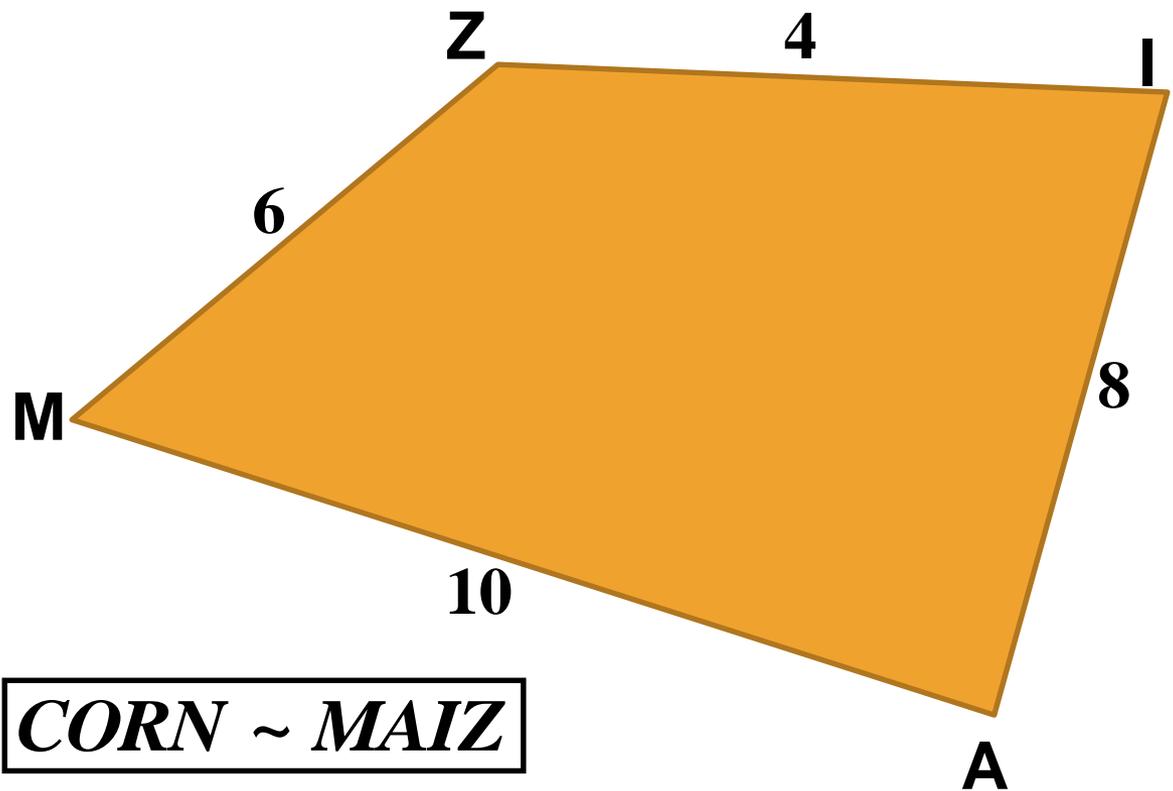
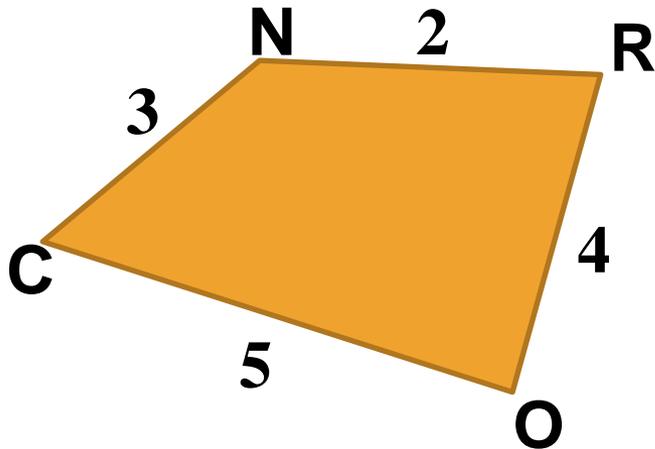


