Name: _____

GCSE (1 – 9)

Pythagoras

Instructions

• Use **black** ink or ball-point pen.
• Answer all Questions.
• Answer the Questions in the spaces provided
– *there may be more space than you need.*
• Diagrams are **NOT** accurately drawn, unless otherwise indicated.
• You must **show all your working out.**

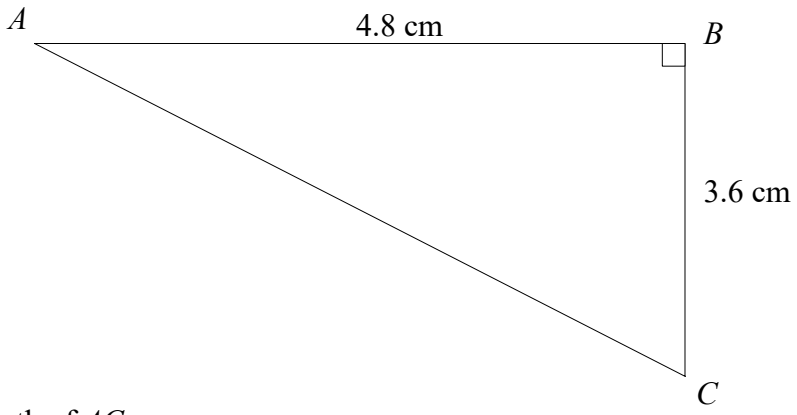
Information

• The marks for each Question are shown in brackets
– *use this as a guide as to how much time to spend on each Question.*

Advice

• Read each Question carefully before you start to answer it.
• Keep an eye on the time.
• Try to answer every Question.
• Check your answers if you have time at the end

1

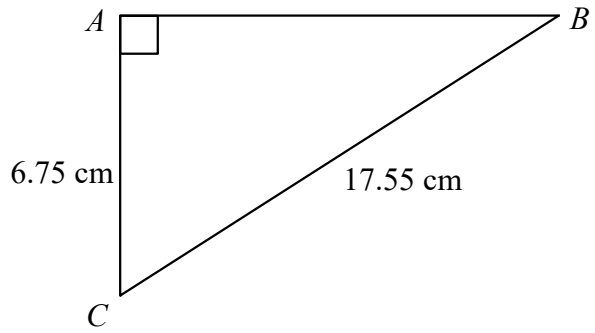


Calculate the length of AC.

….....cm

(Total for question 1 is 3 marks)

2

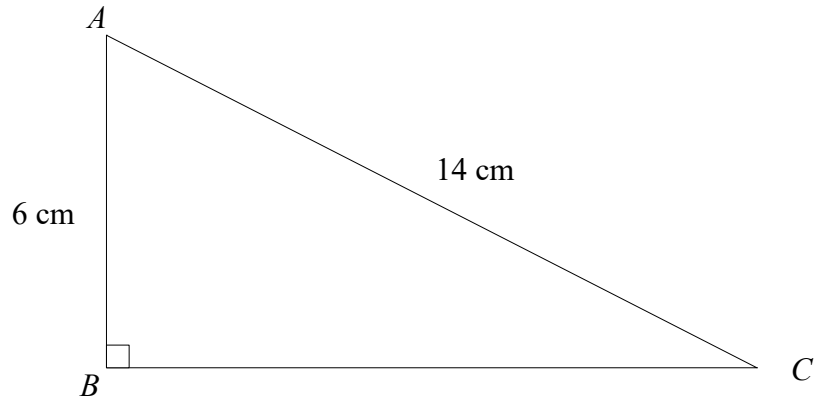


Calculate the length of AB.

….....cm

(Total for question 2 is 3 marks)

3

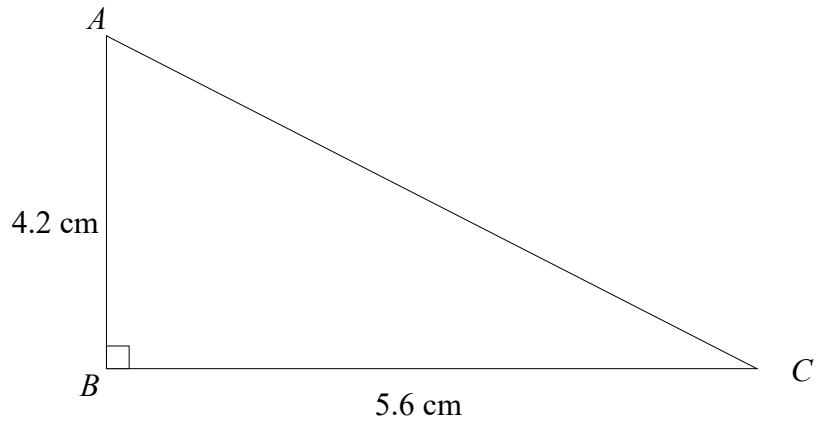


Calculate the length of BC.
Give your answer to 1 decimal place.

