

# Variation using a maths GCSE question

Year 11 (Foundation)

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 F: variation: AQA 2019 P2 Q18

## Area of triangles and formula

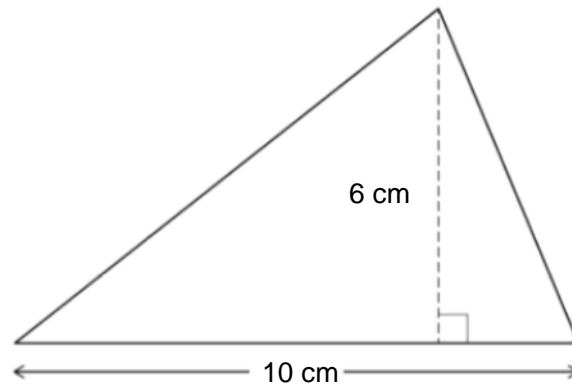


# Prior knowledge to review

- Multiplication strategies
- Knowledge of tables and associated facts
- Area of a triangle
- Substitution into formula
- Rearranging formula



A force of 180 newtons (N) is applied to the surface of this triangle.



Not drawn  
accurately

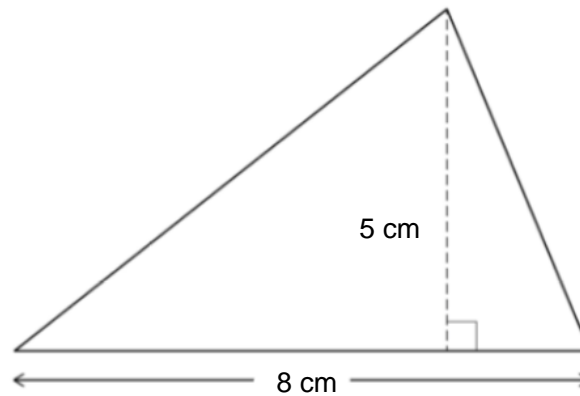
Work out the pressure.

Use  $\text{pressure} = \frac{\text{force}}{\text{area}}$

[3 marks]



A force of 180 newtons (N) is applied to the surface of this triangle.



Not drawn  
accurately

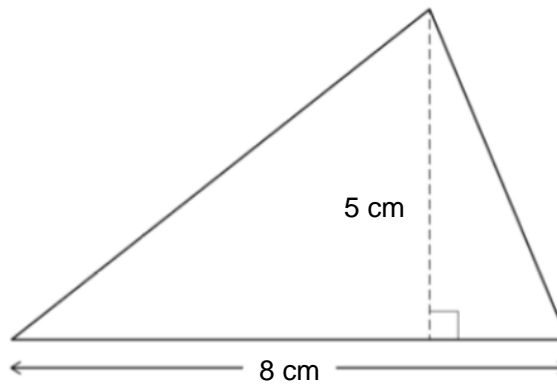
Work out the pressure.

Use  $\text{pressure} = \frac{\text{force}}{\text{area}}$

[3 marks]



A force of 120 newtons (N) is applied to the surface of this triangle.



Not drawn  
accurately

Work out the pressure.

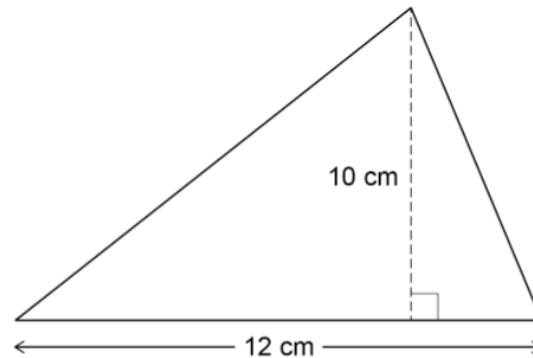
Use  $\text{pressure} = \frac{\text{force}}{\text{area}}$

[3 marks]



Year 11 F: variation: AQA 2019 P2 Q18  
Equivalent fractions and area of rectangles

- 18 A force of 180 newtons (N) is applied to the surface of this triangle.



Not drawn  
accurately

Work out the pressure.

Use  $\text{pressure} = \frac{\text{force}}{\text{area}}$

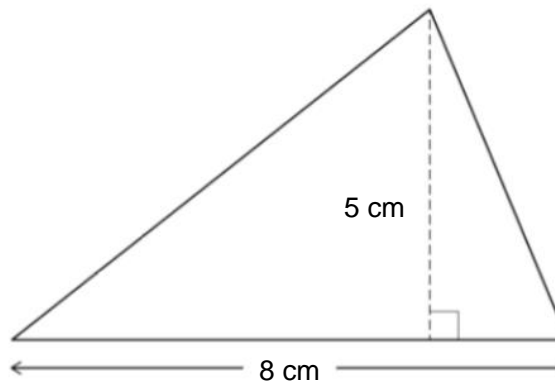
[3 marks]





Work out the force in Newtons on this triangle if the pressure is  $10 \text{ N/cm}^2$

Use  $\text{pressure} = \frac{\text{force}}{\text{area}}$



Not drawn  
accurately



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Tel: 01962 874820 or email: [hias.enquiries@hants.gov.uk](mailto:hias.enquiries@hants.gov.uk)



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