**Q1**. Find the volume of the solid shapes below.

45 cm

8 cm

10 cm

9 cm

11 m

9 m

6 m

19 cm

(b) Calculate the Surface area of triangular prism above.

Q2. The end of the wooden mouldings used to make a photograph frame is in the shape of a quarter–circle.

If a total length of 70 cm of mouldings is required for a frame, find the volume of wood used.

1.5 cm

Q3. A rectangular tank is 1⋅5 m long, 30 cm broad and 20 cm high.

How many **litres** of water can it hold?

(hint - look into the conversion between $cm^{3}and ml$)

**Q4**. Miss Carstairs is going to cover the **curved surface** of a cylindrical umbrella stand with

waterproof fabric. The radius is 10 cm and the height is 60 cm.

Calculate the area of material required, to the nearest square centimetre.

60 cm

10 cm

Q5. (a) A box of chocolates is in the shape of a triangular

9 cm

10 cm

20 cm

prism. Calculate its volume.

**(b**) The box contains 63 chocolates each with a volume of 4 cm3.

 What percentage of the volume of the box is unused?

**Q6**. A cylindrical tin holds a litre of liquid (V = 1000$cm^{3}$) and has a diameter of 7 cm. Calculate its height.