Geometry

6.3 Use Similar Polygons

Similar figures

similar

sizes

shape

* When two figures are the same \_\_\_\_\_\_\_\_\_\_\_\_ but different \_\_\_\_\_\_\_\_\_\_\_, they are \_\_\_\_\_\_\_\_\_\_\_.

Similar polygons (~)

proportional

sides

congruent

angles

* Polygons are similar iff corresponding \_\_\_\_\_\_\_\_\_\_ are \_\_\_\_\_\_\_\_\_\_\_\_ and corresponding \_\_\_\_\_\_\_\_\_ are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

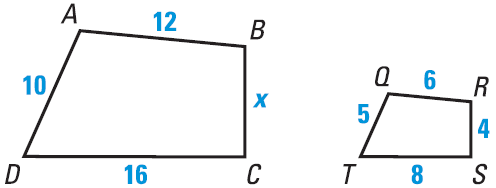
factor

sides

lengths

* Ratio of \_\_\_\_\_\_\_\_\_\_ of corresponding \_\_\_\_\_\_\_\_\_ is the scale \_\_\_\_\_\_\_\_\_\_.

ABCD ~ QRST

What is the scale factor of QRST to ABCD?

Find x.

🡪 x = 8

## Perimeters of Similar Polygons

side

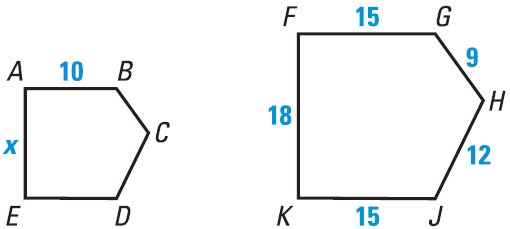
ratio

If two polygons are similar, then the \_\_\_\_\_\_\_\_\_ of their perimeters is equal to the ratios of their corresponding \_\_\_\_\_\_\_ lengths.

1:1

Scale factor

* Congruent polygons have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_

ABCDE ~ FGHJK

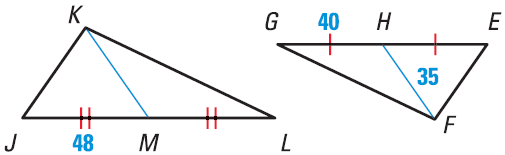
Find the scale factor of FGHJK to ABCDE

Find x

🡪 🡪

Find the perimeter of ABCDE

🡪 🡪 🡪 P = 46

ΔJKL ~ ΔEFG. Find the length of the median .

Assignment: 376 #2-24 even, 28, 32-48 even = 22