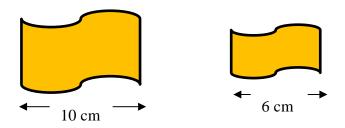
National 5 Homework 1 - Similarity

1. For two similar cylinders. The smaller cylinder has a height of 20 cm and a volume of 750 cm³ If the larger cylinder has a height of 26 cm, calculate the volume of the larger cylinder.

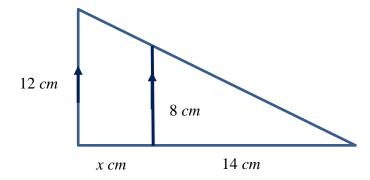


2. The two shapes below are mathematically similar.



The width of the large shape is 10 cm whilst the smaller shape has a width of 6 cm. Given that the area of the larger shape is 30 cm², find the area of the smaller shape.

3. Calculate the length of x



4. A cinema sells two sizes of popcorn.

The larger box has a a volume of 400 cm³ and a height of 8 cm.

The smaller box has a volume of 180 cm³ and a height of 6 cm.

Are these boxes of popcorn mathematically similar?

