

32.) \$0.50 for every  $\frac{1}{4}$  miles  
 $\geq$  at least \$500.00  
 $m = \#$  of miles

$$\frac{\$2.00}{1 \text{ mile}} \cdot m \geq \frac{\$500.00}{2.00}$$
$$m \geq 250 \text{ miles}$$

40.)

$$\frac{3}{5} \text{ of } 275 = 165$$

west branch  $>$  165 people

30.)

 $\Delta = \#$  of study sessions

$$\frac{3}{5}\Delta \geq 15$$

$$\Delta \geq 25$$

$$14.) -11 \cdot -11 > \frac{C}{4} \cdot -11$$
$$\frac{D/U}{\div -11 \cdot -11}$$
$$121 < C$$
$$\boxed{C > 121}$$

$$16.) \quad -2 \cdot -10 \leq -\frac{x}{2} \cdot -2 \quad \begin{array}{l} \text{D/U} \\ \div -2 \cdot -2 \end{array}$$
$$20 \geq x$$
$$\boxed{x \leq 20}$$

28

$$\frac{-1}{2}d < \frac{5}{-2}$$
$$d > -\frac{5}{2}$$

## 5-3 Solving Multistep Inequalities

$$4(3t - 5) + 7 \geq 8t + 3$$

$$12t - 20 + 7 \geq 8t + 3$$

$$\begin{array}{r} 12t - 13 \geq 8t + 3 \\ \underline{-8t} \quad \quad \quad \underline{-8t} \end{array}$$

$$4t - 13 \geq 3$$
$$\begin{array}{r} +13 \quad \quad \quad +13 \end{array}$$

$$\frac{4t}{4} \geq \frac{16}{4}$$

$$t \geq 4$$

- $\emptyset$  empty set  
 $25 \neq -12$
- all real number  
 $18 = 18$   
 $\{n \mid n = \text{all real numbers}\}$



$$\underline{5-3}$$

$$12 - 52 \text{ even}$$

$$74 - 76 \text{ even}$$

26.)

$$\frac{-33}{3} \geq \frac{-3}{3} z$$

$$\boxed{\begin{array}{l} 11 \leq z \\ z \geq 11 \end{array}}$$