7.2

# **SIMILAR POLYGONS**

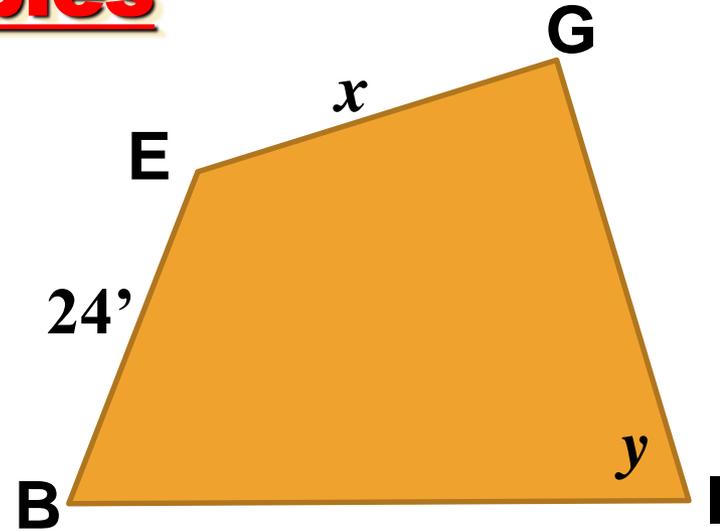
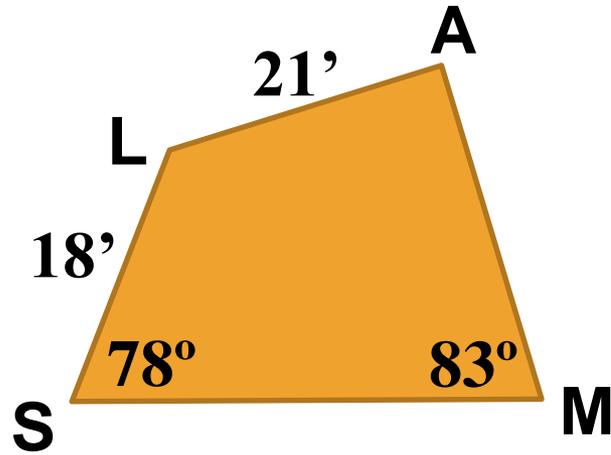
# Similarity



*CORN ~ MAIZ*

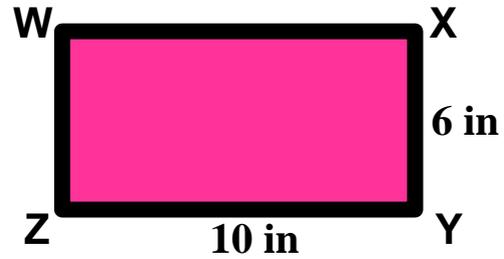
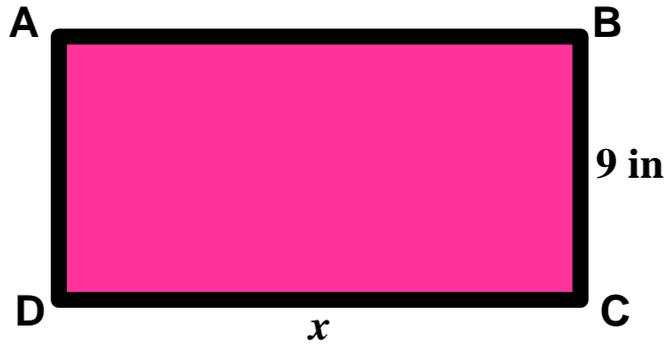
- Same shape, different size
- Corresponding angles are congruent
  
