

Name:

Date:

Pythagoras' Theorem

GCSE

Edexcel
Mathematics
Grade (9-1)

Mark

Score (%)

<hr/> 69	
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Materials

For this paper you must have:

- Ruler
- Pencil, Rubber, Protractor and Compass
- Scientific calculator, which you are expected to use when appropriate

Instructions

- Answer all questions
- Answer questions in the space provided
- All working must be shown
- Do all rough work in this book. Cross out any rough work you don't want to be marked

Information

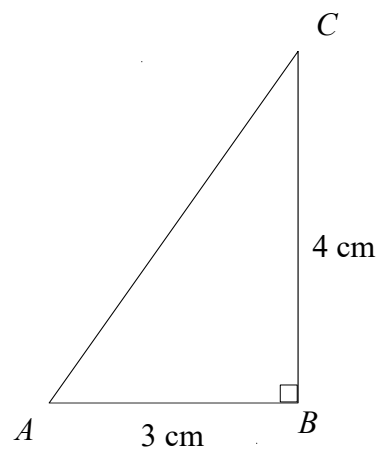
- The marks for the questions are shown in brackets

1 ABC is a right-angled triangle.

$$AB = 3\text{ cm}$$

$$BC = 4\text{ cm}$$

Calculate the length of AC .



Leave blank

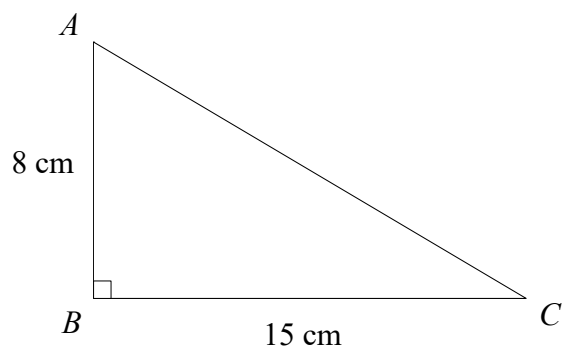
.....
(Total for question 1 is 3 marks)

2 ABC is a right-angled triangle

$$AB = 8\text{ cm}$$

$$BC = 15\text{ cm}$$

Calculate the length of AC .



.....
(Total for question 2 is 3 marks)

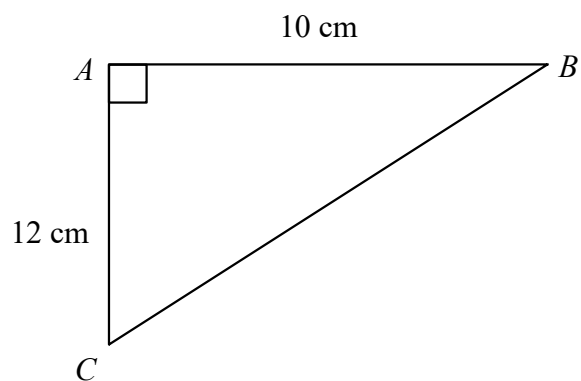
3 ABC is a right-angled triangle

$$AB = 12\text{cm}$$

$$AC = 10\text{cm}$$

Calculate the length of BC .

Give your answer correct to 2 decimal places



.....
(Total for question 3 is 3 marks)

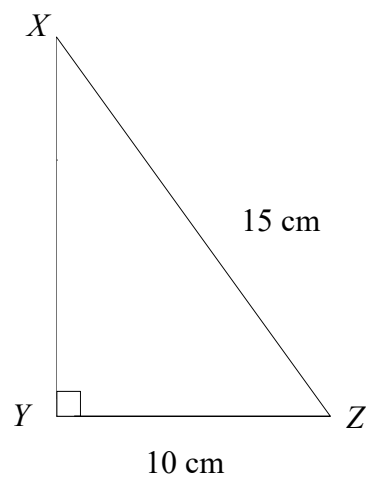
4 XYZ is a right-angled triangle

$$YZ = 10\text{cm}$$

$$XZ = 15\text{cm}$$

Calculate the length of XY .

Give your answer correct to 4 significant figures.



