

Pythagoras Past Paper Questions



Q1.

GHJ is a right-angled triangle.

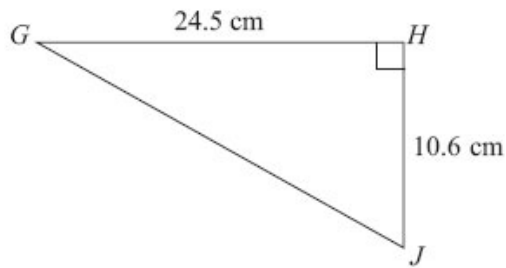


Diagram **NOT**
accurately drawn

Calculate the length of GJ .

Give your answer correct to one decimal place.

.....

(Total for Question is 3 marks)

Q2.

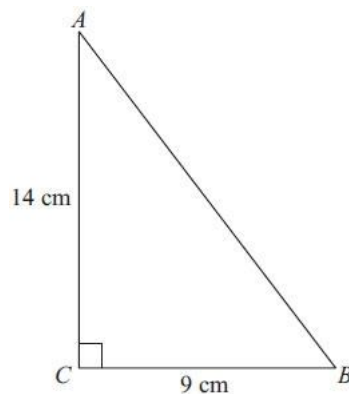


Diagram **NOT**
accurately drawn

Calculate the length of AB .

Give your answer correct to 1 decimal place.

.....

(Total for Question is 3 marks)



Q3.

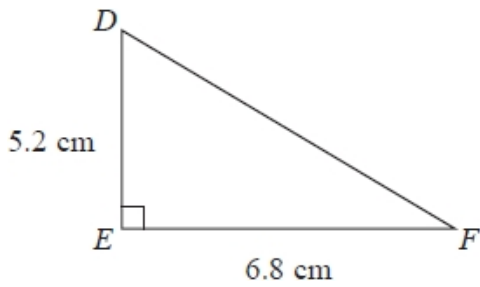


Diagram NOT accurately drawn

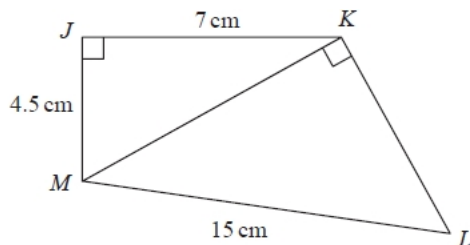
DEF is a right-angled triangle.

Work out the length of DF .
Give your answer correct to 2 decimal places.

.....cm

(Total for question = 3 marks)

Q4.



The diagram shows a quadrilateral $JKLM$.

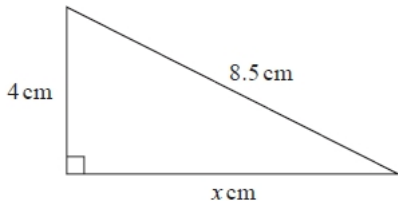
Work out the size of angle KLM .
Give your answer correct to 3 significant figures.

.....°

(Total for question = 4 marks)



Q5.



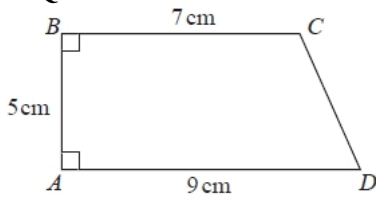
Here is a right-angled triangle.

Work out the value of x .

$x = \dots\dots\dots$

(Total for question = 2 marks)

Q6.



$ABCD$ is a trapezium.

A square has the same perimeter as this trapezium.

Work out the area of the square.

Give your answer correct to 3 significant figures.

$\dots\dots\dots \text{ cm}^2$

(Total for question is 5 marks)



Q7.

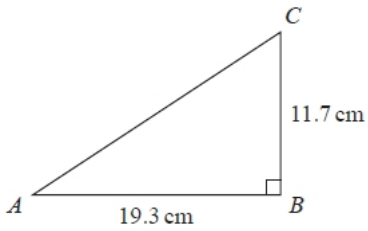


Diagram NOT
accurately drawn

ABC is a right-angled triangle.

Calculate the length of AC .
Give your answer correct to 3 significant figures.

..... cm

(Total for question = 3 marks)

Q8.

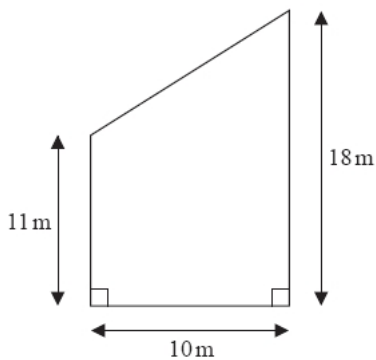


Diagram NOT
accurately drawn

* Here is part of a field.

This part of the field is in the shape of a trapezium.
A farmer wants to put a fence all the way around the
edge of this part of the field.

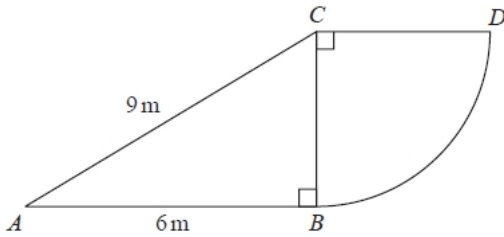
The farmer has 50m of fence.

Does he have enough fence?
You must show all your working.

(Total for question = 5 marks)



Q9.



The diagram shows a right-angled triangle and a quarter circle.

The right-angled triangle ABC has angle $ABC = 90^\circ$

The quarter circle has centre C and radius CB .

Work out the area of the quarter circle.

Give your answer correct to 3 significant figures.

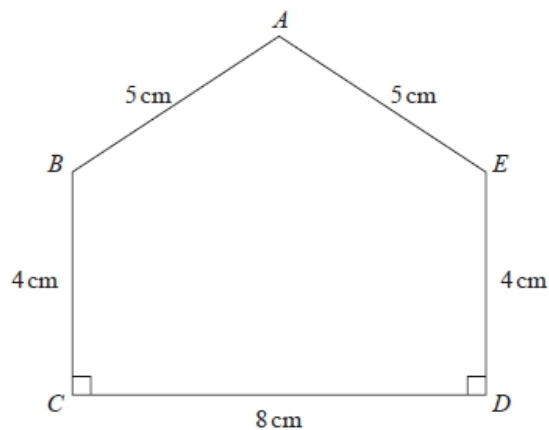
You must show all your working.

..... m²

(Total for question = 4 marks)

Q10.

$ABCDE$ is a pentagon.



Work out the area of $ABCDE$.

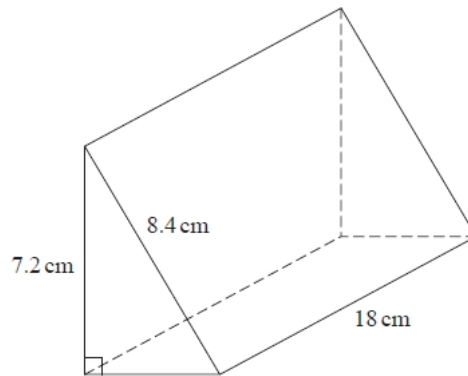
..... cm²

(Total for question = 5 marks)



Q11.

Here is a triangular prism.



Work out the volume of the prism.

Give your answer correct to 3 significant figures.

..... cm³

(Total for question = 5 marks)