

* Do all Problems. Show all work to get given answers.

Name _____

Date _____

LESSON 6.1

Practice B

In the diagram, $WXYZ \sim MNOP$.

1. Find the scale factor of $WXYZ$ to $MNOP$.

$$\frac{4}{5}$$

2. Find the values of x , y , and z .

$$\begin{aligned}x &= 15 \\y &= 8 \\z &= 135\end{aligned}$$

3. Find the perimeter of $WXYZ$.

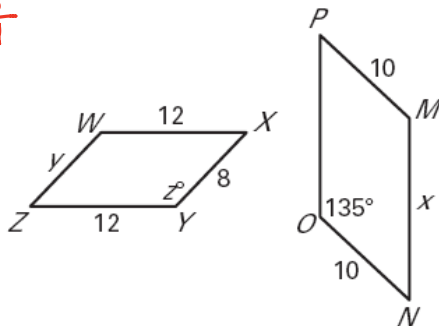
$$40$$

4. Find the perimeter of $MNOP$.

$$50$$

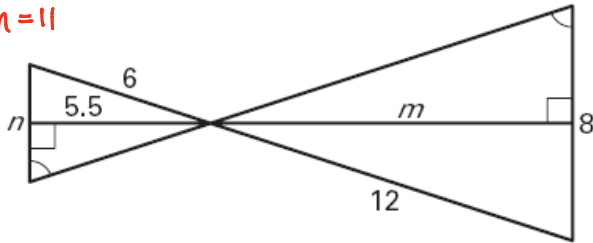
5. Find the ratio of the perimeter of $MNOP$ to the perimeter of $WXYZ$.

$$\frac{5}{4}$$

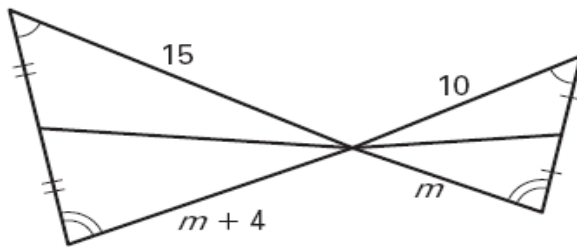


The two triangles are similar. Find the values of the variables.

6. $n = 4$
 $m = 11$



7. $m = 8$



In Exercises 13 and 14, use the following information.

8. **Multiple Choice** The ratio of one side of $\triangle ABC$ to the corresponding side of a similar $\triangle DEF$ is 4:3. The perimeter of $\triangle DEF$ is 24 inches. What is the perimeter of $\triangle ABC$?

32 inches

Swimming Pool The community park has a rectangular swimming pool enclosed by a rectangular fence for sunbathing. The shape of the pool is similar to the shape of the fence. The pool is 30 feet wide. The fence is 50 feet wide and 100 feet long.

9. What is the scale factor of the pool to the fence?

$\frac{3}{5}$

10. What is the length of the pool?

60 feet