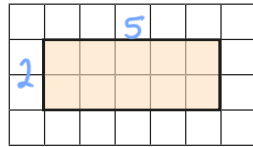
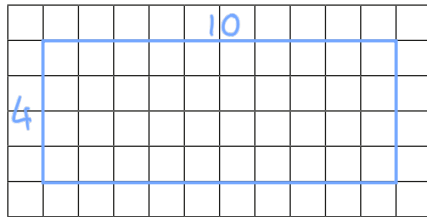


# Using scale factors

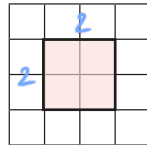
- 1 a) Here is a rectangle.



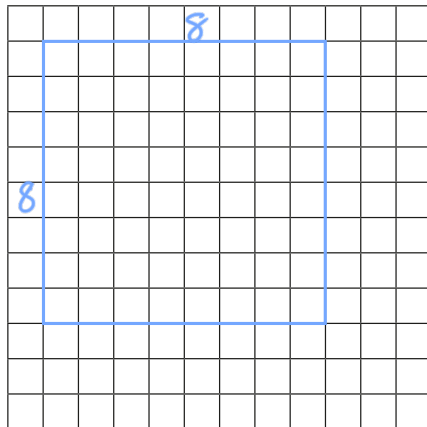
Draw another rectangle where each side is twice as big.



- b) Here is a square.



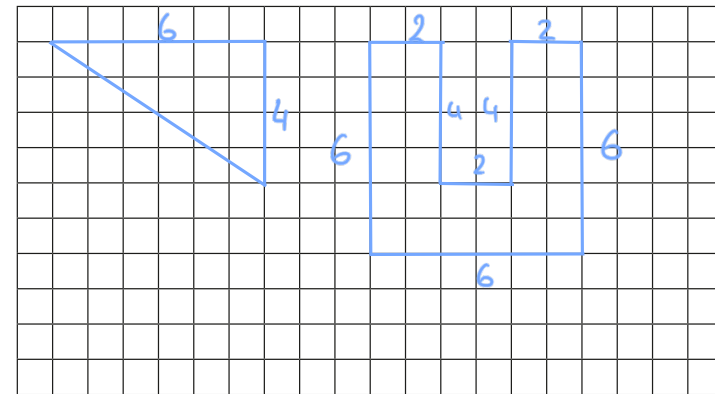
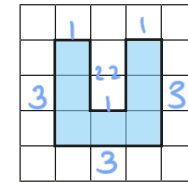
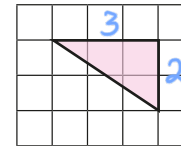
Draw another square where each side is 4 times as big.



- 2 a) Explain what it means for a shape to be enlarged by a scale factor of 2

All of the side lengths are multiplied by 2

- b) Enlarge the shapes by a scale factor of 2



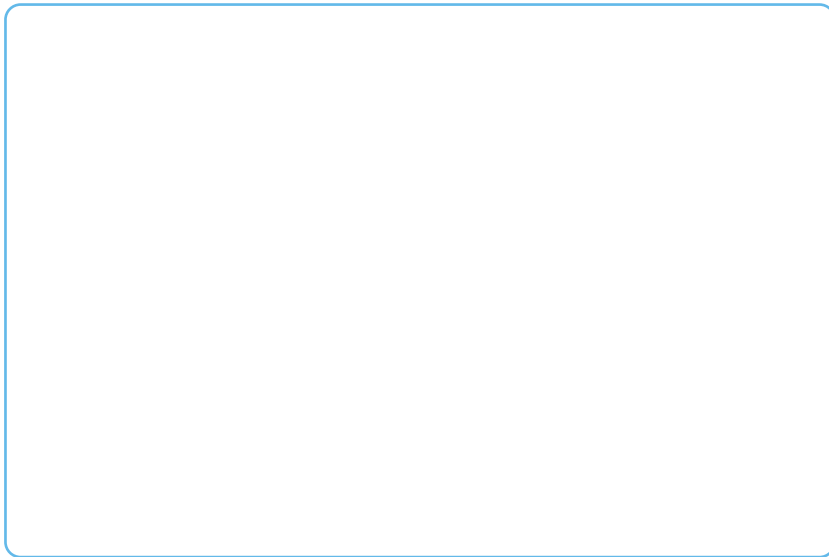
- 3 Complete the sentence.

A shape in which each side has tripled in size has been enlarged by a scale factor of 3

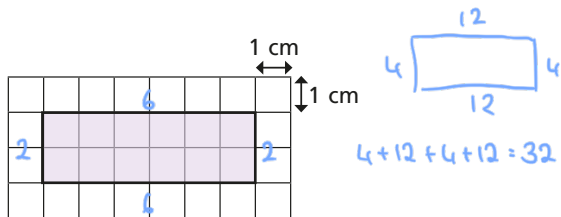
- 4 Here is a rectangle.



- a) Measure the side lengths of the rectangle and label them on the diagram.  
 b) Enlarge the rectangle by a scale factor of 3 and label the side lengths.

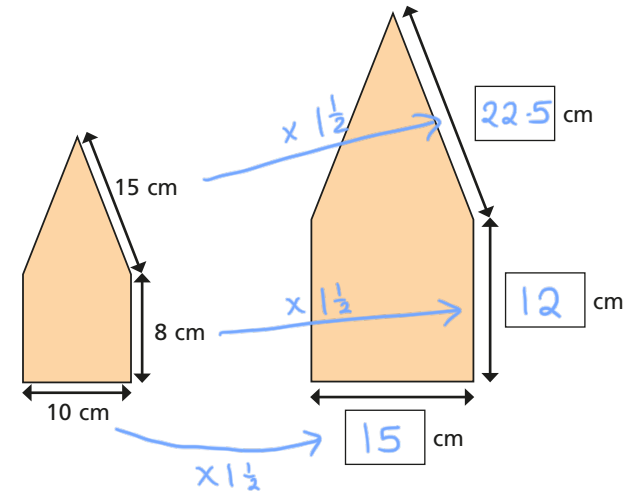


- 5 The sides of the rectangle are increased by a scale factor of 2  
 What is the perimeter of the new shape?

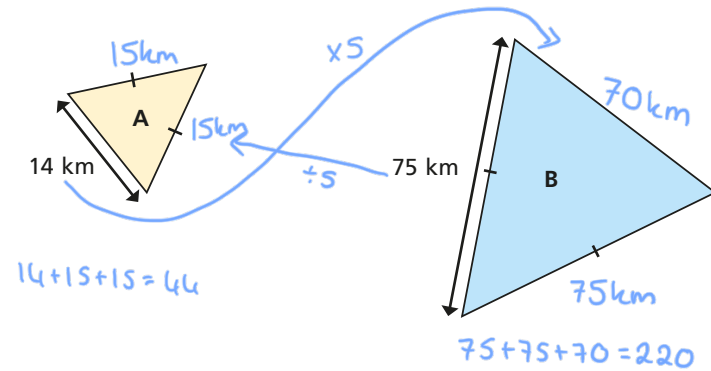


**32** cm

- 6 The shape has been enlarged by a scale factor of  $1\frac{1}{2}$   
 Fill in the dimensions of the new shape.



- 7 Triangle A has been enlarged by a scale factor of 5 to make triangle B.  
 Find the perimeter of each triangle.



perimeter of A = **44 km**      perimeter of B = **220 km**