JP Maths Revision

Attempt the paper before watching the solutions!

https://www.youtube.com/@JPMathsRevision

FOUNDATION / HIGHER TIER

Pythagoras

INSTRUCTIONS

- Use **black ink** or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You must **show all your working.**
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.

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.*

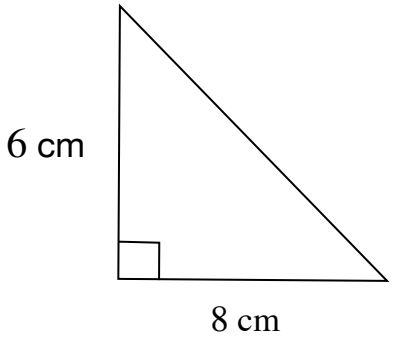
ADVICE

- 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.

You've got this!

1. A right-angled triangle has sides of 6 cm and 8 cm.

Calculate the length of the hypotenuse.



cm

.....

(Total for Question 1 is 2 marks)

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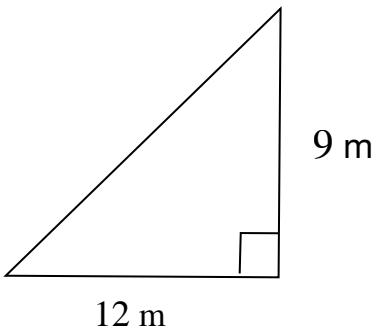
2. A right-angled triangle has sides of 9 m and 12 m.

Calculate the length of the hypotenuse.



m

.....

(Total for Question 2 is 2 marks)

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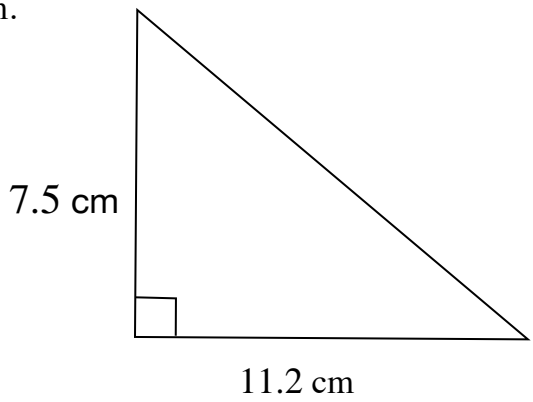
3. A right-angled triangle has sides of 7.5 cm and 11.2 cm.

Calculate the length of the hypotenuse.

Give your answer to 1 decimal place.



cm

.....

(Total for Question 3 is 2 marks)

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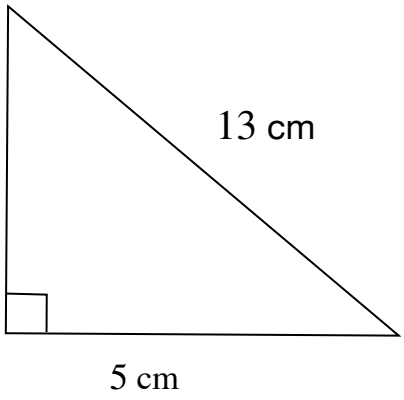
4. A right-angled triangle has a hypotenuse of 13 cm and one other side of 5 cm.

Calculate the missing side.



cm

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(Total for Question 4 is 2 marks)

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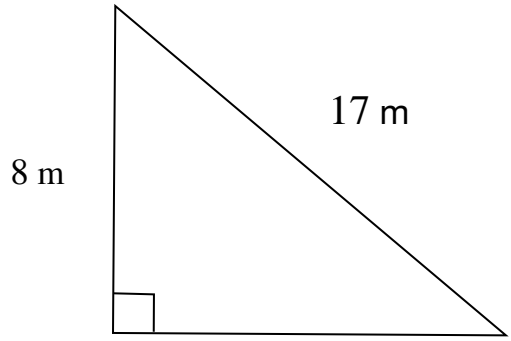
5. A right-angled triangle has a hypotenuse of 17 m and one other side of 8 m.

Calculate the missing side.



m

.....

(Total for Question 5 is 2 marks)

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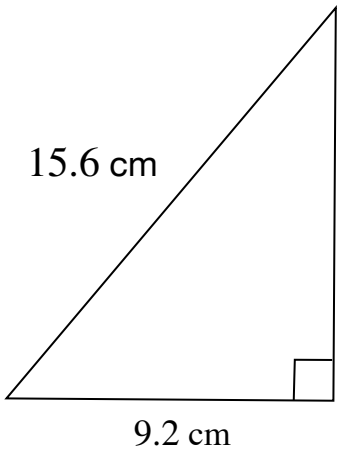
6. A right-angled triangle has a hypotenuse of 15.6 cm and one other side of 9.2 cm.

Calculate the missing side.

Give your answer to 1 decimal place.



cm

.....

(Total for Question 6 is 2 marks)

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7. A ladder is leaning against a wall.

The ladder is 10 m long.

The foot of the ladder is 6 m from the wall.

How high up the wall does the ladder reach?

m

.....

(Total for Question 7 is 2 marks)

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8. A rectangle is 14 cm long and 9 cm wide.

Calculate the length of the diagonal.

cm

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(Total for Question 8 is 2 marks)

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9. A rectangle has a diagonal of 20 cm.

Its width is 12 cm.

Calculate the length of the rectangle.

cm

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(Total for Question 9 is 2 marks)

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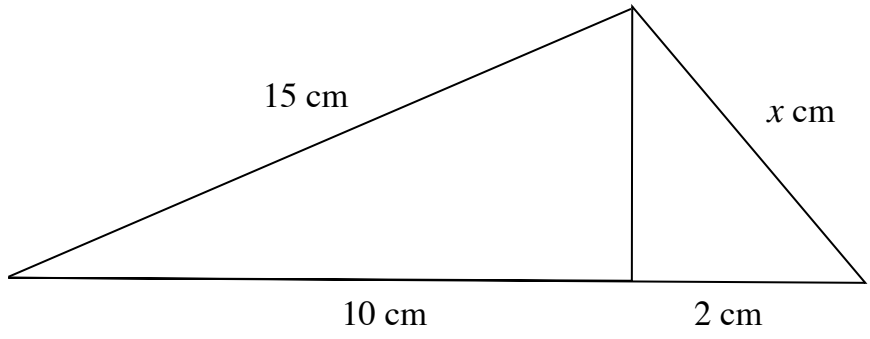
10. A shape is made from two right-angled triangles joined together.

Calculate the length of the side marked x.



cm

.....

(Total for Question 10 is 3 marks)

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11. A triangle has a base of 14 cm.

The two equal sloping sides are each 13 cm.

Calculate the area of the triangle.

cm^2

.....

(Total for Question 11 is 3 marks)