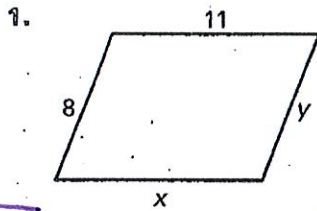
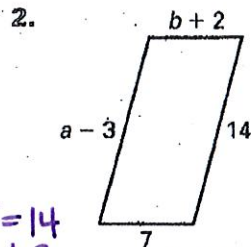


**LESSON 5.8 Practice**

Find the value of each variable in the parallelogram.

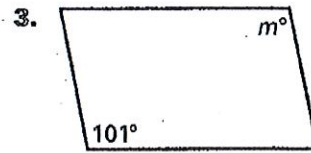


$$\begin{array}{r} x = 11 \\ y = 8 \end{array}$$

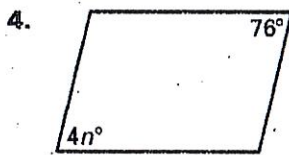


$$\begin{array}{r} a - 3 = 14 \\ + 3 \quad + 3 \\ \hline a = 17 \end{array}$$

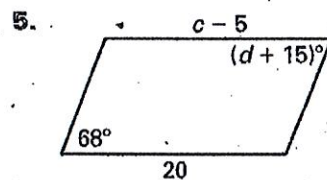
$$\begin{array}{r} b + 2 = 7 \\ - 2 \quad - 2 \\ \hline b = 5 \end{array}$$



$$m = 101$$

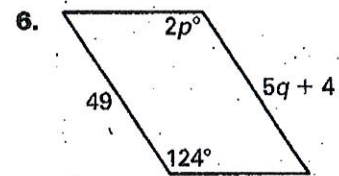


$$\begin{array}{r} 4n = 76 \\ \div 4 \quad \div 4 \\ \hline n = 19 \end{array}$$



$$\begin{array}{r} c - 5 = 20 \\ + 5 \quad + 5 \\ \hline c = 25 \end{array}$$

$$\begin{array}{r} d + 15 = 68 \\ - 15 \quad - 15 \\ \hline d = 53 \end{array}$$

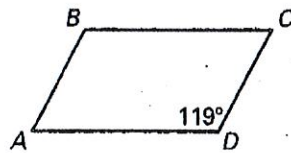


$$\begin{array}{r} 5q + 4 = 49 \\ - 4 \quad - 4 \\ \hline 5q = 45 \\ \div 5 \quad \div 5 \\ \hline q = 9 \end{array}$$

$$\begin{array}{r} 2p = 124 \\ \div 2 \quad \div 2 \\ \hline p = 62 \end{array}$$

Find the measure of the indicated angle in the parallelogram.

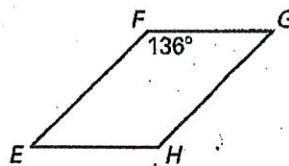
7. Find  $m\angle C$ .



$$180 - 119 = 61$$

$$m\angle C = 61^\circ$$

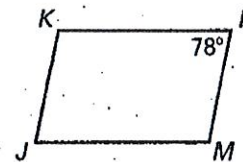
8. Find  $m\angle E$ .



$$180 - 136 = 44$$

$$m\angle E = 44^\circ$$

9. Find  $m\angle K$ .



$$180 - 78 = 102$$

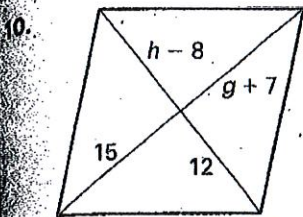
$$m\angle K = 102^\circ$$



LESSON 5.8

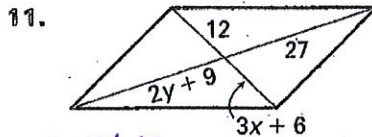
Practice continued

Find the value of each variable in the parallelogram.



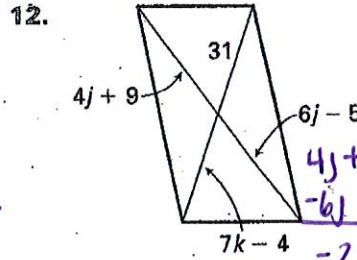
$$\begin{array}{r} g+7=15 \\ -7 \quad -7 \\ \hline g=8 \end{array}$$

$$\begin{array}{r} h-8=12 \\ +8 \quad +8 \\ \hline h=20 \end{array}$$



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

$$\begin{array}{r} 2y+9=27 \\ -9 \quad -9 \\ \hline 2y=18 \\ \div 2 \quad \div 2 \\ \hline y=9 \end{array}$$



$$\begin{array}{r} 7k-4=31 \\ +4 \quad +4 \\ \hline 7k=35 \\ \div 7 \quad \div 7 \\ \hline k=5 \end{array}$$

$$\begin{array}{r} 4j+9=6j-5 \\ -6j \quad -6j \\ \hline -2j+9=-5 \\ -9 \quad -9 \\ \hline -2j=-14 \\ \div -2 \quad \div -2 \\ \hline j=7 \end{array}$$

$$\begin{array}{r} -2j=-14 \\ \div -2 \quad \div -2 \\ \hline j=7 \end{array}$$

Use the diagram of parallelogram *MNOP* at the right to complete the statement. Explain.

13.  $\overline{MN} \cong \overline{PO}$

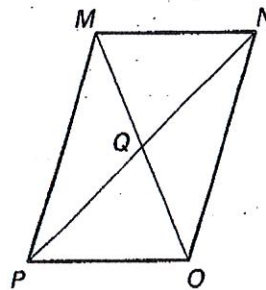
14.  $\overline{MN} \parallel \overline{PO}$

15.  $\overline{ON} \cong \overline{PM}$

16.  $\angle MPO \cong \angle MNO$

17.  $\overline{PQ} \cong \overline{QN}$

18.  $\overline{QM} \cong \overline{QO}$



19.  $\angle MQN \cong \angle PQO$   
Vertical  $\angle$ s

20.  $\angle NPO \cong \angle MNP$   
alternate interior  $\angle$ s

Find the indicated measure in  $\square HIJK$ . Explain.

21.  $HI = 16$

22.  $KH = 10$

23.  $GH = 8$

24.  $HJ = 16$

25.  $m\angle KIH = 28^\circ$

26.  $m\angle JIH = 96^\circ$   
 $180 - 84 = 96$

27.  $m\angle KJI = 84^\circ$

28.  $m\angle HKI = 68^\circ$   
 $180 - 84 = 96$   
 $96 - 28 = 68$