- Corresponding sides are proportional

# Find the missing variables



*SMAL ~ BIGE*

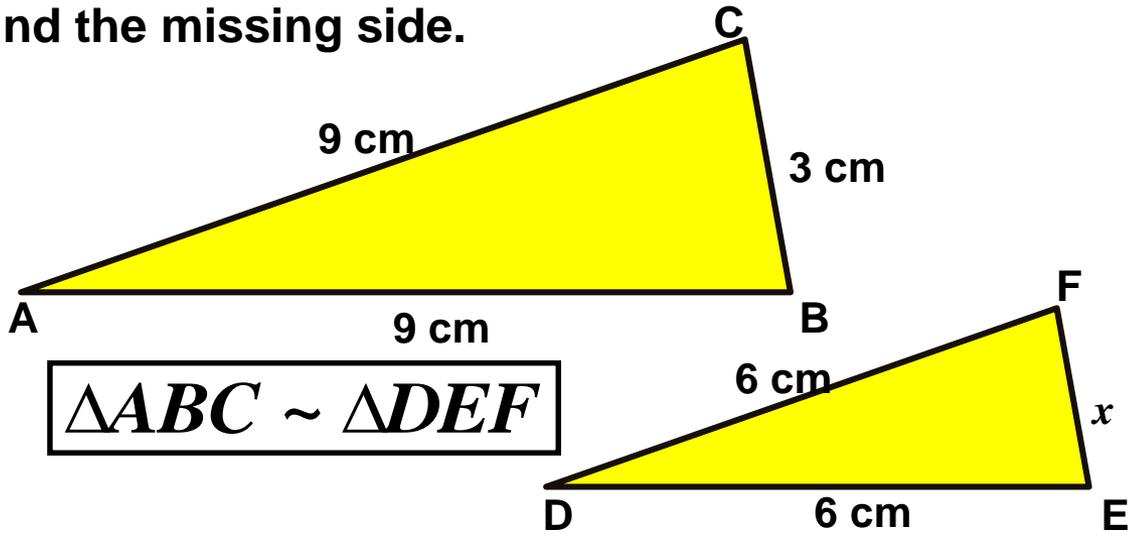
# FIND MISSING SIDES



$$ABCD \sim WXYZ$$

# PRACTICE

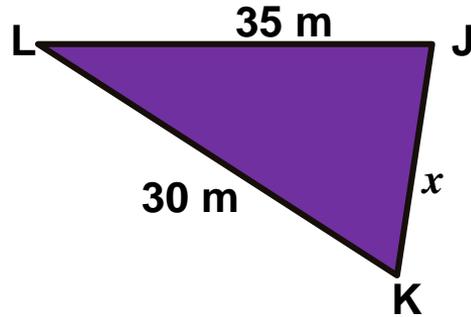
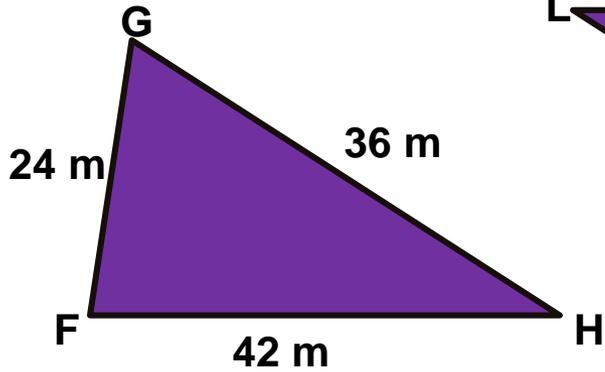
Find the missing side.



# PRACTICE

Find the missing side.