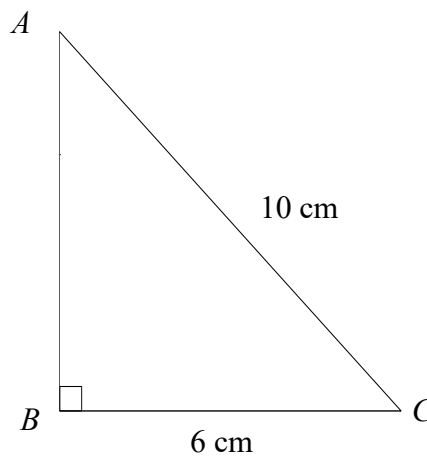
.....
(Total for question 4 is 3 marks)

5 ABC is a right-angles triangle

$AC = 10$ cm

$BC = 6$ cm

Calculate the length of AB .



.....
(Total for question 5 is 3 marks)

6 ABC is a right-angled triangle.

$AB = 10$ cm

$BC = 5$ cm

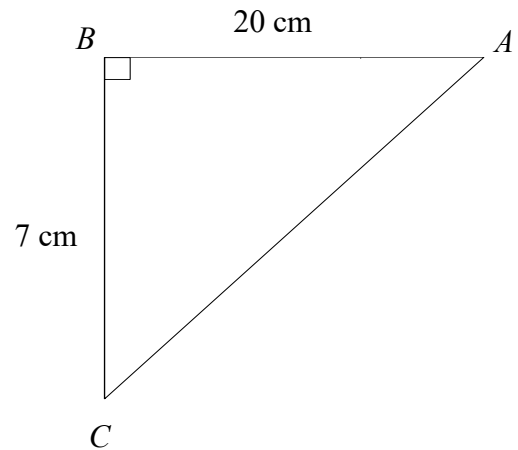
$AC = x$ cm (the hypotenuse)

Calculate the length of AC .

Give your answer correct to 1 decimal places

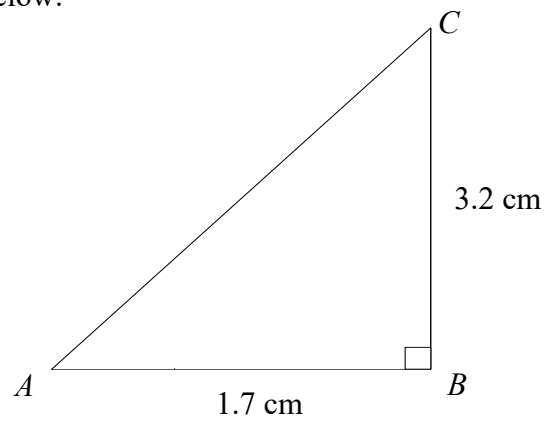
.....
(Total for question 6 is 3 marks)

- 7 ABC is a right-angled triangle as shown in the diagram below.
 Work out the perimeter of the triangle ABC .
 Give your answer correct to 3 significant figure.



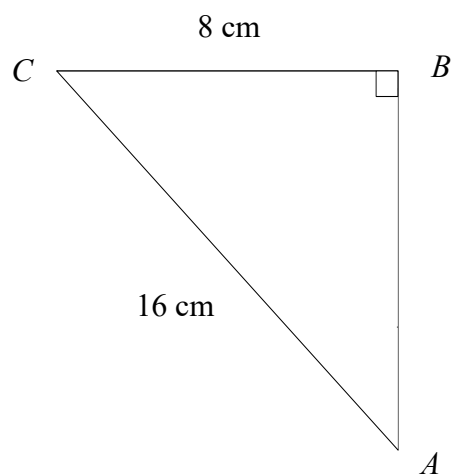
.....
 (Total for question 7 is 4 marks)

- 8 ABC is a right-angled triangle as shown in the diagram below.
 Work out the perimeter of the triangle ABC



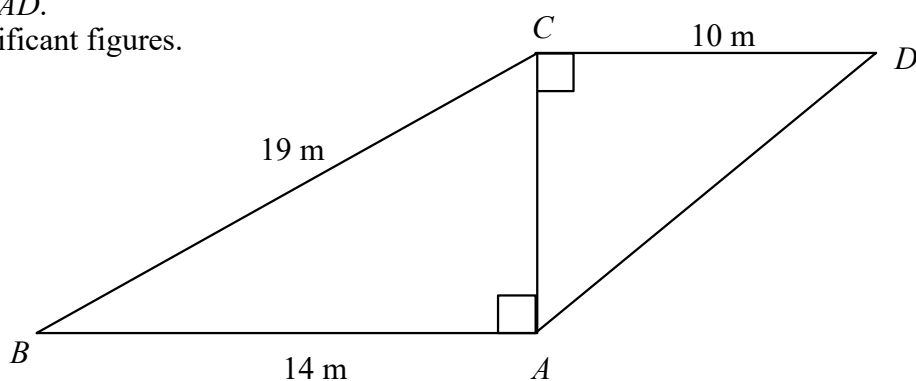
.....
 (Total for question 8 is 4 marks)