….....cm

(Total for question 3 is 3 marks)

4

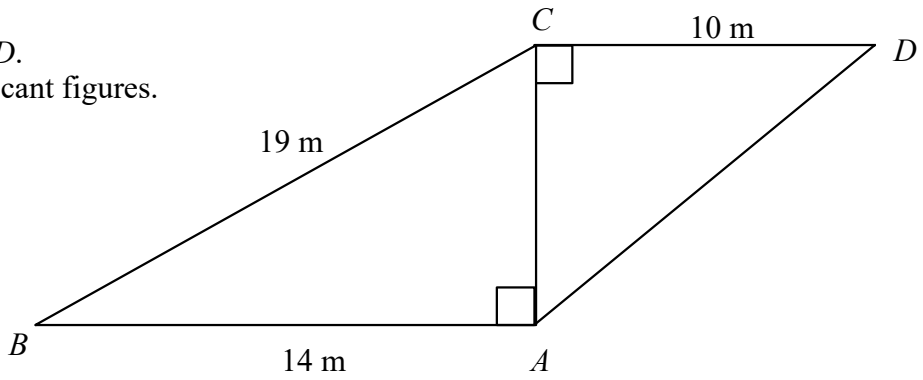


Calculate the length of AC.

….....cm

(Total for question 4 is 3 marks)

5 Calculate the length of the *AD*.
Give your answer to 3 significant figures.



….....m

(Total for question 5 is 4 marks)

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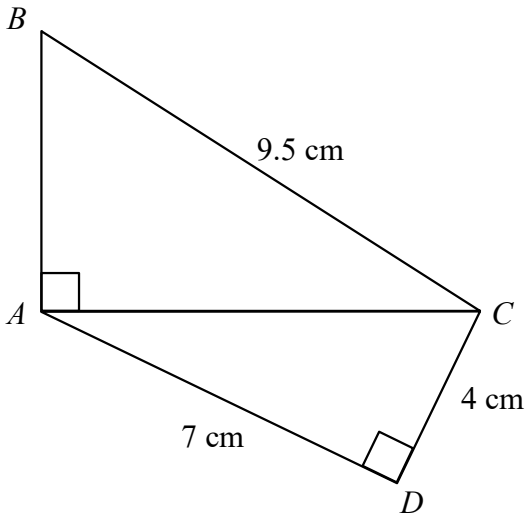
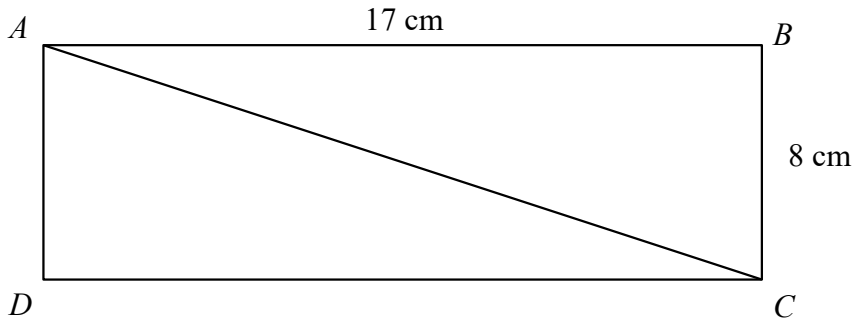
6 Calculate the length of the *AB*.
Give your answer to 3 significant figures.



….....cm

(Total for question 5 is 4 marks)

7



ABCD is a rectangle .
Calculate the length of the diagonal *AC*.

Give your answer correct to 1 decimal place.

