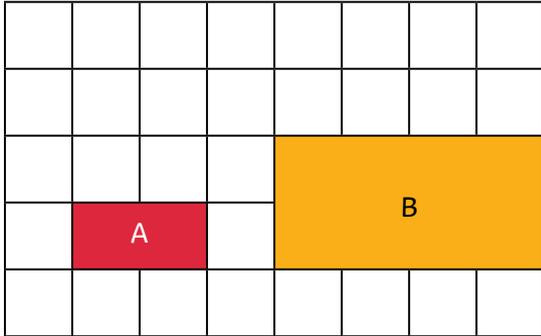


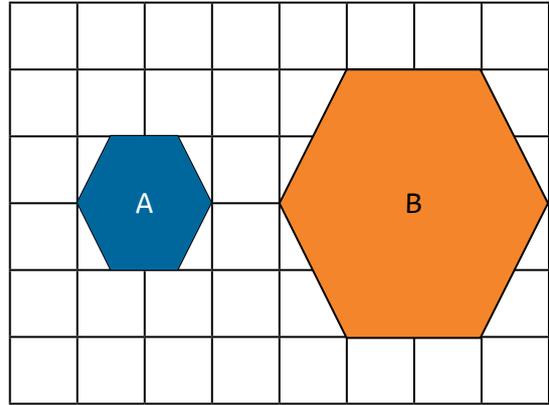


1) In each example, shape A has been enlarged by a different scale factor to create shape B. Write the scale factor enlargement of each shape.

a)



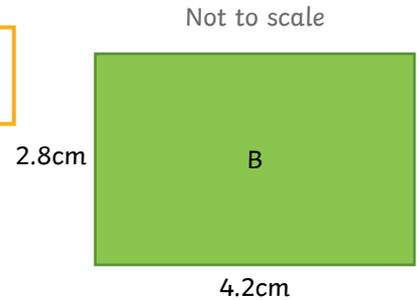
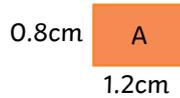
b)



2) Is Odion correct? Explain why.

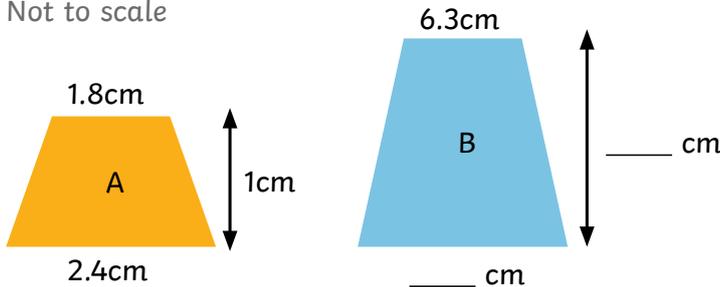


I have enlarged shape A by a scale factor of 3.5.



3) Shape B has been scaled from shape A. Find the missing side length and height.

Not to scale

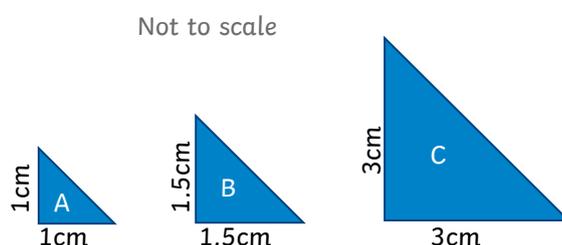




- 1) A rectangle has a perimeter of 8cm. An enlargement of this rectangle has a perimeter of 12cm. The length of the smaller rectangle is 3cm.
Draw both rectangles and describe the scale factor enlargement.

2)  Michael

I think that triangles B and C are similar to triangle A.



Do you agree with Michael? Use reasoning to explain your answer.

- 3) Square A is the original shape. Two friends discuss the possibility of completing a scale factor table, knowing that squares B and C are enlargement of square A.

 Jurgen

You cannot complete the table because you don't know the length of square B.

 Josie

It is possible because you know that square B has been enlarged by a scale factor of 7.

| Square | Length of Side | Scale Factor |
|--------|----------------|--------------|
| A | 7cm | |
| B | | 7 |
| C | 35cm | |

Which child is correct? Complete the missing boxes in the table to help you explain your answer.



1) Rectangle A has been enlarged to create rectangle B.

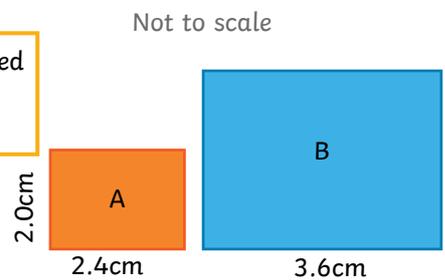
Use the following clues to identify the scale factor enlargement from rectangle A to rectangle B.

- The perimeter of rectangle A is 10cm.
- The length of rectangle A is 3cm.
- Shape B has an area of 54cm^2 .

Scale factor enlargement = _____

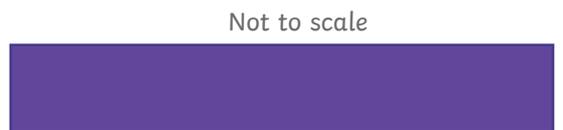


I have enlarged shape A to create shape B. If I used the same scale factor to enlarge shape B to create shape C, shape C would have a length of 8.1cm.



2) Do you agree with Raul? Use reasoning to explain your answer.

3) The area of this rectangle is 28cm^2 and the perimeter is 32cm. When enlarged, the length of the longest side increases to 35cm.



What scale factor has the rectangle been enlarged by? Use reasoning to justify your answer.

4) Enlarge this shape in three different ways, each time using a scale factor less than one whole.

