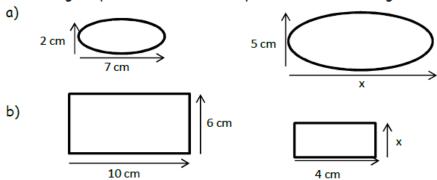
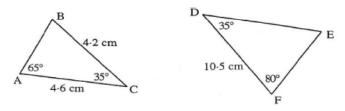
## Ex 24 Similar Figures

1. The following shapes are mathematically similar. Find the length of side x.



Study the two triangles shown.



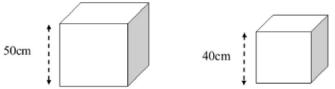
- a) Explain clearly why the two triangles must be similar.
- b) Use the fact that the two triangles are similar to calculate the length of the line DE.
- 3. Two perfume bottles are mathematically similar in shape.

  The smaller one is 6 centimetres high and holds 30 ml of perfume.

  The larger one is 9 cm high.

  What volume of perfume will the larger one hold?

4. The two boxes below are mathematically similar and both have to be wrapped with decorative paper.



If it requires 3.27  $m^2$  of paper to cover the large box, calculate the **area** of paper needed to cover the smaller box.