

21.

$$3x + 5 > 26 \quad + \quad 6x - 9 \leq 6$$

$$\quad \quad \quad -5 \quad -5 \quad \quad \quad +9 \quad +9$$

$$\frac{3x}{3} > \frac{21}{3}$$

$$x > 7$$

$$\frac{6x}{6} \leq \frac{15}{6}$$

$$x \leq 15/6$$

$$x \leq 5/2$$

$$x > 7 \text{ and } x \leq 2.5 \quad x \leq 2.5$$



NO SOLUTION

22. $|3x + 2| > 8$

$$3x + 2 > 8$$

$$\quad \quad \quad -2 \quad -2$$

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

$$x > 2$$

$$3x + 2 < -8$$

$$\quad \quad \quad -2 \quad -2$$

$$\frac{3x}{3} < \frac{-10}{3}$$

$$x < -10/3$$

$$x < -3\frac{1}{3}$$



$$x > 2 \text{ OR } x < -10/3$$

$x < 2 \text{ AND } x > -3$



$-3 < x < 2$

24. $4 + |3k - 1| \leq 11$

$$\quad \quad \quad -4 \quad \quad \quad -4$$

$$|3k - 1| \leq 7$$

$$3k - 1 \leq 7$$

$$\quad \quad \quad +1 \quad +1$$

$$\frac{3k}{3} \leq \frac{8}{3}$$

$$k \leq 2\frac{2}{3}$$

$$3k - 1 \geq -7$$

$$\quad \quad \quad +1 \quad +1$$

$$\frac{3k}{3} \geq \frac{-6}{3}$$

$$k \geq -2$$



$-2 \leq k \leq 2\frac{2}{3}$

$$25. \quad 3x + 6y = 9 \quad D: \{-1, 0, 2\}$$

$$3(-1) + 6y = 9 \quad R: \{2, ?, ?\}$$

$$\begin{array}{r} -3 + 6y = 9 \\ +3 \quad +3 \\ \hline 6y = 12 \\ \hline y = 2 \end{array}$$

$$27. \quad \begin{array}{r} x + 2y = 4 \\ -x \end{array} \quad y = mx + b$$

$$\frac{2y = 4 - x}{2}$$

$$y = 2 - \frac{x}{2} = 2 - \frac{1}{2}x$$

$$m = -\frac{1}{2} \quad \text{'y-int': } 2$$

graphing w/ points:

$$x + 2y = 4$$

$$x = 0$$

$$\frac{2y = 4}{2}$$

$$y = 2$$

$$(0, 2)$$

$$y = 0$$

$$x = 4$$

$$(4, 0)$$

