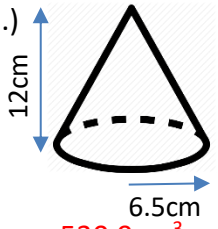
Answers

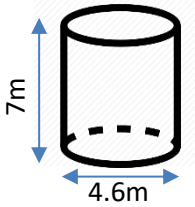
1. Calculate the volume of each shape:

a.)



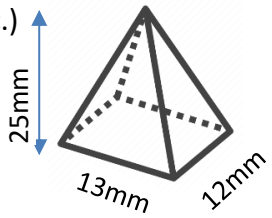
530.9cm^3

b.)



116.3m^3

c.)



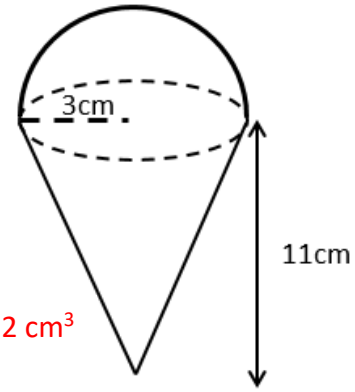
1300mm^3

d.)

1150.3m^3

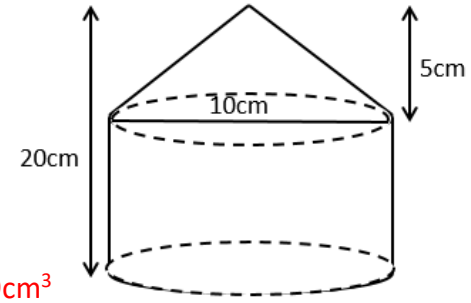
2. Calculate the volume of each compound shape:

a.)



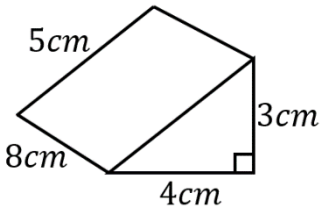
V = 160.2 cm^3

b.)



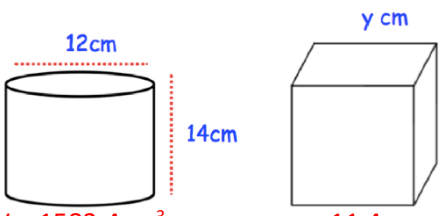
V = 1309cm^3

3. A baker wants to produce a triangular prism out of marzipan. They have $50cm^3$ of marzipan; can they make the prism?



V = 48 cm^3
Since 48 < 50 there is enough marzipan to make the prism

13. A cylinder and a cube have the same volume. Find the length of y.



V = 1583.4cm^3

y = 11.4 cm

4. A pharmaceutical company makes vitamin pills in the shape of spheres of radius 0·5cm.

a) Calculate the volume of one pill. Give your answer correct to 2 significant figures.

V = 0.52 cm^3 (2 sf)

The company decides to change the shape of each pill to a cylinder.

b) The new pill has the same volume as the original and its diameter is 1·4cm. Calculate the height of the new pill.

h = 0.34cm (2 sf)