- 9 ABC is a right-angled triangle as shown in the diagram below.
 Workout the area of the triangle ABC .
 Give your answer correct to 1 decimal places



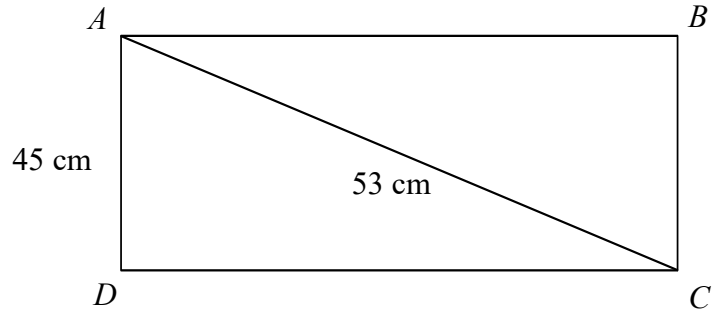
.....
 (Total for question 9 is 4 marks)

- 10 Calculate the length of the AD .
 Give your answer to 3 significant figures.



.....
 (Total for question 10 is 4 marks)

11

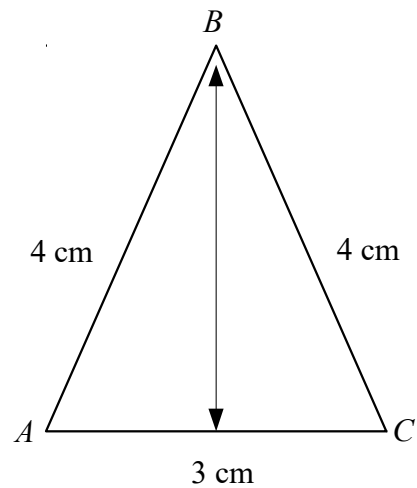


$ABCD$ is a rectangle.
Find the perimeter of the rectangle.

Give your answer correct to 1 decimal place.

.....
(Total for question 11 is 3 marks)

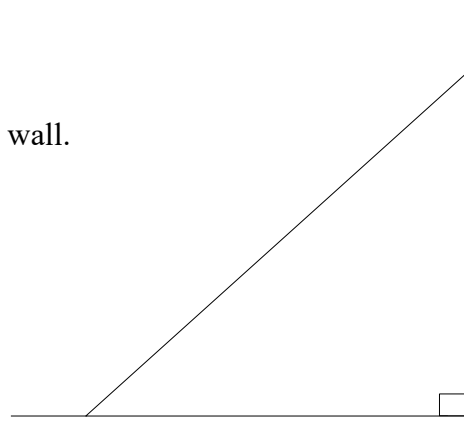
12 ABC is an isosceles triangle.
Find the area of the triangle.
Give your answer correct to 1 decimal places



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(Total for question 12 is 3 marks)

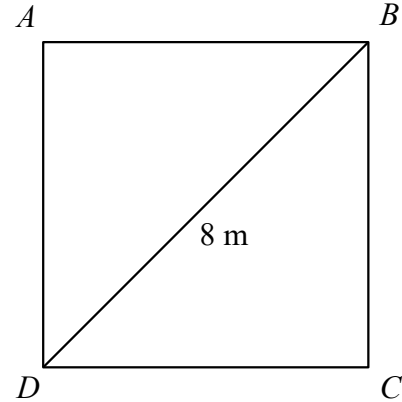
13 A 14m ladder is placed against a 10m high wall.
The ladder touched the top of the wall.

Find out how far is the foot of ladder from the bottom of the wall.
Give your answer correct to 1 decimal place.



