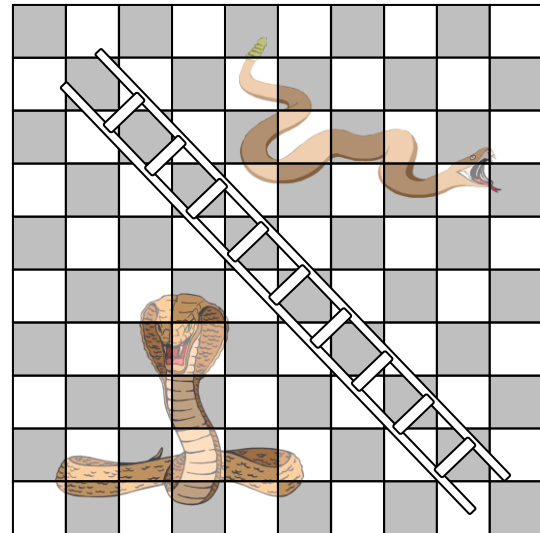


National 5 Homework – Relationships

APPLYING the THEOREM of PYTHAGORAS

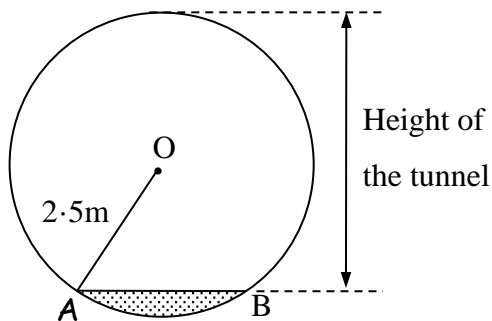
1. A square snakes & ladders board has 100 squares and a diagonal of length 35 cm.

Find the length of side of one of the



(4)

2.



The figure shows the cross section of a tunnel with a horizontal floor AB which is 2.4 metres wide.

The radius OA of the cross section is 2.5 metres.

(4)

Find the height of the tunnel.

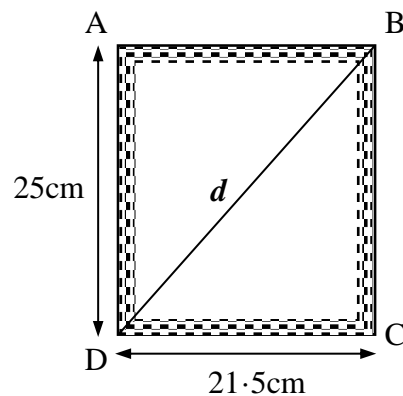
3. Calum is making a picture frame, ABCD .

It is 25 cm high and 21.5 cm wide.

To check whether the frame is rectangular, he measures the diagonal, d .

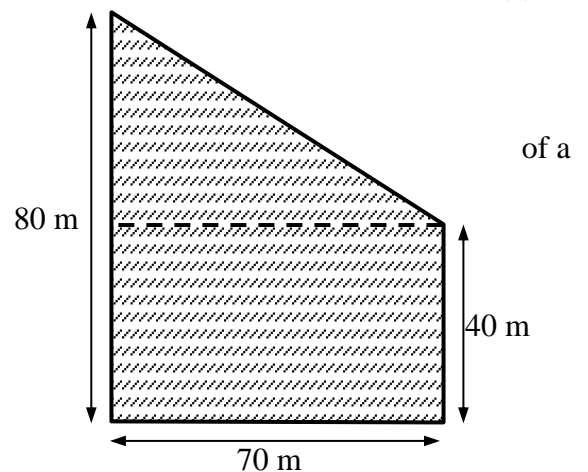
It is 31.5 cm long.

Is the frame rectangular?



(4)

4. Calculate the perimeter of this field, which is made up of rectangle and a right angled triangle.



16 marks