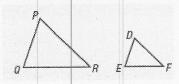
1. If polygons are similar then what do you know about the corresponding sides and the corresponding angles?

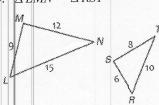
Given the similar figures, name all pairs of corresponding sides and angles. Look at the similarity statement to help.

2.  $\triangle PQR \sim \triangle DEF$ 

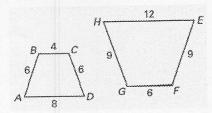


$$\overline{QP} \to \underline{\qquad} \qquad \angle Q \cong \underline{\qquad} \\
\overline{PR} \to \underline{\qquad} \qquad \angle P \cong \underline{\qquad} \\
\overline{RQ} \to \underline{\qquad} \angle R \cong \underline{\qquad} \\$$

3.  $\Delta LMN \sim \Delta RST$ 



4. ABCD~ HGFE



$$\overline{AB} \to \underline{\qquad} \angle A \cong \underline{\qquad}$$

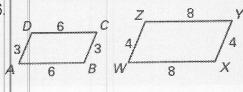
$$\overline{BC} \to \underline{\qquad} \angle B \cong \underline{\qquad}$$

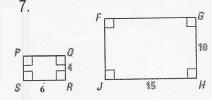
$$\overline{CD} \to \underline{\qquad} \angle C \cong \underline{\qquad}$$

$$\overline{DA} \to \underline{\qquad} \angle D \cong \underline{\qquad}$$

Use the similar polygons above to write the statement of proportionality for each:

Complete the similarity statement for the similar figures and then find the scale factor . REDUCE fractions!



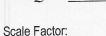


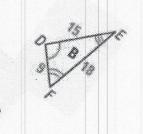
 $\Delta LKM \sim \Delta$ 

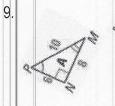
Scale Factor:

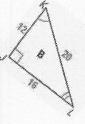


Scale Factor:











KJML~

 $\Delta HJG \sim \Delta$ 

Scale Factor:

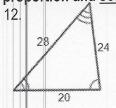
Scale Factor:

 $\triangle NPM \sim \Delta$ 

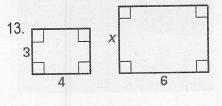
Scale Factor:

The two polygons are similar. Write a proportion and solve for x.

11. 5 2 2 2 2 1 28 24

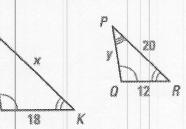




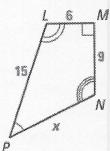


Complete the similarity statement for the similar figures and then find the  $\underline{\text{scale factor}}$ . Next, write proportions and  $\underline{\text{SOLVE}}$  for the missing lengths.

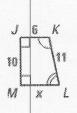
14.



15.



16.



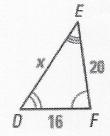
N 12 P

y

Z22

R 16 0

17.



15 NB