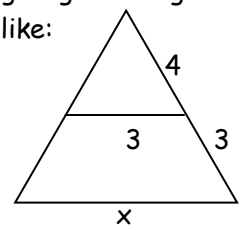
SIMILARITY AND ENLARGEMENT

MTH 4-16a
I have explored the relationships that exist between the sides, or sides and angles, in right-angled triangles and can select and use an appropriate strategy to solve related problems, interpreting my answer for the context.
MTH 4-17b
I can apply my understanding of the properties of similar figures to solve problems involving length and area.

Pupils should be able to:

- Draw scale drawings using a given scale factor
- Understand the mathematical concept of *similar* shapes.
- Identify similar shapes using ratios of sides.
- Use the concept of a scale factor k with similar shapes.

- Calculate missing lengths using the scale factor k.
- Solve problems like:



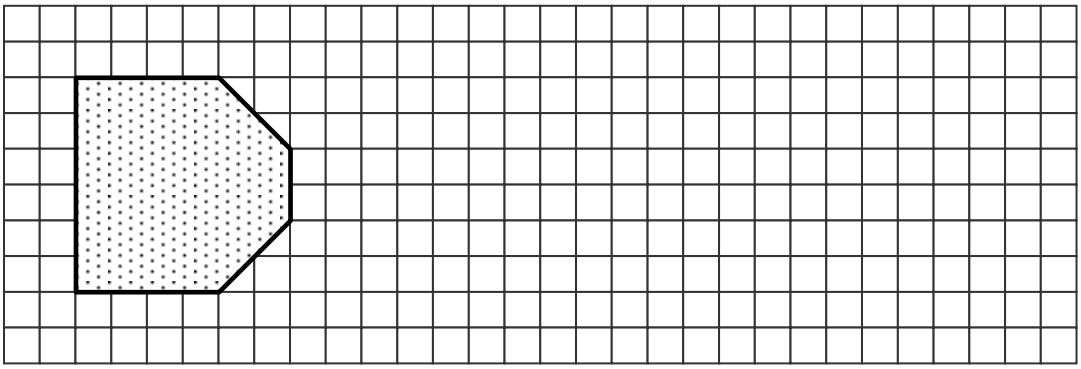
PUPILS SHOULD COMPLETE THE FOLLOWING EXERCISE AND ASSESS THEIR PROGRESS BY TICKING ONE OF THE OPTIONS FOR EACH TOPIC IN THE TABLE BELOW

	DEVELOPING	CONSOLIDATING	SECURE
Scale Drawings Question 1			
Understand concept of similar shapes Question 2			
Identify similar shapes Question 3			
Solve problems Questions 4 & 5			

mymaths lessons: library/Shape/Scale and Similarity/Similar Triangles

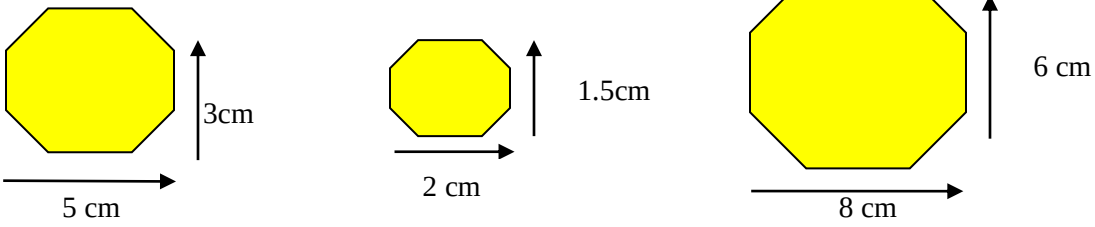
SELF EVALUATION EXERCISE DATE DUE_____

1. Draw an enlargement of this shape using a Scale Factor of 2
   Then draw a reduction of this shape using a Scale Factor of $\frac{1}{2}$

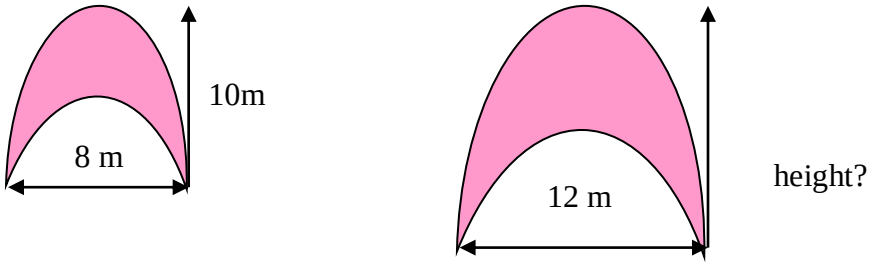


2. Draw two mathematically similar shapes.

3. One of these shapes is the odd one out (not similar) – which shape is it and why.



4. These two shapes are similar, find the scale factor and use this to calculate the height of the larger shape



5. These triangles are similar,
   calculate side x