

WJEC Past Paper Questions Tier: Intermediate Topic: Pythagoras
Intermediate Maths Summer 2019 P2 Q10

In this question, you will be assessed on the quality of your organisation, communication and accuracy in writing.

Is it possible to draw a **right-angled** triangle with the measurements shown below?
You must use calculations (not a scale drawing) to support your answer.
You must show all your working.

[4 + 2 OCW]

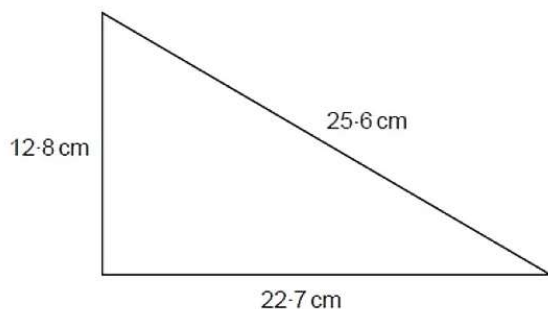


Diagram not drawn to scale

Intermediate Numeracy Summer 2018 P2 Q9a(i)

Yared is going to make a door wedge.

- (a) The cross-section of the wedge is shown below.
The horizontal length is 12 cm and the vertical height is 3 cm.

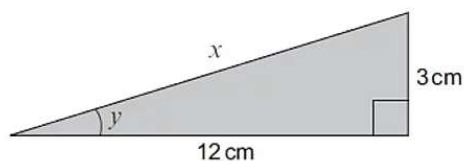


Diagram not drawn to scale

- (i) Calculate the length x .

Give your answer correct to 3 significant figures.

[4]

Intermediate Maths June 2017 P2 Q14

A right-angled triangle LMN is shown below.
 $LN = 16.9$ cm and $LM = 6.5$ cm.

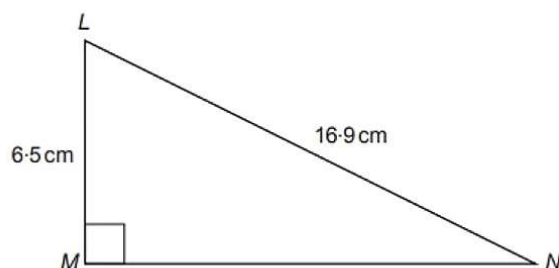


Diagram not drawn to scale

Calculate the length MN .

[3]

The wire window guard shown below is to be made.



Diagram not drawn to scale

The length of the sides of each small wire square shown is 3.3 cm.

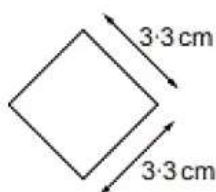


Diagram not drawn to scale

Llinos considers the length of the diagonal of each small square.

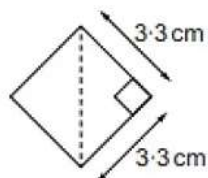


Diagram not drawn to scale

She says,

The height of the window guard is equal to 9.5 diagonals of the square.
The width of the window guard is equal to 11 diagonals of the square.

- (a) Calculate the length of the diagonal of a small square.
Give your answer correct to 1 decimal place. [3]
- (b) Calculate the area of the **window guard**.
You must show all your working. [3]

Intermediate Numeracy Summer 2019 P2 Q9a

Mr Jakob notices a crack in a vertical wall which stands on horizontal ground.



- (a) Mr Jakob fixes two temporary supports against the wall, as shown in the diagram below.

