

Lesson #29

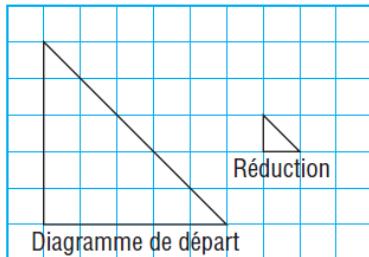
1. Video : <https://youtu.be/xf95N6kk3JI>

2. Complete the following comprehension questions
in your notebooks on page 70. Questions de
compréhension à faire dans vos cahiers à la
page 70.

Complete the following questions in your notebooks on page 70.

1. Are circles polygons? Explain.

2. Calculate the scale factor of your reduction. Show your work. I



Scale diagram

1. What are the 2 conditions necessary to prove similarity?

- 2.

3. a) Is a scale diagram with a scale factor of 1.24 a reduction or an enlargement? Explain.

4. Where in real life do we see enlargements? (Give an example).

5.



Original

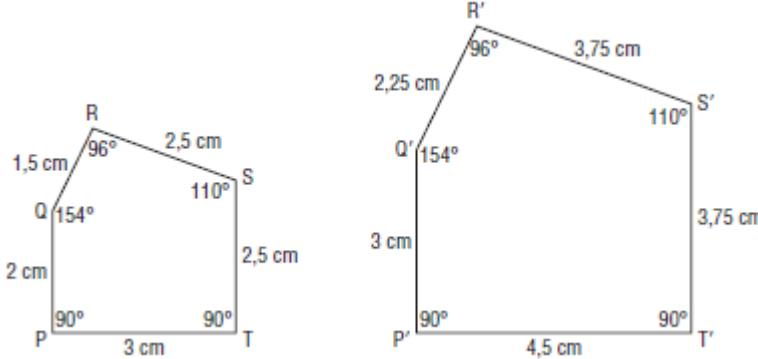
2cm x 6cm

scale diagram

1.5cm x ???

- a) Calculate the scale factor.
b) Find the missing side.

6. Prove that these polygons are similar.



Correct your answers with mine below.

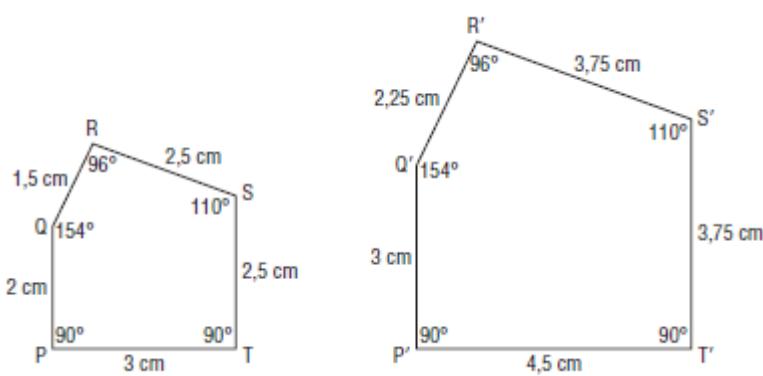
ANSWERS

1. No, circles are NOT polygons because they are not made of straight lines.
2. SF = SD/original $1/5 = 0.2$ $1/5 = 0.2$

Two conditions to prove similarity-

- a. Corresponding sides must be proportional
- b. Corresponding angles must be equal

3. A scale diagram with a scale factor of 1.24 is an enlargement 1.24 times bigger than the original.
4. The drive in, the smartboard, billboards etc are all examples of enlargements.
5. SF = SD/orig $1.5/2 = 0.75$ The scale factor is 0.75
 $6 \text{ cm} \times 0.75 = 4.5 \text{ cm}$



Corresponding angles are equal.

$$\angle R = \angle R'$$

$$\angle Q = \angle Q'$$

$$\angle P = \angle P'$$

$$\angle T = \angle T'$$

$$\angle S = \angle S'$$

Corresponding sides are proportional by a scale factor of 1.5

$$FE = DE/\text{orig} \quad 2.25/1.5 = 1.5 \quad 3.75/2.5 = 1.5 \quad 3.75/2.5 = 1.5 \quad 4.5/3 = 1.5$$

$$3/2 = 1.5$$