

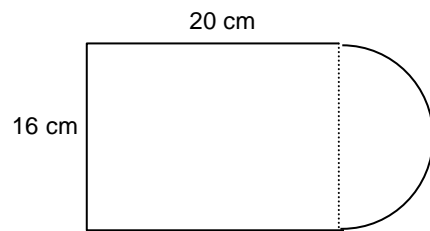
# Perimeter, Area and Volume Review Sheet 1

Answer on the supplied lined paper. You do NOT need to copy the diagrams. This review sheet **will be marked and will count towards your result for this unit.** You may work in groups, but you must submit individual solutions. Marks will be awarded for both **SETTING OUT** and for **CORRECT ANSWERS**.

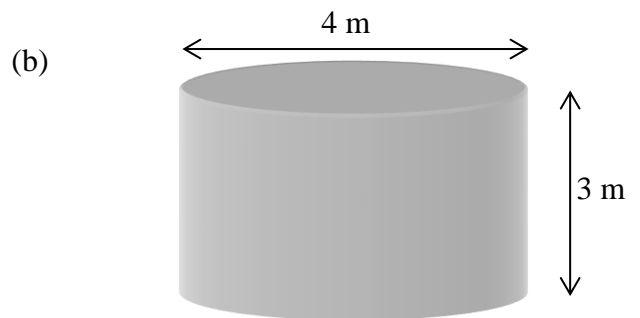
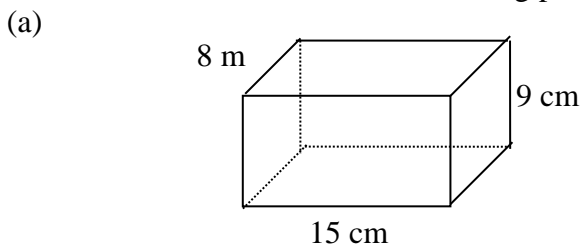
1. **Copy and complete** the following **perimeter, area** and **volume** rules:
- |                            |                             |
|----------------------------|-----------------------------|
| Perimeter of any polygon = | Circumference of a circle = |
| Area of a square =         | Area of a rectangle =       |
| Area of a parallelogram =  | Area of a trapezoid =       |
| Area of a triangle =       | Area of a circle =          |
| Volume of a prism =        | Volume of a cone =          |
| Volume of a pyramid =      |                             |

2. (a) 12.1 m = \_\_\_\_\_ cm      (b) 234 mm = \_\_\_\_\_ cm      (c) 3.2 km = \_\_\_\_\_ cm

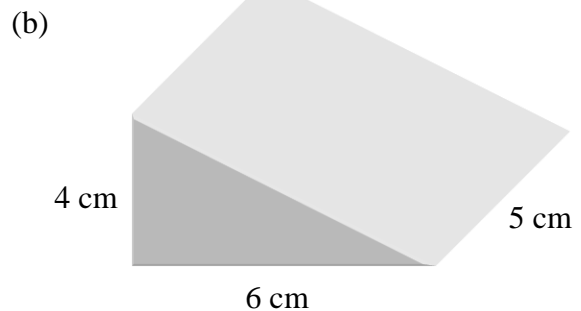
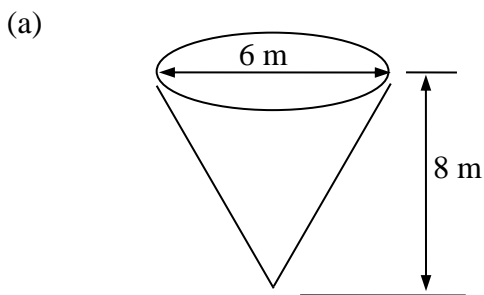
3. Find the **perimeter** of this shape.



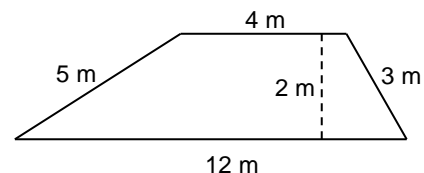
4. Find the **volume** of the following prisms.



