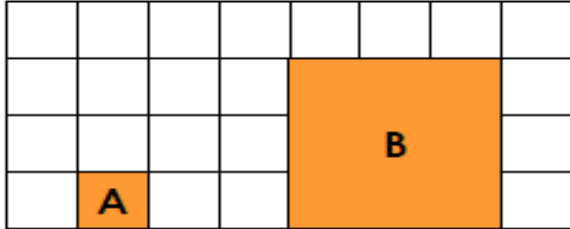


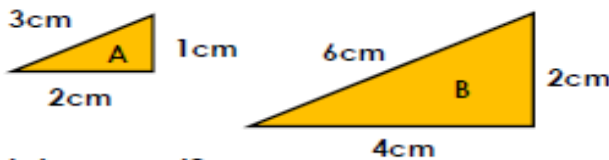
LO: To calculate the scale factor (bronze)

1a. Complete the sentence below. Shape A has been increased by a scale factor of _____ to create shape B.



VF

2a. Will says he has enlarged his shape by a scale factor of 2. Shape B is his new shape.



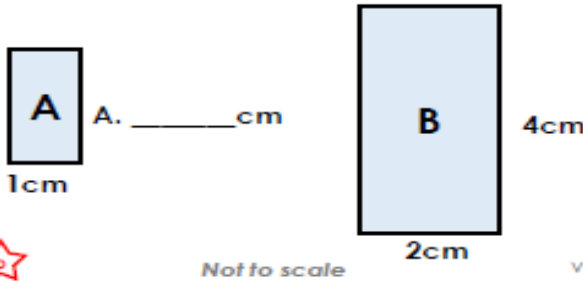
Is he correct?



Not to scale

VF

3a. Rectangle B has been scaled from rectangle A. Find the missing length.

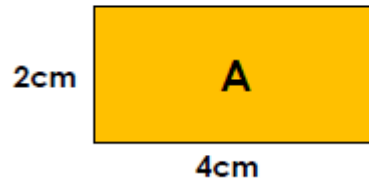


Not to scale

VF

4 Shape A has been enlarged to create shape B.

Shape B has a perimeter of 48cm.



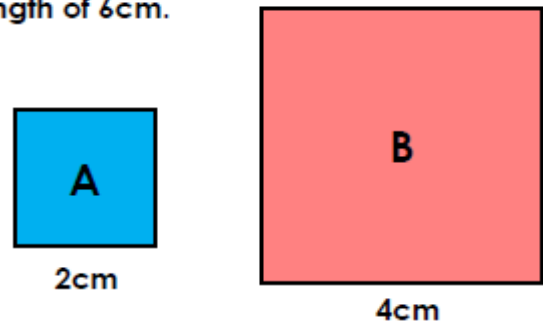
Identify which scale factor has been used.



not to scale

PS

5 Sharon is enlarging shapes by a scale factor of 2 each time. She says that if she created shape C, one side would have a length of 6cm.



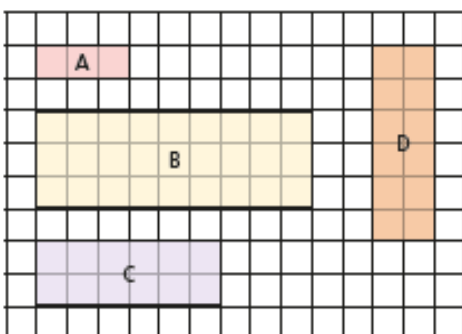
Do you agree? Explain your answer.



Not to scale

R

6 Complete the sentences.



Shape B is an enlargement, by a scale factor of , of shape A.

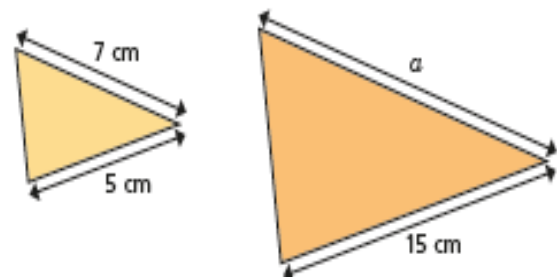
Shape C is an enlargement, by a scale factor of , of shape A.

Shape D is an enlargement, by a scale factor of , of shape A.

7

The two triangles are similar.

Find the length of a .



LO: To calculate the scale factor (silver)

1 True or false? Shape B has been increased by a scale factor of 2.5 to create shape A.

VF

2 Evelyn says she has enlarged her shape by a scale factor of 2.5. Shape B is her new shape.

1cm **A** 3cm **B**
1cm 3cm

Is she correct?

Not to scale

VF

3 Triangle B has been scaled from triangle A. Find the missing lengths.

2cm **A** 6cm
4cm

A. _____ cm **B** B. _____ cm
10cm

Not to scale

VF

4 Bobby has enlarged shape A to create shape B. He says if he created shape C using the same scale factor, one side would have a length of 8cm.

1cm **A** 4cm **B**

Do you agree? Explain your answer.

Not to scale

PS

5 When enlarged, the perimeter of the shape below increases to 49cm.

5cm **B** 2cm

What scale factor has the shape been increased by? Explain your answer.

Not to scale

R

6 The two triangles are similar. Find the area of the smaller triangle.

4 cm 24 cm 30 cm

area = cm²

7 These two children's toys are similar. Find the length marked y.

20 cm 18 cm 5 cm y

LO: To calculate the scale factor (gold)

1 True or false? Shape A has been increased by a scale factor of 2 to create shape B.

VF

2 Ashton says he has enlarged his shape by a scale factor of 3.5. Shape B is his new shape.

Is he correct?

Not to scale VF

3 Shape B has been scaled from shape A. Find the missing lengths.

Not to scale VF

4 Amanda has enlarged shape A to create shape B. She says if she created shape C using the same scale factor, one side would have a length of 7.2cm.

Do you agree? Explain your answer.

Not to scale PS

5 One side of this square is 4.2cm. When enlarged, the perimeter increases to 42cm.

What scale factor has the shape been increased by? Explain your answer.

Not to scale R

6 The rectangle is enlarged by a scale factor.

The perimeter of the enlarged rectangle is 64 m.

What is the scale factor of enlargement?

scale factor =

7 The diagram shows three similar triangles. Calculate the missing values.

$a =$
 $b =$
 $c =$
 $d =$