

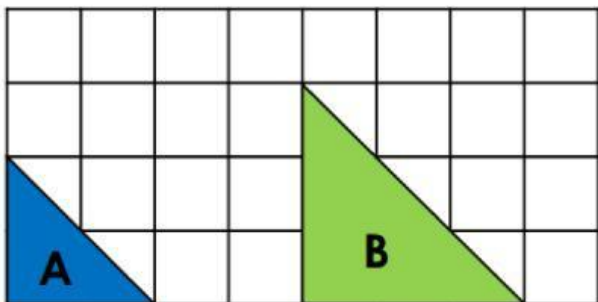


# Ratio and Proportion

## Scale Factors

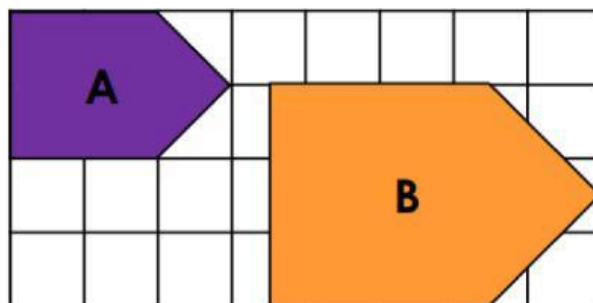
12a. True or false?

Shape A has been increased by a scale factor of 2 to create shape B.

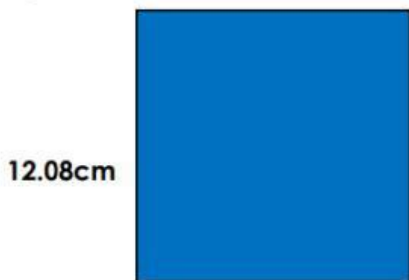


12b. True or false?

Shape A has been increased by a scale factor of 1.5 to create shape B.



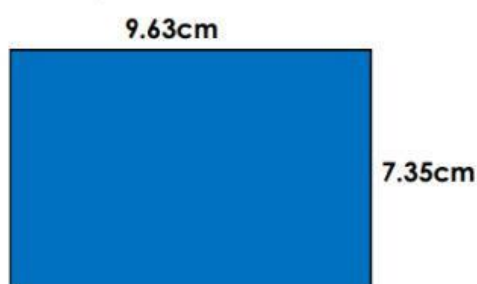
7a. This square has been enlarged by a scale factor of 4. Find the perimeter of the original shape.



Not to scale

PS

7b. This shape has been enlarged by a scale factor of 3. Find the perimeter of the original shape.



Not to scale

PS

8a. Ashleigh says,



If I enlarge the shape by a scale factor of 3.5, the new area will be  $112.7\text{cm}^2$ .



Is she correct? Explain your answer.



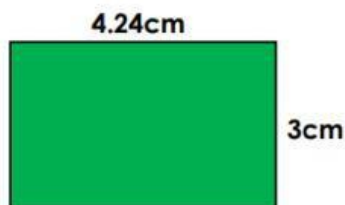
Not to scale

R

8b. Roberto says,



If I enlarge the shape by a scale factor of 2.5, the new area will be  $50.88\text{cm}^2$ .



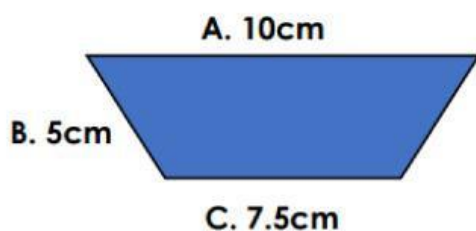
Is he correct? Explain your answer.



Not to scale

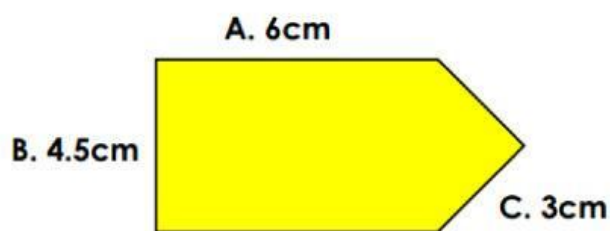
PS

9a. This shape was enlarged by a scale factor of 2.5.



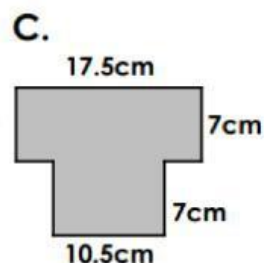
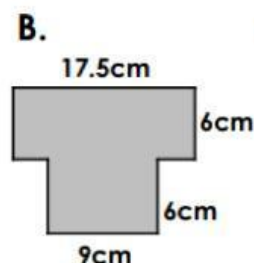
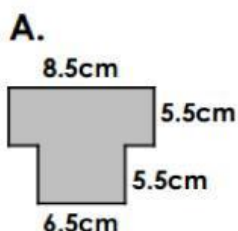
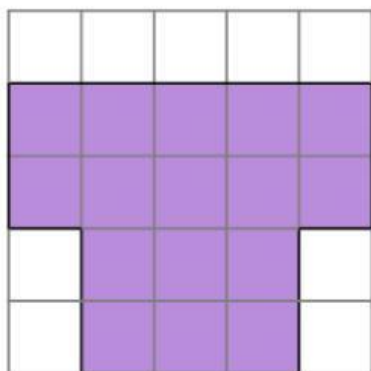
What were the measurements of the original shape?

9b. This shape was enlarged by a scale factor of 1.5.

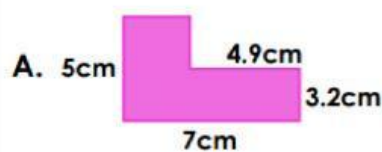


What were the measurements of the original triangle?

7. If the shape below (drawn on  $1\text{cm}^2$  paper) was enlarged by a scale factor of 3.5, what would its new measurements be? Tick the correct option.



9. Leo is enlarging shapes by different scale factors. He calculates the perimeter each time and records his results on the chart below.



|                      | scale factor<br>4 | scale factor<br>4.5 | scale factor<br>5.5 |
|----------------------|-------------------|---------------------|---------------------|
| Shape A<br>Perimeter | 94cm              | 108cm               | 132cm               |
| Shape B<br>Perimeter | 48cm              | 54.5cm              | 66cm                |

Identify and correct any errors.



not to scale

RPS  
HW/Ext