

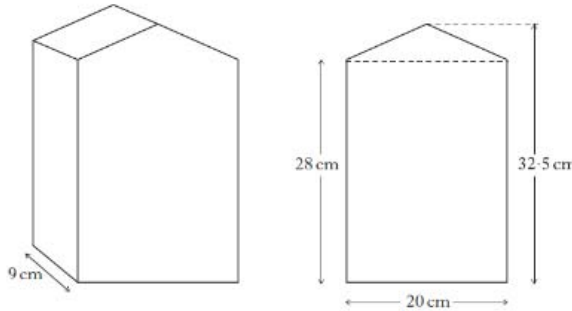
Credit Revision - Volume

2012 - Paper 2

3. A container for oil is in the shape of a prism.

The width of the container is 9 centimetres.

The uniform cross section of the container consists of a rectangle and a triangle with dimensions as shown.



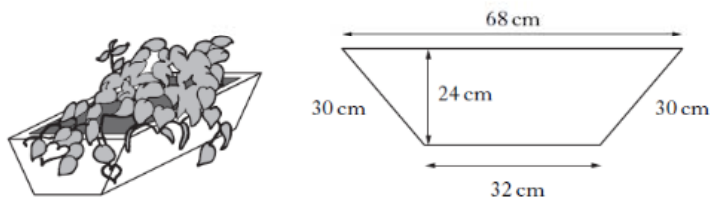
4KU

Calculate the volume of the container, **correct to the nearest litre.**

2011 - Paper 2

9. A flower planter is in the shape of a prism.

The cross-section is a trapezium with dimensions as shown.



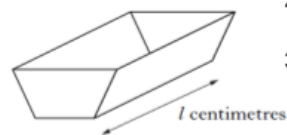
- (a) Calculate the area of the cross-section of the planter.

2KU

- (b) The volume of the planter is 156 litres.

3RE

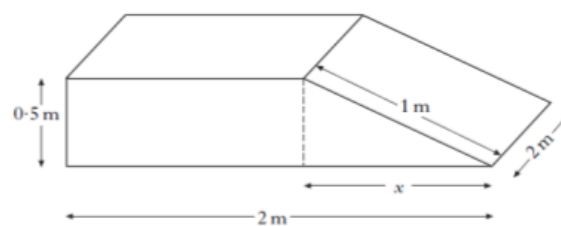
Calculate the length, l centimetres, of the planter.



2010 - Paper 2

5. A concrete ramp is to be built.

The ramp is in the shape of a cuboid and a triangular prism with dimensions as shown.



- (a) Calculate the value of x .

2RE

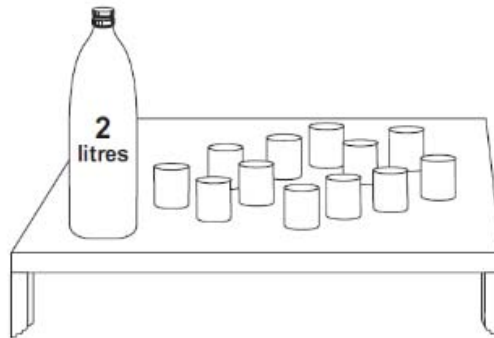
- (b) Calculate the volume of concrete required to build the ramp.

3RE

2009 - Paper 2

2. Lemonade is to be poured from a 2 litre bottle into glasses.

Each glass is in the shape of a cylinder of radius 3 centimetres and height 8 centimetres.



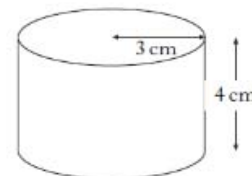
How many full glasses can be poured from the bottle?

4RE

2007 - Paper 2

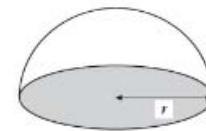
12. (a) A cylindrical paperweight of radius 3 centimetres and height 4 centimetres is filled with sand.

Calculate the volume of sand in the paperweight.



2KU

- (b) Another paperweight, in the shape of a hemisphere, is filled with sand.



It contains the same volume of sand as the first paperweight.

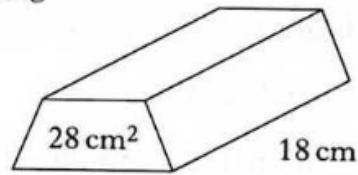
Calculate the radius of the hemisphere.

[The volume of a hemisphere with radius r is given by the formula, $V = \frac{2}{3}\pi r^3$].

3RE

2006 - Paper 2

7. (a) A block of copper 18 centimetres long is prism shaped as shown.

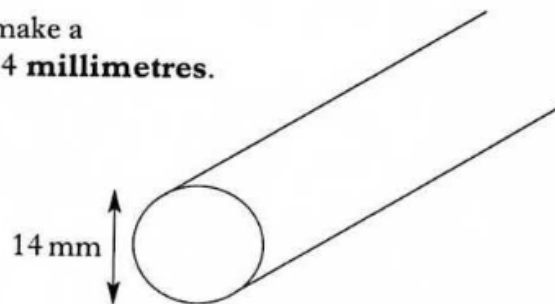


The area of its cross section is 28 square centimetres.

1KU

Find the volume of the block.

- (b) The block is melted down to make a cylindrical cable of diameter 14 millimetres.

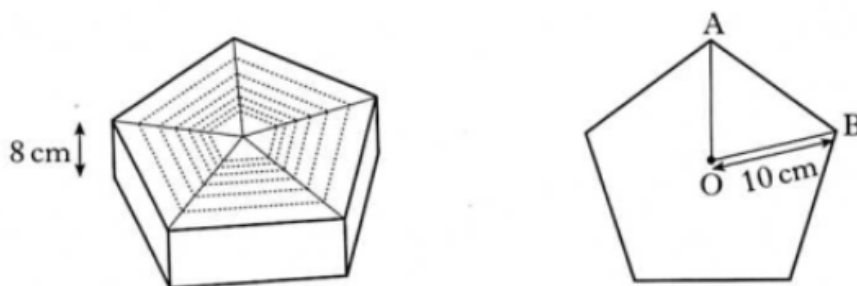


4RE

Calculate the length of the cable.

2004 - Paper 2

9. A gift box, 8 centimetres high, is prism shaped.



The uniform cross-section is a regular pentagon.

Each vertex of the pentagon is 10 centimetres from the centre O.

5KU

Calculate the volume of the box.