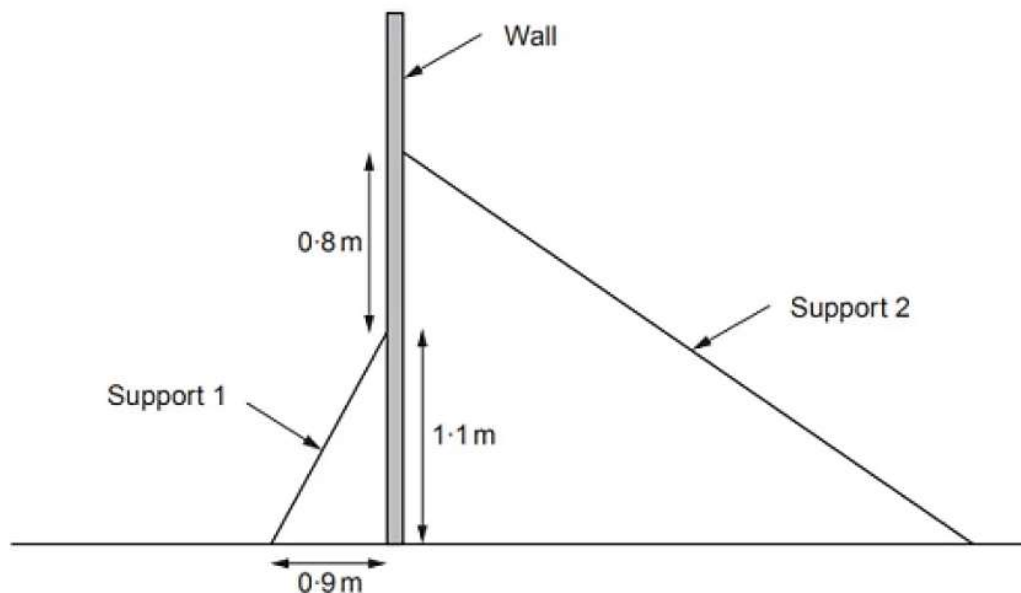


Diagram not drawn to scale

- (i) Calculate the length of Support 1.

[3]

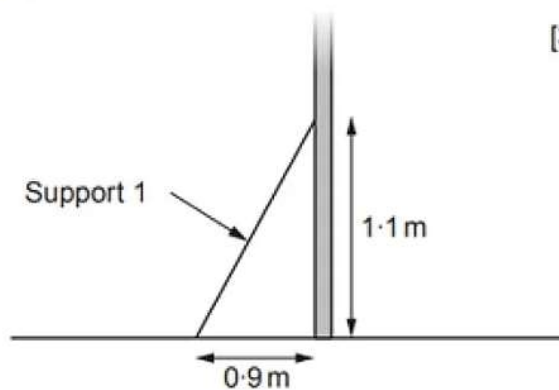


Diagram not drawn to scale

- (ii) The length of Support 2 is 2.6 m.
Calculate the angle between the horizontal ground and Support 2.

[3]

Intermediate Numeracy Nov 2017 P2 Q9

Bethan has a plan of her rectangular lawn, which she has labelled $ABCD$. She wants to cut out a triangular flowerbed from her lawn, labelled GHD . Bethan decides that $AG : GD$ should be $1 : 2$ and that $DH = HC$.

She has made a sketch shown below.

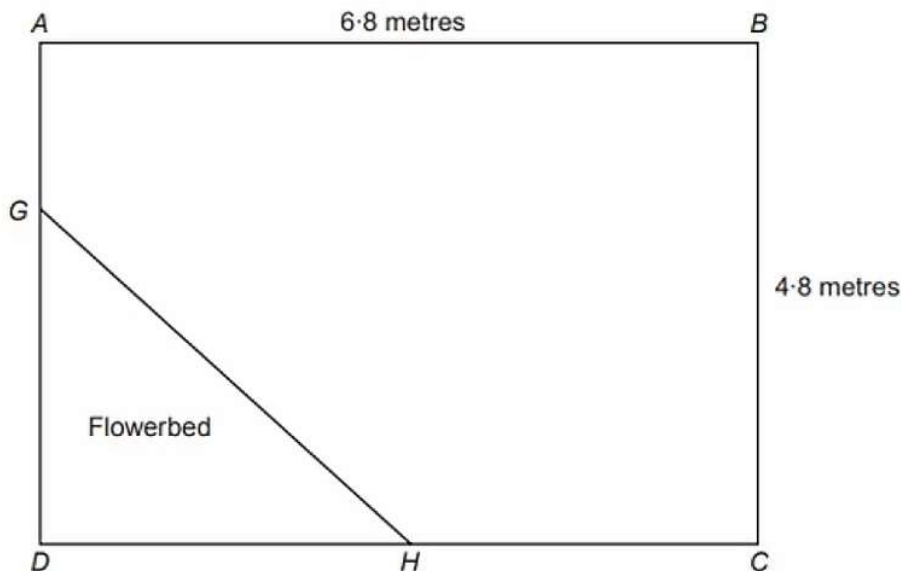


Diagram not drawn to scale

- (a) Calculate the length of GH . [4]
- (b) The flowerbed, GHD , is to have a flexible edging strip placed around its perimeter. The edging strip costs £3.50 per metre and can only be bought in strips of complete metres.
- How much will the edging strip cost Bethan?
 - What length of strip will be left over?
Give your answer in centimetres.
- [4]