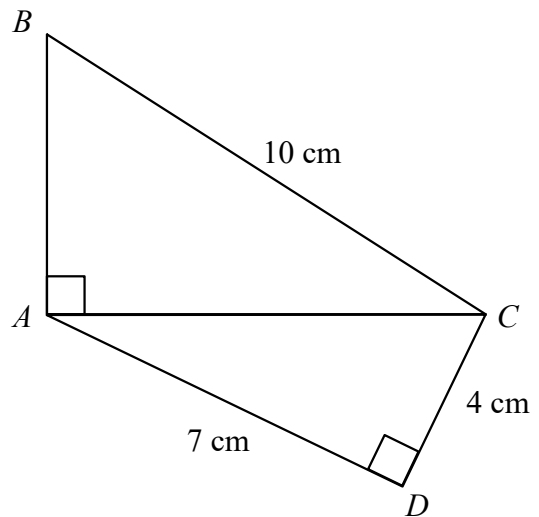
.....
(Total for question 13 is 3 marks)

14 $ABCD$ is a square playground as shown below.
Find the area of the playground.
Give your answer correct to one decimal place.



.....
(Total for question 14 is 3 marks)

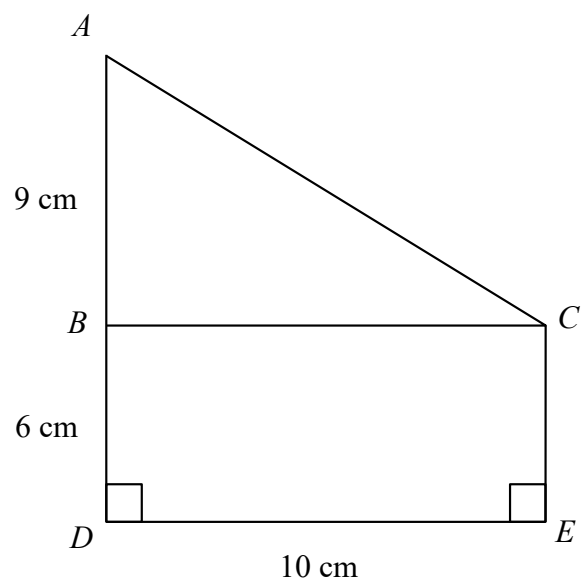
15 Calculate the length of the AB .
Give your answer to 3 significant figures.



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(Total for question 15 is 4 marks)

16 Liza wants to paint the borders of the shape red as shown below.
 $AB = 9\text{cm}$, $BD = 6\text{cm}$ and $DE = 10\text{cm}$.

Find out how much length Liza needs to paint red.
Give your answer correct to 4 significant figures.



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(Total for question 16 is 3 marks)

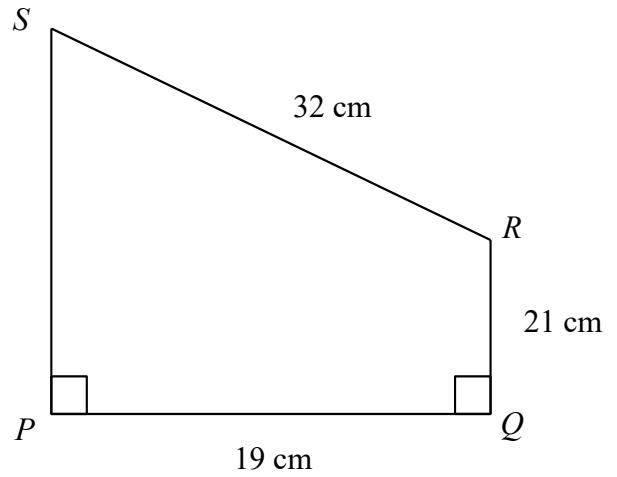
17 The total length of a square field is 36 km.
Find the length of the diagonal.
Give your answer correct to 3 significant figures.

.....
(Total for question 17 is 4 marks)

18 An equilateral triangle has a side-length of 5 cm.
Find its area.
Give your answer correct to 1 decimal place.

.....
(Total for question 18 is 4 marks)

19 PQRS is a trapezium. SP is parallel to RQ.
 Angle PQR and SPR are 90° .
 Calculate the length of PS.
 Give your answer correct to 3 significant numbers.



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(Total for question 19 is 4 marks)

20 A television has a diagonal length of 60 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 20 is 4 marks)