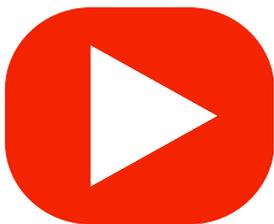


# Volume of a Prism

Video 356 on [www.corbettmaths.com](http://www.corbettmaths.com)

Examples



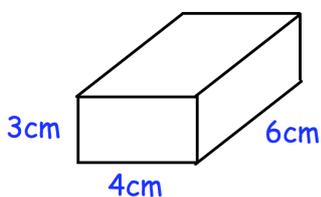
Workout

Click here

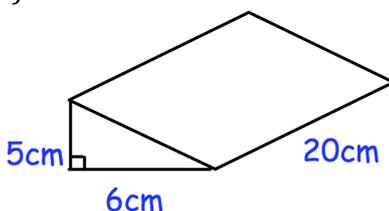
Scan here

Question 1: Calculate the volume of each prism below

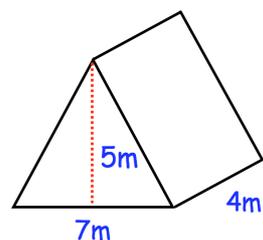
(a)



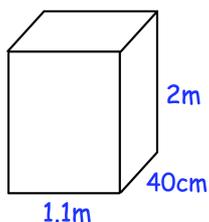
(b)



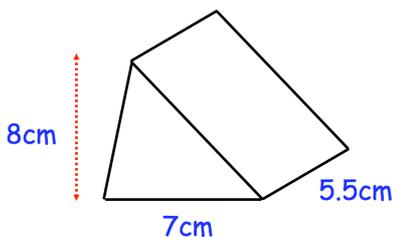
(c)



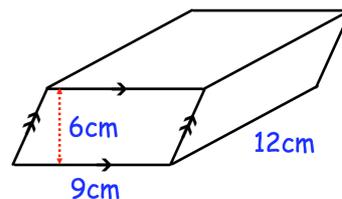
(d)



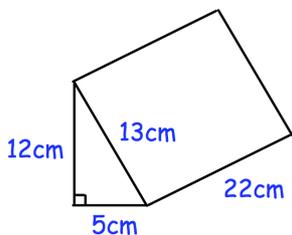
(e)



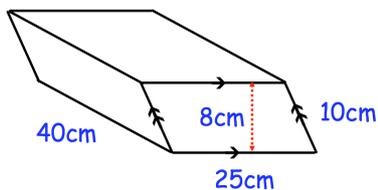
(f)



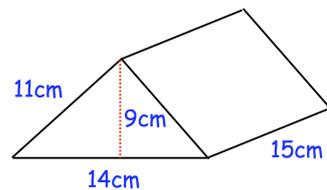
(g)



(h)

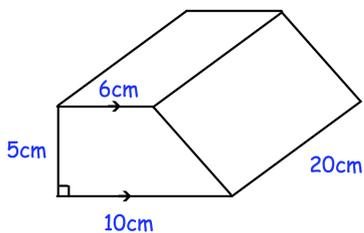


(i)

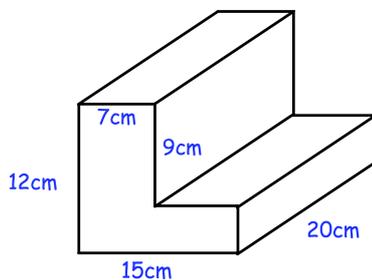


Question 2: Calculate the volume of each prism below

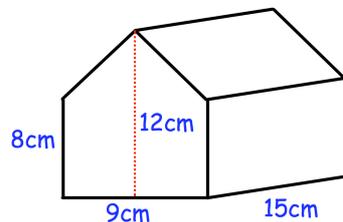
(a)



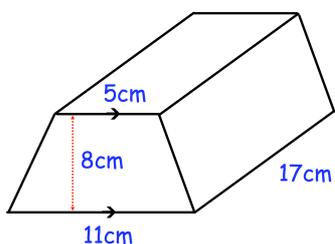
(b)



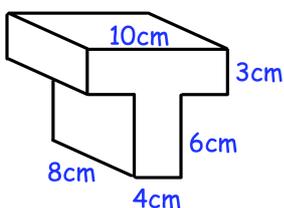
(c)



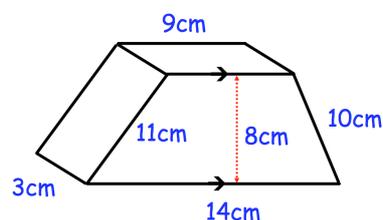
(d)



(e)



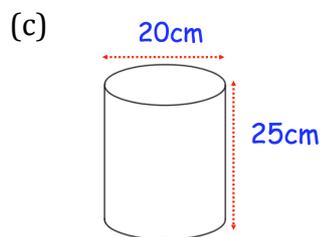
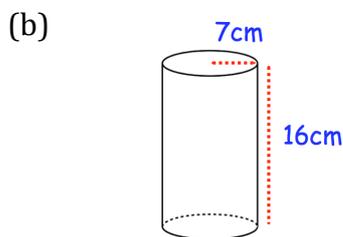
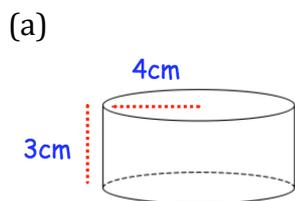
(f)



