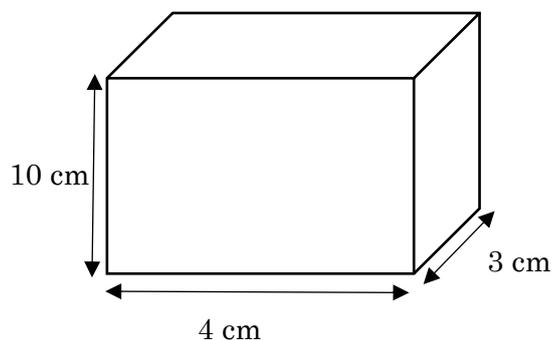




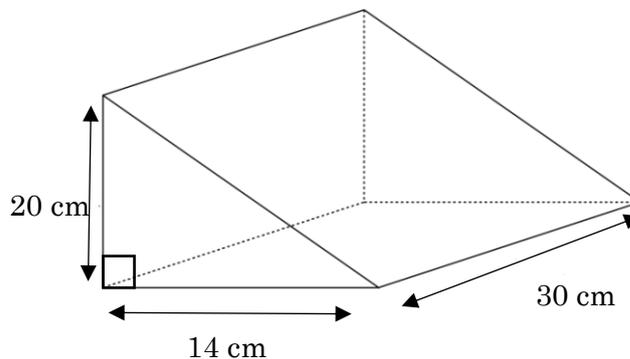
Volume of a Prism Exam Practice

Q1. Work out the volume of the cuboid shown, stating the units.



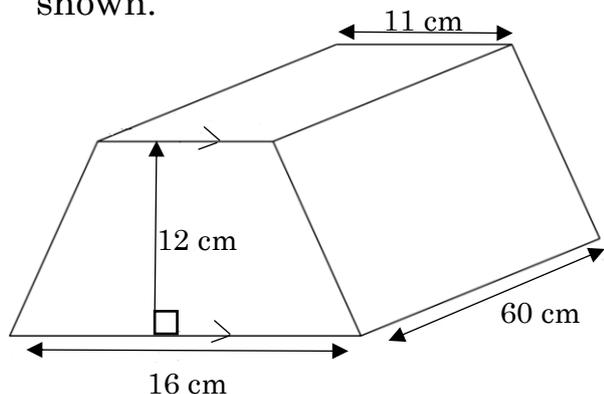
(3 marks)

Q2. Work out the volume of the shape shown, stating the units.



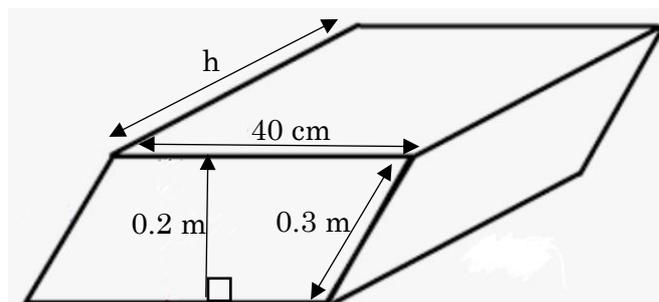
(3 marks)

Q3. Work out the volume of the prism shown.



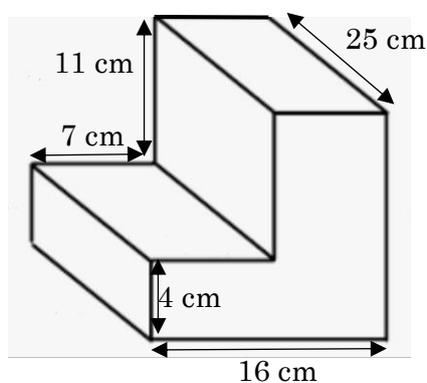
(3 marks)

Q4. The prism below, which has a parallelogram cross-section, has volume 60000 cm^3 . Find the length h .



