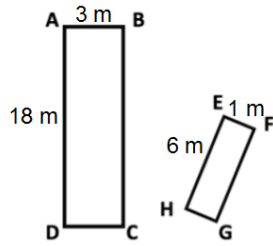


### Scale Factor Test Review

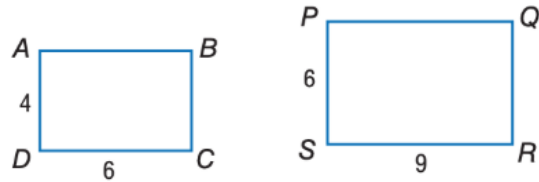
1. Find the scale factor.



ABCD to EFGH \_\_\_\_\_

EFGH to ABCD \_\_\_\_\_

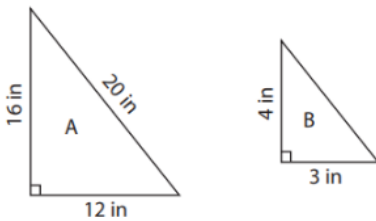
2. Find the scale factor.



ABCD to PQRS \_\_\_\_\_

PQRS to ABCD \_\_\_\_\_

3. Triangle A is similar to Triangle B.



a. What is the length of the missing side length in Triangle B?

b. What is the scale factor from Triangle A to Triangle B?

c. What is the scale factor from Triangle B to Triangle A?

d. What is the perimeter of Triangle A? Of Triangle B?

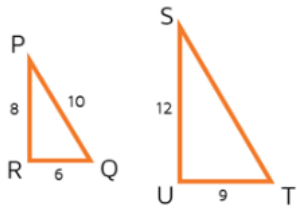
e. What is the area of Triangle A? Of Triangle B?

f. What is the relationship between the scale factor and the perimeters of the two triangles?

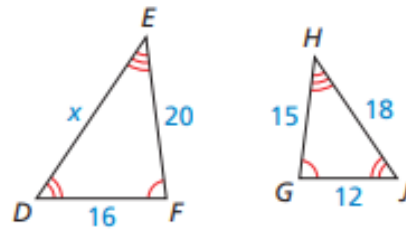
g. What is the relationship between the scale factor and the area of the two triangles?

4. Solve for the variable. Show your work.

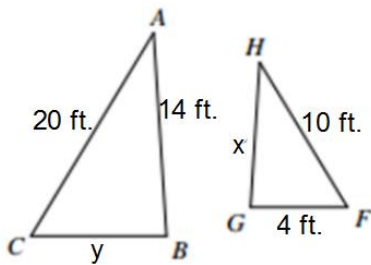
a.  $\triangle PQR \sim \triangle STU$



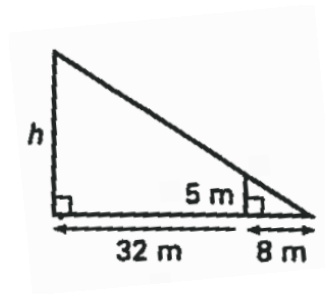
b.  $\triangle DEF \sim \triangle JHG$



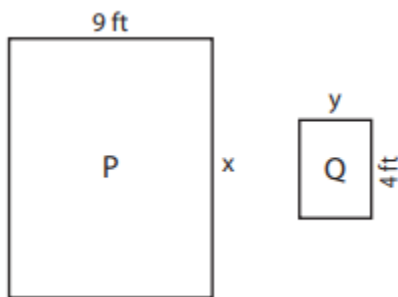
c.  $\triangle ABC \sim \triangle HGF$



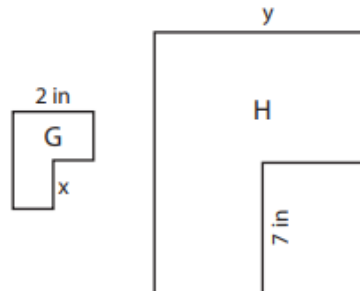
d.



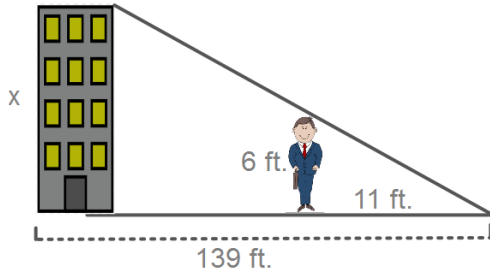
e. The scale factor from P to Q is  $\frac{1}{3}$ .



f. The scale factor from G to H is 7.

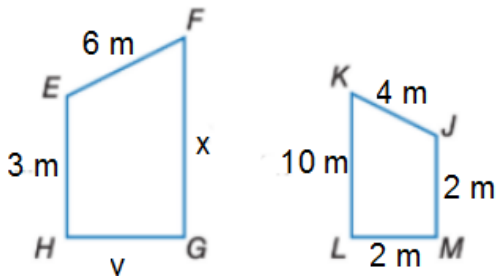


5. A man 6 feet tall casts a shadow that is 11 feet long. A building casts a shadow of 139 feet long. What is the height of the building? Show your work.



6. Use the figures to answer the questions.

$$EFGH \sim JKLM$$



- a) What are the corresponding sides?

EF corresponds to \_\_\_\_\_

FG corresponds to \_\_\_\_\_

GH corresponds to \_\_\_\_\_

HE corresponds to \_\_\_\_\_

- b) What is the scale factor from EFGH to JKLM?

- e) What is the perimeter of both shapes?

EFGH = \_\_\_\_\_

JKLM = \_\_\_\_\_

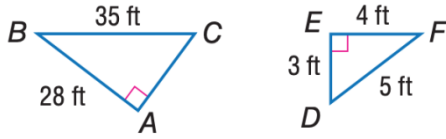
- c) What is the scale factor from JKLM to EFGH?

- f) How do the perimeters relate to the scale factor?

- d) What is the side length of FG? Show your work.

7. Use the triangles below to answer the questions.

$$ABC \sim EFD$$



a) What is the scale factor from ABC to EFD?

b) What is the scale factor from EFD to ABC?

d) What is the area of both shapes?

ABC = \_\_\_\_\_

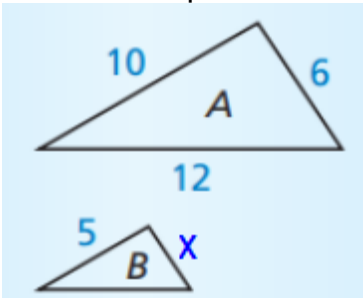
EFD = \_\_\_\_\_

c) What is the side length of AC? Show your work.

e) How do the areas relate to the scale factors?

8. Find the error in the problem below. Correctly solve the problem and explain the error.

**Solve correctly:**



$$\frac{5}{10} = \frac{6}{x}$$

$$5x = 60$$

$$x = 6$$

Explain Error: \_\_\_\_\_

\_\_\_\_\_

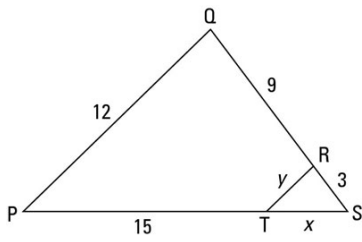
\_\_\_\_\_

$$\frac{5}{10} = \frac{6}{x}$$

$$5x = 60$$

$$x = 6$$

a)



b) The scale factor from M to N is 8.