….....cm

(Total for question 7 is 3 marks)

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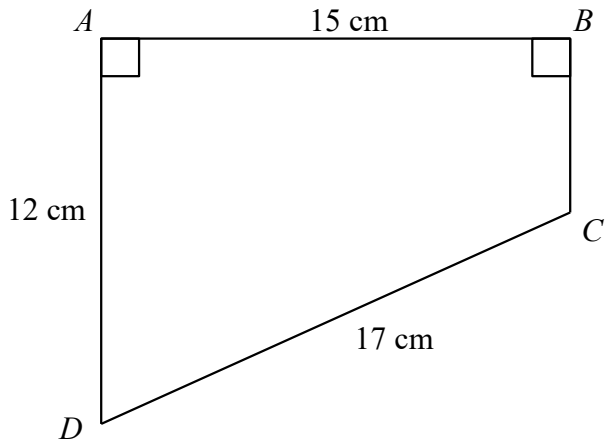
8 *ABCD* is a trapezium.

Calculate the length of *BC*.

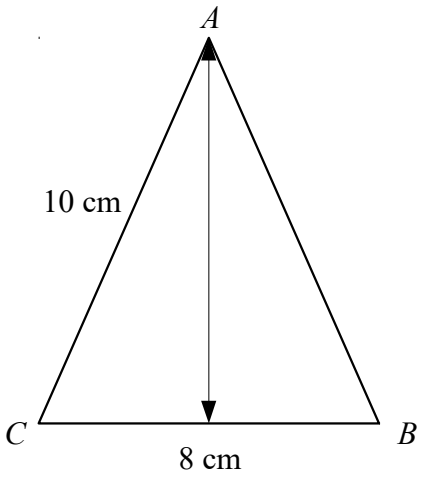


….....cm

(Total for question 8 is 3 marks)

9 *ABC* is an isosceles triangle.

Calculate the perpendicular height of *ABC*.
Give your answer correct to 3 significant figures..



….....cm

(Total for question 9 is 3 marks)

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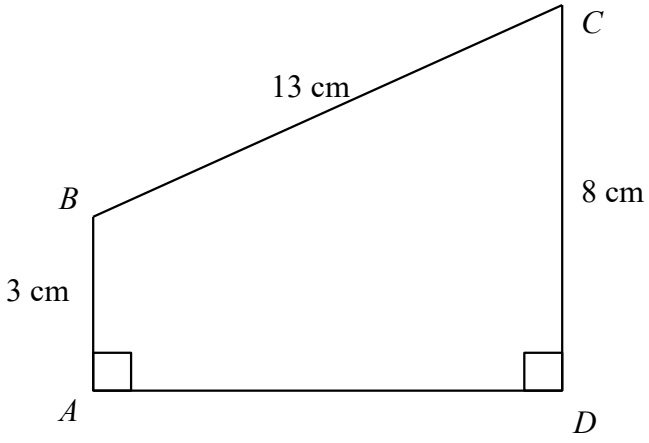
10 *ABCD* is a trapezium.

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



….....cm

(Total for question 10 is 4 marks)

11 A ship leaves point A and sails for 3.7 km due North.
The ship then sails for 2.4 km due East to reach point B.

Calculate the the shortest distance between point A and point B.
Give your answer correct to 1 decimal place.

.....km

(Total for question 11 is 3 marks)

12 A ladder reaches 2.5 m up a vertical wall.
The base of the ladder is 70 cm from the base of the wall on a horizontal ground.

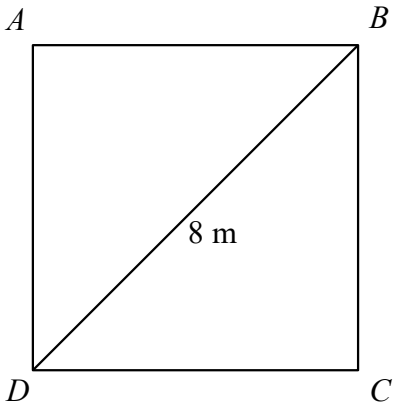
Find the length of the ladder.

.....

(Total for question 12 is 4 marks)

13 *ABCD* is a square.
The diagonal of the square is 8 m.

Calculate the perimeter of the square.
Give your answer correct to one decimal place.



….....m

(Total for question 13 is 3 marks)

14 A television has a diagonal length of 50 inches.

The ratio of the length of the television to the width of the television is 4:3

Calculate the length and the width of the television.
Give your answers correct to 1 decimal place.

Length ….....… inches

Width ….....inches

(Total for question 14 is 3 marks)