

Variation using a maths GCSE question

Year 11 (Higher)

HIAS Maths Team (secondary)
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Final version

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Overview

This document contains...

A set of connected questions that link to a past GCSE question

Points to consider when using this resource

Each variation of the exam question should be considered as part of a learning journey. Teachers may wish to consider models and images to support students to access the problems.



Year 11 H: variation: AQA 2019 P2 Q7

Area of rectangles and triangles with ratio



Prior knowledge to review

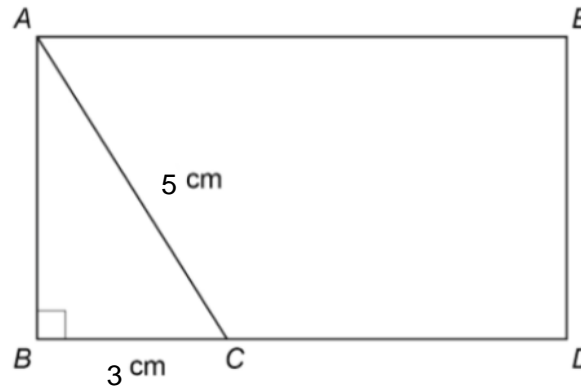
- Pythagoras
- Area of triangles
- Knowledge of ratio



The diagram shows rectangle $ABDE$ and right-angled triangle ABC .

$$AC = 5 \text{ cm}$$

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



Not drawn
accurately

$$BC : CD = 1 : 2$$

Work out the area of rectangle $ABDE$.

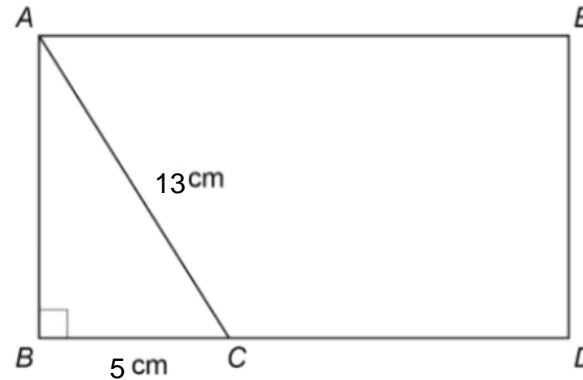
[4 marks]



The diagram shows rectangle $ABDE$ and right-angled triangle ABC .

$$AC = 13 \text{ cm}$$

$$BC = 5 \text{ cm}$$



Not drawn
accurately

$$BC : CD = 1 : 3$$

Work out the area of rectangle $ABDE$.

[4 marks]



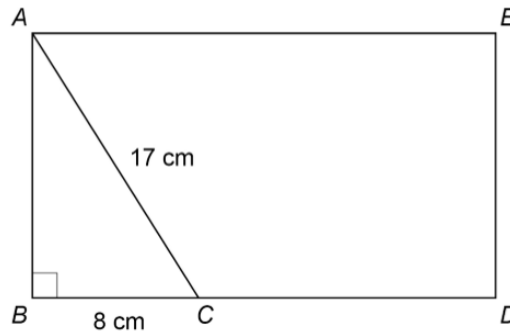
Year 11 H: variation: AQA 2019 P2 Q7

Area of rectangles and triangles with ratio

7 The diagram shows rectangle $ABDE$ and right-angled triangle ABC .

$$AC = 17 \text{ cm}$$

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



Not drawn
accurately

$$BC : CD = 1 : 2$$

Work out the area of rectangle $ABDE$.

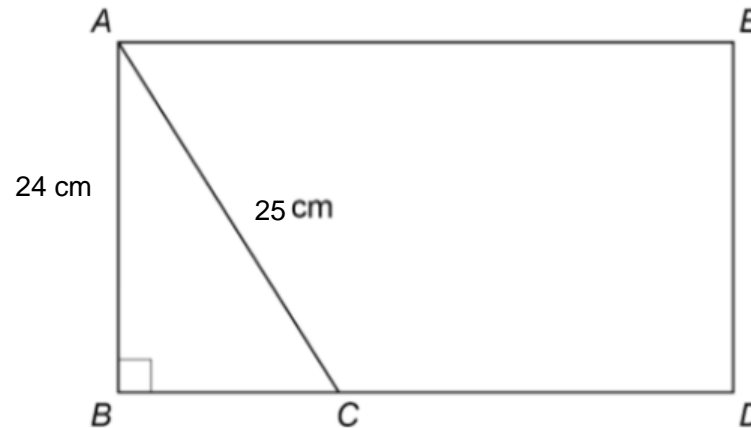
[4 marks]



The diagram shows rectangle $ABDE$ and right-angled triangle ABC .

$$AB = 24\text{cm}$$

$$AC = 25\text{cm}$$



Not drawn
accurately

$$BC : CD = 1 : 3$$

Work out the area of rectangle $ABDE$.

[4 marks]



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