## Volume of a Prism

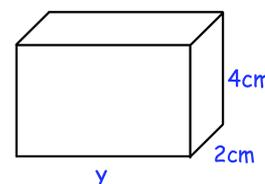
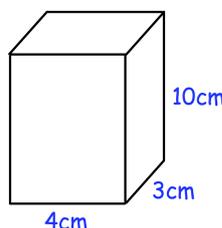
Video 356 on [www.corbettmaths.com](http://www.corbettmaths.com)

Question 3: Calculate the volume of each cylinder below

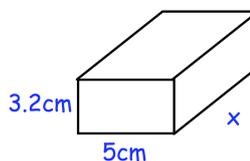
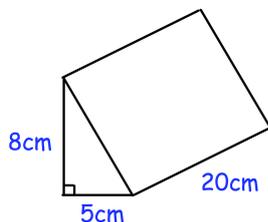


### Apply

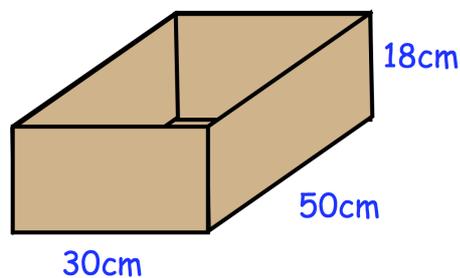
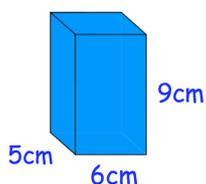
Question 1: Cillian makes two cuboids out of clay. Both cuboids have the same volume. Find  $y$



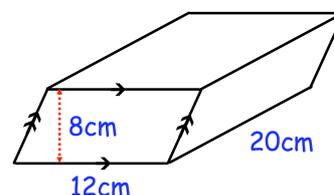
Question 2: The cuboid and the triangular prism have the same volume. Find  $x$ .



Question 3: Boxes of coffee are placed into a crate. Each box of coffee is a cuboid and the crate is also a cuboid. How many boxes of coffee fit into the crate?



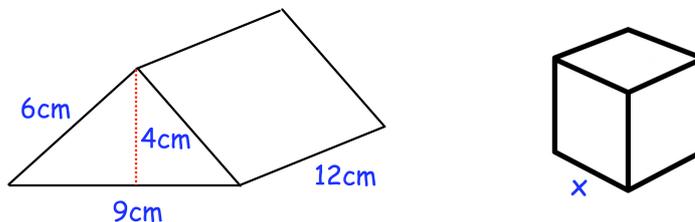
Question 4: James wants to fill an empty flowerpot with soil. He has 2 litres of soil. Given  $1 \text{ litre} = 1000\text{cm}^3$ . Does James have enough soil to fill the flowerpot?



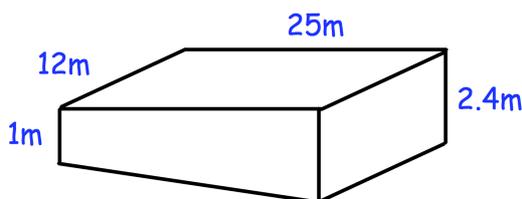
## Volume of a Prism

Video 356 on [www.corbettmaths.com](http://www.corbettmaths.com)

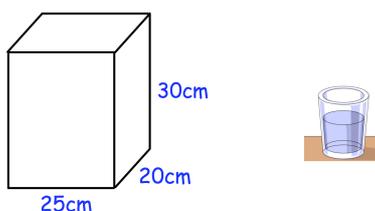
Question 5: The solid triangular prism shown below is made from metal. The prism is melted down and the metal is used to create a solid cube. Find the side length of the cube.



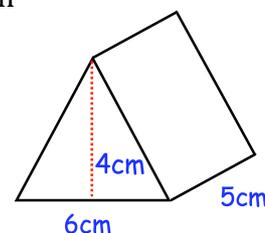
Question 6: The swimming pool in a leisure centre is shown below. The length of the swimming pool is 25m and the width is 12m. The depth of the shallow end is 1m and the depth of the deep end is 2.4m. Given  $1\text{m}^3 = 1000$  litres. Work out how much water, in litres, the swimming pool holds.



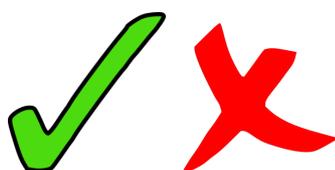
Question 7: A fish tank is  $\frac{1}{4}$  full of water. Harry pours a 400ml glass of water into the fish tank. Given  $1\text{ml} = 1\text{cm}^3$ . What will the depth of the water of the fish tank then be?



Question 8: A solid glass paperweight is in the shape of a triangular prism. The density of the glass is  $2.4\text{g/cm}^3$ . Work out the mass of the paperweight.



Answers



Click here



Scan here