3D Shapes

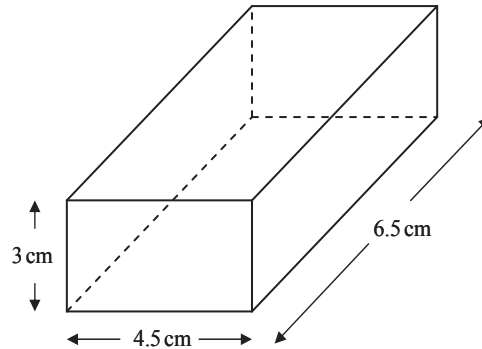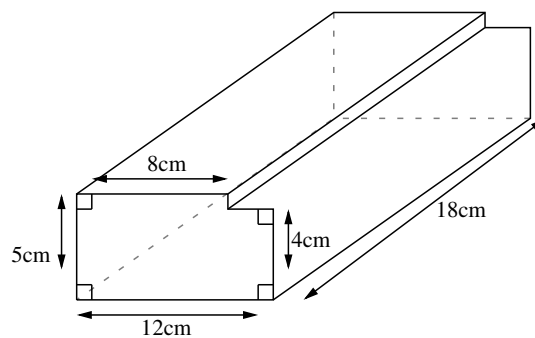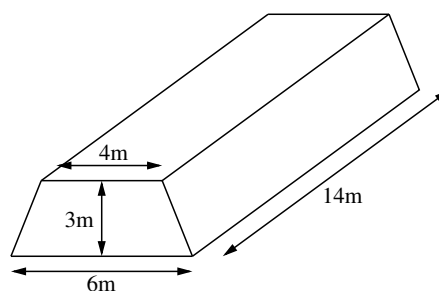**i. What is the volume of the following cuboid?**

ii. The diagram shows a prism. Work out the volume of the prism.

iii. The diagram below shows a water tank. The cross-section of the tank is a trapezium.

The lengths of the parallel sides of the trapezium are 6m and 4m. The distance between the parallel sides of the trapezium is 3m. The length of the tank is 14m.

- Work out the volume of the tank.

The tank is initially empty. Water then flows into the tank. After one minute there are 600 litres of water in the tank. Assume that water continues to flow into the tank at this rate.

- Work out how many more minutes it takes for the tank to be 85% full of oil. ($1 \text{ m}^3 = 1000$ litres)