Intermediate Maths Sample 2 P2 Q14

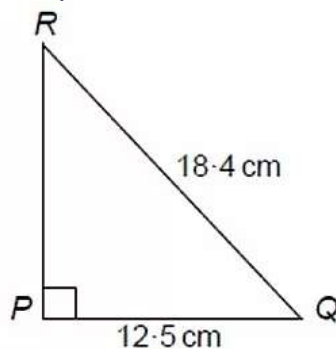
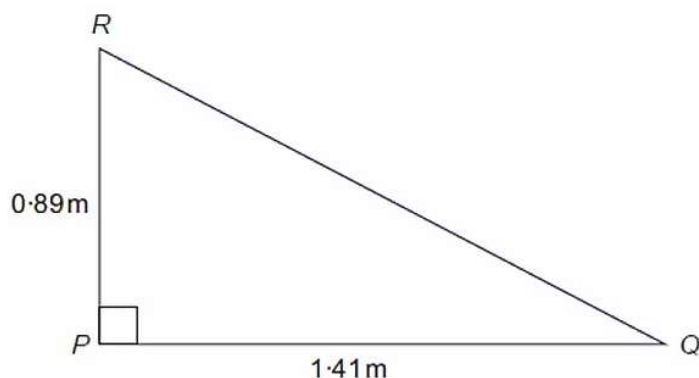


Diagram not drawn to scale

Calculate the length of PR , giving your answer correct to 1 decimal place.

[3]

Intermediate Maths Summer 2018 P2 Q15

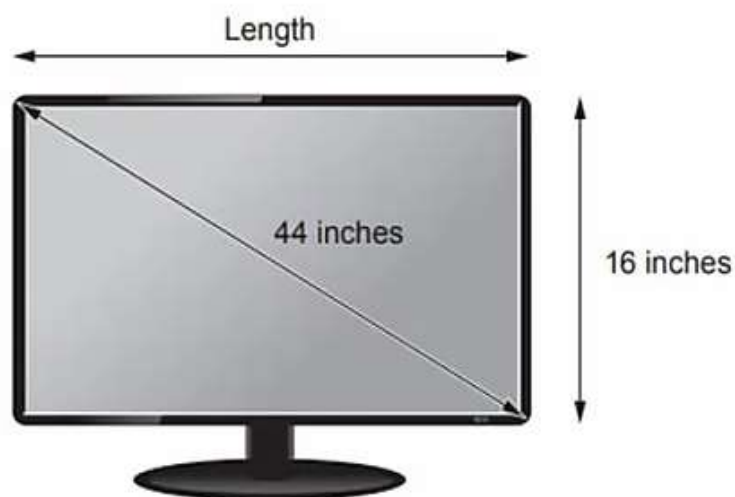
 PQR is a right-angled triangle, as shown below. $PQ = 1.41\text{ m}$ and $PR = 0.89\text{ m}$.*Diagram not drawn to scale*Calculate the length of QR .

[3]

Intermediate Numeracy Summer 2017 P2 Q13a

Marta buys a new television.

- (a) Marta wants to fit the television in a bookcase on the wall.
In the shop she forgot to write down the length of the television.
She did write down the height and the diagonal of the screen.

*Diagram not drawn to scale*

Marta needs to know the length of the screen before she opens the box, in case she wants to return the television.

Calculate the length of the screen.

Give your answer correct to 2 significant figures.

[4]

WJEC Past Paper Questions Tier: Intermediate Topic: Pythagoras
Intermediate Maths Nov 2018 P2 Q16
The perimeter of a square is 76.4 m.

Calculate the length of its diagonal.
You must show all your working.

[4]

Intermediate Numeracy Sample 2 P2 Q14

The length of the flag shown is twice its width.

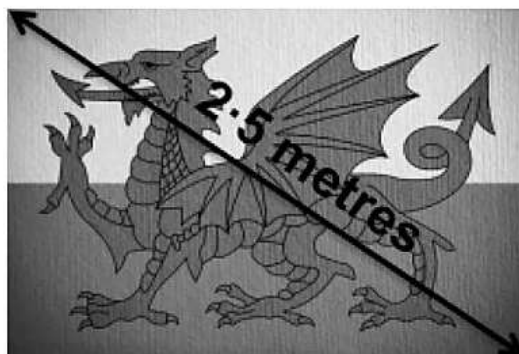


Diagram not drawn to scale

The diagonal of the flag measures 2.5 metres.
Calculate the width of the flag.

[5]