

$$21) \quad 8 - 4x < 16$$

$$\begin{array}{r} -8 \quad -8 \\ -4x < 8 \\ \hline -4 \quad -4 \end{array}$$

$$x > -2$$

$$22) \quad 2y - 9 \leq 5$$

$$\begin{array}{r} +9 \quad +9 \\ 2y \leq 14 \end{array}$$

$$y \leq 7$$

$$23) \quad -\frac{2}{3}g + 7 < 9$$

$$\begin{array}{r} -7 \quad -7 \\ \hline -\frac{2}{3}g < 2 \\ \hline -\frac{2}{3}g < 2 \cdot \frac{3}{2} \end{array}$$

$$g > -3$$

$$24) \quad 2x + 7 > x + 10$$

$$\begin{array}{r} -x \quad -x \\ x + 7 > 10 \\ \hline -7 \quad -7 \end{array}$$

$$x > 3$$

$$25) \quad r + 4 < 13 - 2r$$

$$\begin{array}{r} +2r \quad +2r \\ 3r + 4 < 13 \\ \hline -4 \quad -4 \\ 3r < 9 \\ \hline r < 3 \end{array}$$

$$r < 3$$

$$26) \quad 3j + 2 - 2j > -10$$

$$\begin{array}{r} j + 2 > -10 \\ \hline -2 \quad -2 \end{array}$$

$$j > -12$$

$$27) \quad 4(k - 1) > 4$$

$$\begin{array}{r} 4k - 4 > 4 \\ \hline 4k > 8 \end{array}$$

$$k > 2$$

$$28) \quad 8m - 8 < 12 + 4m$$

$$\begin{array}{r} -4m \quad -4m \\ 4m - 8 < 12 \\ \hline +8 \quad +8 \\ 4m < 20 \end{array}$$

$$m < 5$$

$$29) \quad 2(3f + 2) \geq 4f + 12$$

$$\begin{array}{r} 6f + 4 \geq 4f + 12 \\ \hline -4f \quad -4f \\ 2f + 4 \geq 12 \\ \hline -4 \quad -4 \end{array}$$

$$f \geq 4$$

$$30) \quad h + 2(3h + 4) \leq 1$$

$$\begin{array}{r} h + 6h + 8 \leq 1 \\ \hline 7h + 8 \leq 1 \\ \hline -8 \quad -8 \end{array}$$

$$h \leq -1$$

$$31) \quad 2(5t - 25) + 5t < -80$$

$$\begin{array}{r} 10t - 50 + 5t < -80 \\ \hline 15t - 50 < -80 \\ \hline +50 \quad +50 \end{array}$$

$$t < -2$$

$$32) \quad \frac{1}{2}(2g + 4) > -7 \cdot 2$$

$$\begin{array}{r} 2g + 4 > -14 \\ \hline -4 \quad -4 \\ 2g > -18 \end{array}$$

$$g > -9$$

$$33) \quad 3\left(\frac{1}{3}x + 2x - 3\right) > 2$$

$$\begin{array}{r} x + 6x - 9 > 6 \\ \hline 7x - 9 > 6 \\ \hline +9 \quad +9 \end{array}$$

$$x > \frac{15}{7}$$

Solve each word problem

34) The sophomore class is planning a picnic. The cost of a permit to use the city park is \$250. They are going to charge each sophomore \$75 and each guest \$1.25. If 200 hundred sophomores attend, how many guests must attend to pay for the cost of the park?

$$200(0.75) = 150$$

$$150 + 1.25x \geq 250$$

$$x \geq 80 \text{ guests}$$

35) Joleen is a sales associate in a clothing store. Each week she earns \$250 plus a \$.03 on every dollar she sells. If Joleen wants to earn \$450 dollars this week, how much money do here customers have to spend?

$$250 + 0.03x \geq 450$$

$$x \geq \$6,666.67$$