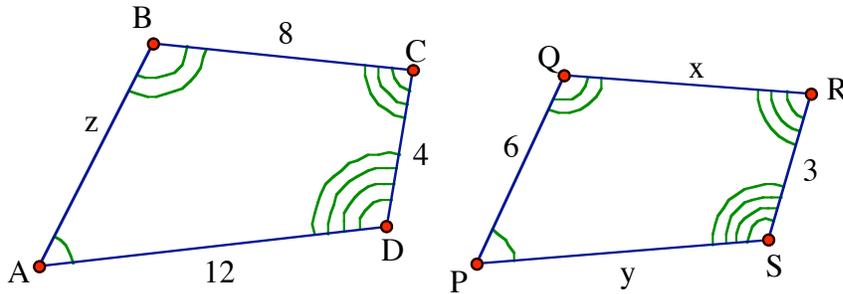


**Chapter 5: Similarity**  
**Lesson 5-2: Similar Polygons**  
**Classwork**

Name \_\_\_\_\_  
 Date \_\_\_\_\_  
 Period \_\_\_\_



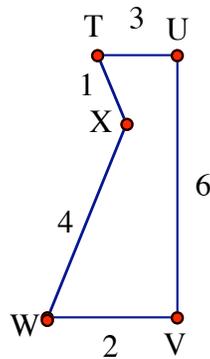
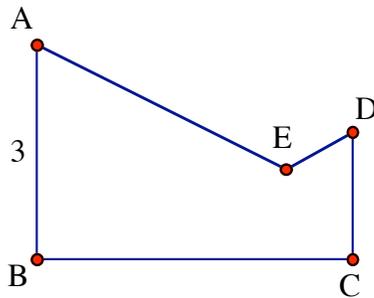
For questions 1-4 refer to the above diagram.

- Complete. Quad ABCD ~ Quad \_\_\_\_\_.
- Find the scale factor of the larger polygon to the smaller polygon.
- Complete.  $\frac{AB}{?} = \frac{?}{QR} = \frac{?}{RS} = \frac{AD}{?}$ .
- |  |  |  |
|--|--|--|
| Write a proportion<br>and solve for x. | Write a proportion<br>and solve for y. | Write a proportion<br>and solve for z. |
|--|--|--|

x = \_\_\_\_\_

y = \_\_\_\_\_

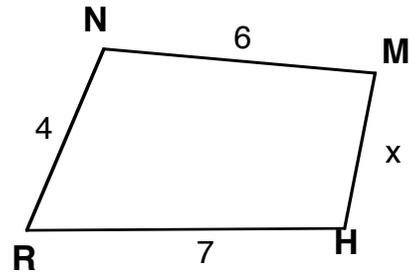
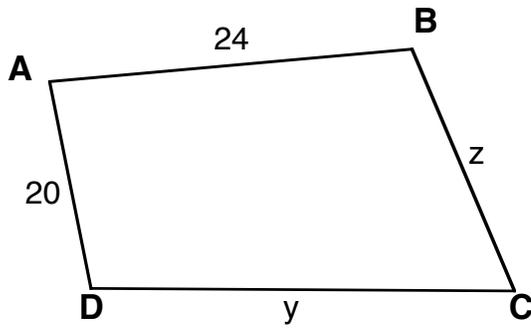
z = \_\_\_\_\_



**Pentagon AEDCB ~ Pentagon WXTUV.**

- Find the scale factor of the smaller pentagon to the larger pentagon.
- Find the indicated lengths.  
 $AE = \underline{\hspace{2cm}}$ ,  $ED = \underline{\hspace{2cm}}$ ,  $DC = \underline{\hspace{2cm}}$ ,  $BC = \underline{\hspace{2cm}}$ .

**Quad ABCD ~ Quad MNRH.**



7. Find the scale factor of the larger polygon to the smaller polygon.

8.

Write a proportion  
and solve for x.

Write a proportion  
and solve for y.

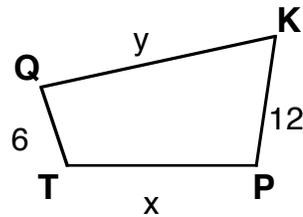
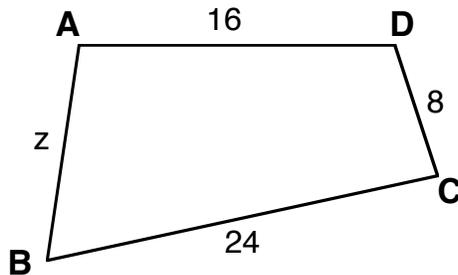
Write a proportion  
and solve for z.

x = \_\_\_\_\_

y = \_\_\_\_\_

z = \_\_\_\_\_

**Quad ABCD ~ Quad PKQT.**



9. Find the scale factor of the larger polygon to the smaller polygon.

10.

Write a proportion  
and solve for x.

Write a proportion  
and solve for y.

Write a proportion  
and solve for z.

x = \_\_\_\_\_

y = \_\_\_\_\_

z = \_\_\_\_\_