

099 \$2.7 #s 12, 22, 65, 66, 74, 77

#s 1-64. Solve, graph and give the sol'n set in interval notation for each inequality.

(12)  $|8x-3| < -2$  NEVER!  $\boxed{\emptyset}$

(22)  $|4x-11| > -1$  ALWAYS!  $\boxed{(-\infty, \infty)}$

#s 65-END Same instructions, but graph is optional. (Graph 'em, anyway!). Also some equations

(65)  $|2x-3| < 7$  thrown in to the mix of inequalities.

$2x-3 < 7$  AND  $2x-3 > -7$

$2x < 10$

$2x > -4$

$x < \frac{10}{2}$

AND  $x > -2$



$x \in \boxed{(-2, \frac{10}{7})}$

(66)  $|2x-3| > 7$

$2x-3 > 7$  OR  $2x-3 < -7$

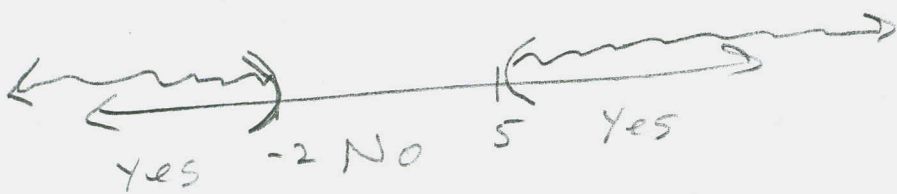
$2x > 10$

$2x < -4$

$x > 5$

OR

$x < -2$



$x \in \boxed{(-\infty, -2) \cup (5, \infty)}$

099  $S_{2.7} \# S_{74,77}$

(74)  $8 + |5x - 3| \geq 11$

$$\begin{array}{r} -8 \qquad \qquad \qquad = -8 \\ \hline \end{array}$$

$$|5x - 3| \geq 3$$

$$5x - 3 \geq 3 \quad \text{OR} \quad 5x - 3 \leq -3$$

$$5x \geq 6$$

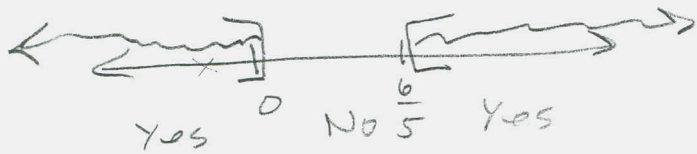
$$x \geq \frac{6}{5}$$

$$5x \leq 0$$

$$x \leq \frac{0}{5}$$

OR

$$x \leq 0$$



$$x \in (-\infty, 0] \cup \left[\frac{6}{5}, \infty\right)$$

(77)  $|x + 11| = -1$  Never!  $\boxed{\emptyset}$