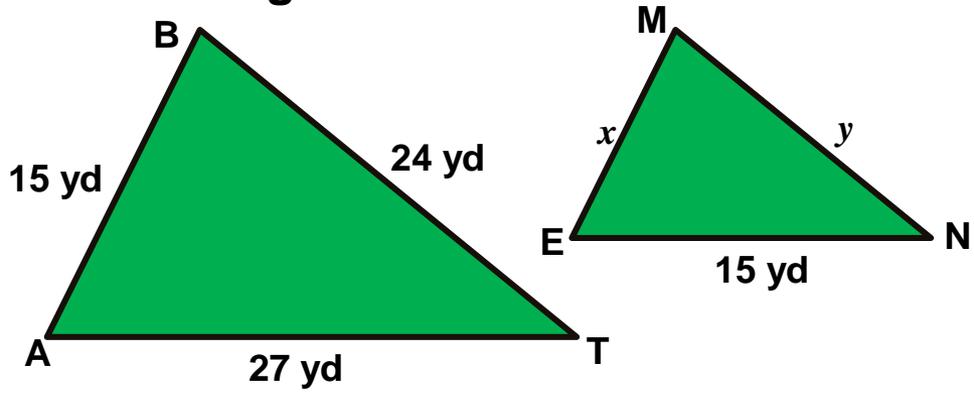
$$\triangle FGH \sim \triangle JKL$$



# PRACTICE

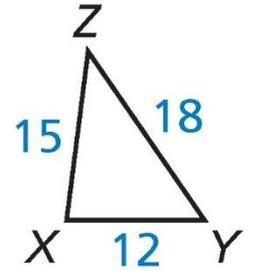
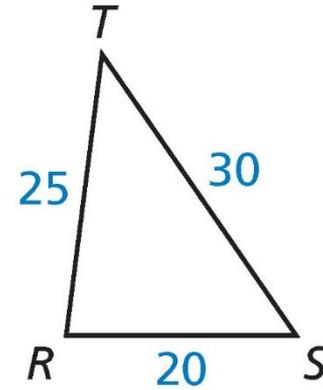
Find the missing sides.

$$\triangle BAT \sim \triangle MEN$$

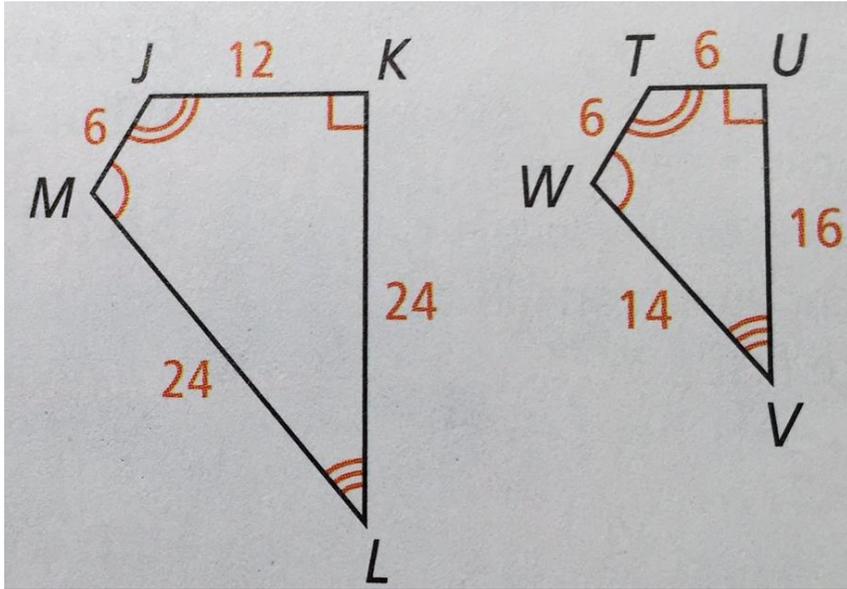


In the diagram,  $\triangle RST \sim \triangle XYZ$ .

- a. Find the scale factor from  $\triangle RST$  to  $\triangle XYZ$ .
- b. List all pairs of congruent angles.
- c. Write the ratios of the corresponding side lengths in a *statement of proportionality*.



Are the polygons similar? Justify your answer. If they are, write a similarity statement, and give the scale factor.



Are the polygons similar? Justify your answer. If they are, write a similarity statement, and give the scale factor.