5. Find the **volume** of the following shapes:

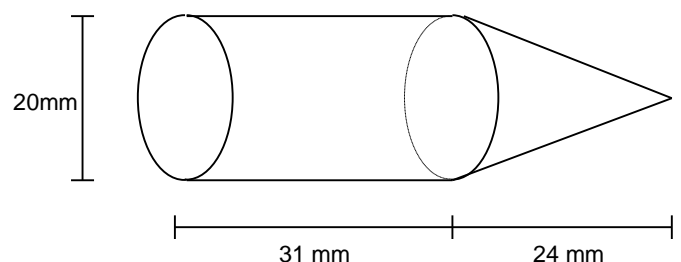


6. Find the **area** of this trapezium.



## Challenge!

7. Find the volume of this metal bar.



## Perimeter, Area and Volume Review Sheet 2

Answer in your notebooks. Show proper setting out. Draw the diagram if it isn't given. Include dimensions on your diagram.

1. Copy and complete the following **perimeter**, **area** and **volume** rules:

Perimeter of any polygon =

Area of a square =

Area of a parallelogram =

Area of a triangle =

Volume of a prism =

Volume of a pyramid =

Circumference of a circle =

Area of a rectangle =

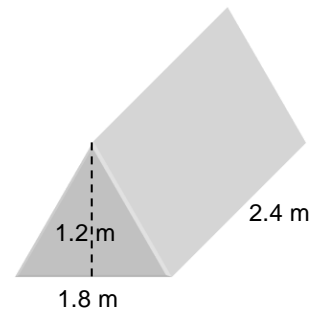
Area of a trapezoid =

Area of a circle =

Volume of a cone =

2. The water in a rectangular swimming pool is 1.5 metres deep. The length of the pool is 10 metres. The width of the pool is 6 metres.
- Draw the diagram. Include dimensions.
  - Find the volume of water in cubic metres.
  - Find the volume in litres ( $1 \text{ m}^3 = 1000 \text{ L}$ )

3. The diagram alongside is a camping tent.
- Copy the diagram. Include dimensions.
  - Find the volume of air inside the tent.



4. A cylindrical water tank has a diameter of 3 metres and a height of 1.8 metres. The tank is full.
- Draw the diagram. Include dimensions.
  - Find the volume of water in cubic metres.
  - Find the volume in litres ( $1 \text{ m}^3 = 1000 \text{ L}$ )

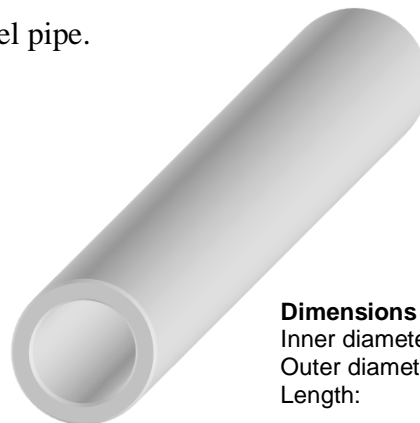
5. The Great Pyramid of Giza in Egypt is a square-based pyramid. The square base has a side length of 230 m. The height of the pyramid is 147 metres.
- Draw a diagram of the Great Pyramid. Include dimensions.
  - Find the volume of the pyramid.



6. A can of soup has a diameter of 12 cm and a height of 12 cm.
- Draw the diagram. Include dimensions.
  - Find the volume of soup, in  $\text{cm}^3$ .
  - If soup weighs 1.1 grams per  $\text{cm}^3$ , find the weight of the soup in grams.

### Challenge Question!

7. Find the volume of steel needed to make this steel pipe.



#### Dimensions

Inner diameter: 50 cm

Outer diameter: 60 cm

Length: 4 m