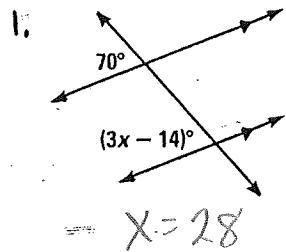


3-2 Skills Practice

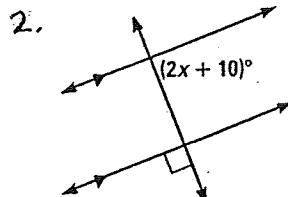
Angles and Parallel Lines

USING ALGEBRA Find the value of x .



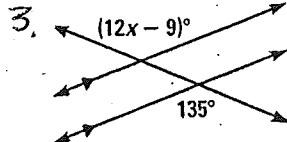
$$70^\circ = 3x - 14$$

$$x = 28$$



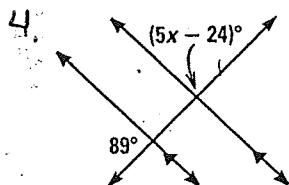
$$2x + 10 = 90$$

$$x = 40$$



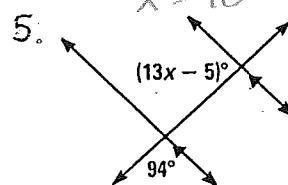
$$12x - 9 = 135$$

$$x = 12$$



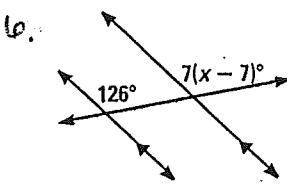
$$89^\circ = 5x - 24$$

$$x = 23$$



$$94^\circ = 13x - 5$$

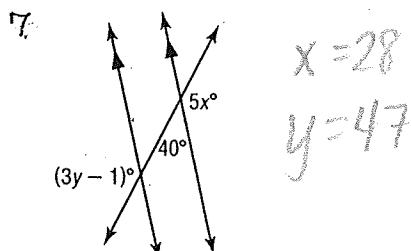
$$x = 7$$



$$126^\circ = 7(x - 7)$$

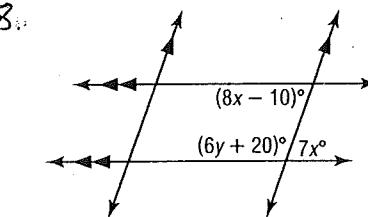
$$x = 25$$

Find x and y in each figure.



$$3y - 1 = 40$$

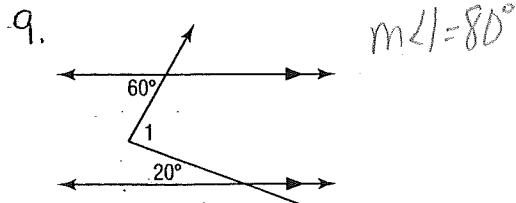
$$y = 14$$



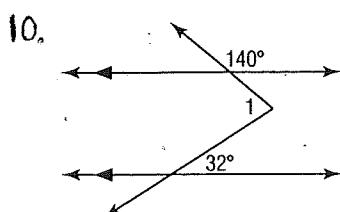
$$8x - 10 = 7x$$

$$y = 15$$

Find $m\angle 1$ in each figure.



$$m\angle 1 = 80^\circ$$

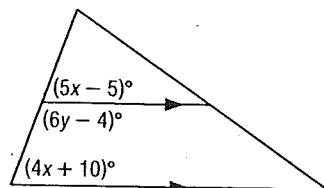


$$m\angle 1 = 72^\circ$$

3-2**Study Guide and Intervention** *(continued)***Angles and Parallel Lines****Exercises**

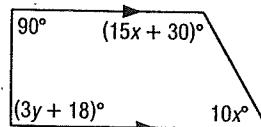
Find x and y in each figure.

1.



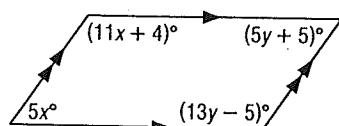
$$\begin{aligned}x &= 15 \\y &= 19\end{aligned}$$

2.



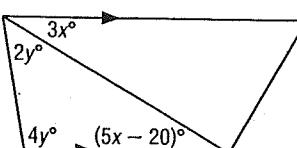
$$\begin{aligned}x &= 6 \\y &= 24\end{aligned}$$

3.



$$\begin{aligned}x &= 11 \\y &= 10\end{aligned}$$

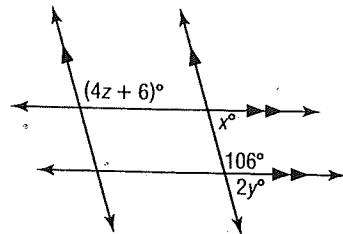
4.



$$\begin{aligned}x &= 10 \\y &= 25\end{aligned}$$

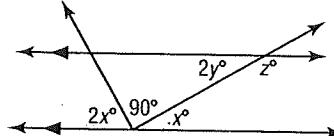
Find x , y , and z in each figure.

5.



$$\begin{aligned}x &= 74 \\y &= 37 \\z &= 25\end{aligned}$$

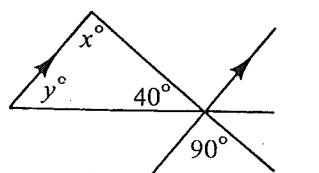
6.



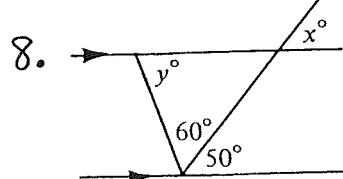
$$\begin{aligned}x &= 30 \\y &= 15 \\z &= 150\end{aligned}$$

Find x and y in each figure.

7.

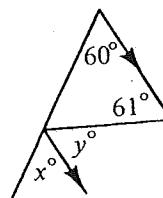


$$x = 60^\circ \quad y = 61^\circ$$



$$\begin{aligned}x &= 50^\circ \\y &= 70^\circ\end{aligned}$$

8.



$$\begin{aligned}x &= 90^\circ \\y &= 50^\circ\end{aligned}$$