 < x < 17$

$11 < x$  and  $x < 17$

$x > 11$  and  $x < 17$



$x \in (11, 17)$

#539-END Solve the compound inequality  
Give solution set in interval notation

(40)  $-5x \leq 10$  OR  $3x - 5 \geq 1$

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

$x \geq -2$

$3x \geq 6$

$x \geq \frac{6}{3}$

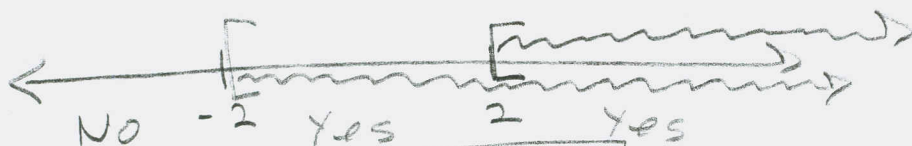
$x \geq 2$

OR Keep

ONE OR

BOTH

HAPPY



$x \in [-2, \infty)$

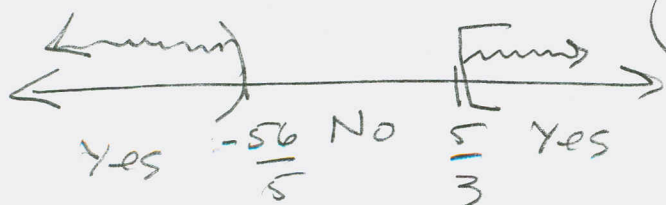
(55)  $3x \geq 5$  OR  $-\frac{5}{8}x - 6 > 1$

$x \geq \frac{5}{3} = 1\frac{2}{3}$

$-\frac{5}{8}x > 7$

$(-\frac{8}{5})(-\frac{5}{8}x) < (-\frac{8}{5})(7)$

$x < -\frac{56}{5} = -11\frac{1}{5}$



$x \in (-\infty, -\frac{56}{5}) \cup [\frac{5}{3}, \infty)$