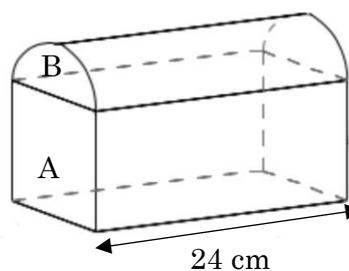
(4 marks)

Q5. Find the volume of the L-shaped prism below.



(4 marks)

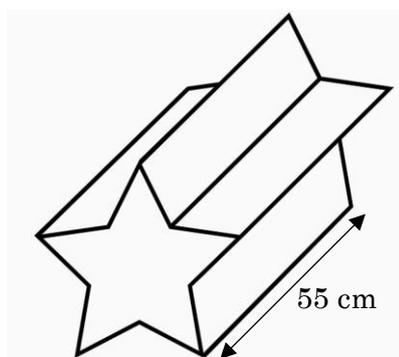
Q6. The prism below has cross-section made up of a square, and a semi-circle. Shape A has area 70 cm^2 . Find the volume of the prism to 1 d.p.



(5 marks)

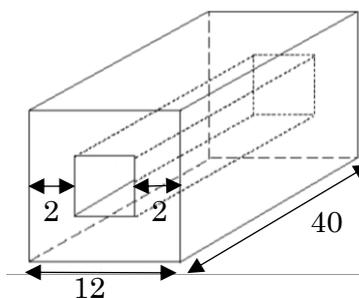


Q7. The cross-section of the prism is 780 cm^2 . Work out the volume of the prism.



(3 marks)

Q8. Below is a wooden cuboid. The cross-section is square and has a prism with square cross-section removed from the centre as shown. Find the volume of the shape.

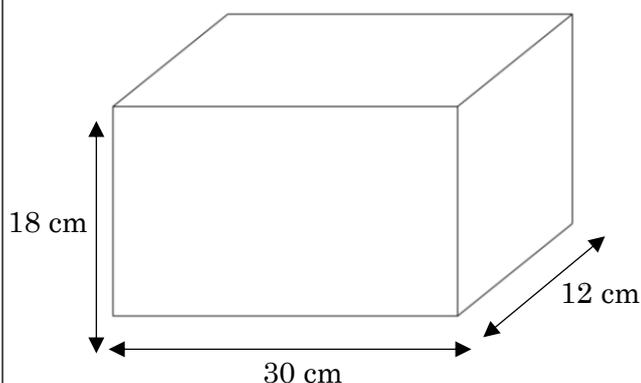


(4 marks)

Q9. A sealed tank, as shown below, is in the shape of a cuboid. It is filled with water to a height of 8 cm. During storage, the tank is then turned and stood on its side.

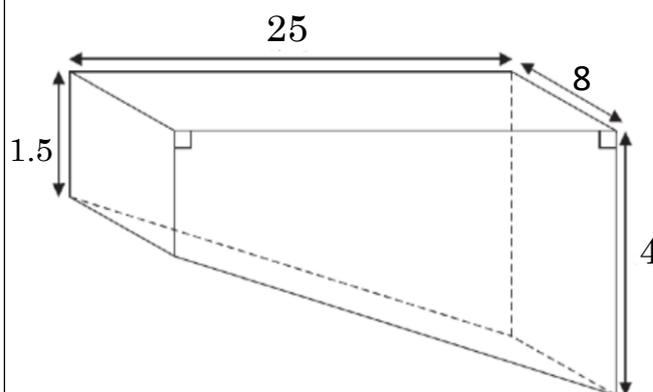
a) Work out the new height of the water in the tank.

(3 marks)



b) Another tank like this one is completely filled with water. There is a small hole in the bottom of this tank, through which water leaks out at a rate of $7 \text{ cm}^3/\text{s}$. If water is poured in at a rate of $4 \text{ cm}^3/\text{s}$, work out how long it will take for the tank to empty. (2 marks)

Q10. Below is a picture of a swimming pool. All lengths are given in metres.



The pool is filled to 95% of its full capacity. Liquid chlorine is then added to the water as a disinfectant. If 2 cm^3 is needed per m^3 , work out the volume of chlorine required to disinfect the pool.

(6 marks)