

GCSE Mathematics

F

Volume & Surface Area of Prisms

Foundation | Grades 4-5

Total Marks	Time	Questions
57	57 min	20

Instructions:

- Do not use a calculator when you see: 
- Answer all questions in the spaces provided.
- Show all your working - marks are awarded for method as well as final answers.
- Cross through any work you do not want to be marked.
- Check your answers if you have time at the end.

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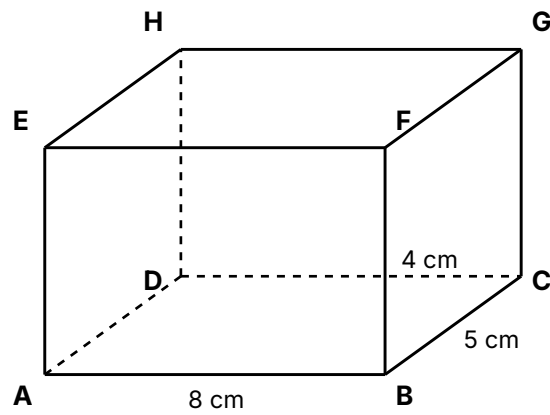
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Edexcel-style questions**Q1** 

Grade 4

Edexcel style

Find the volume of the cuboid shown.

*Diagram NOT accurately drawn*

Answer _____

Q2

Grade 4

Edexcel style

Find the surface area of the cuboid shown.

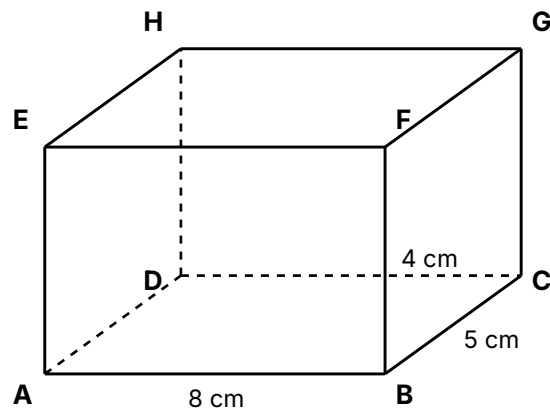


Diagram NOT accurately drawn

Answer _____

Q3

Grade 4

Edexcel style

Find the volume of the triangular prism shown.

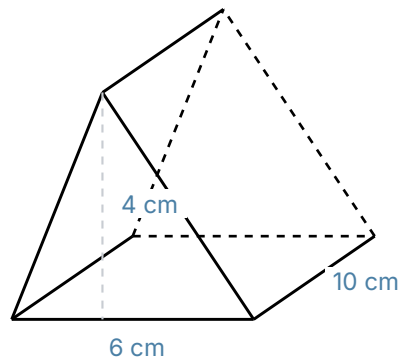


Diagram NOT accurately drawn

Answer _____

Q4

Grade 5

Edexcel style

The triangular cross-section shown is right-angled, with legs 3 cm and 4 cm and hypotenuse 5 cm. Find the surface area of the prism.

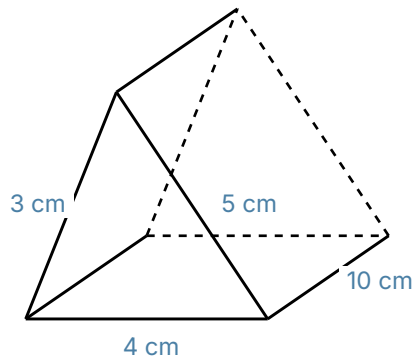


Diagram NOT accurately drawn

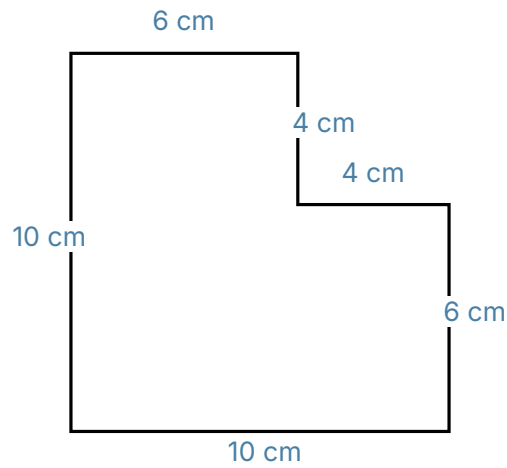
Answer _____

Q5

Grade 5

Edexcel style

The diagram shows the L-shaped cross-section of a prism. The prism has a length of 5 cm. Find the volume of the prism.



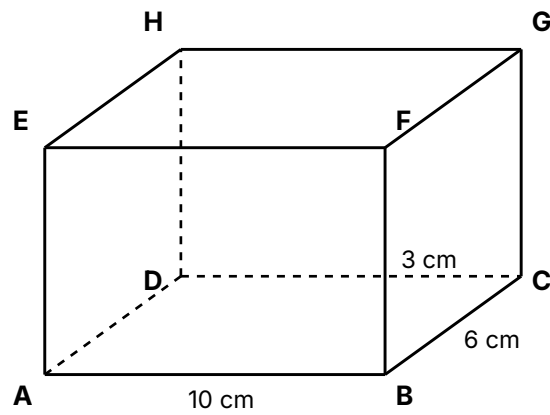
Answer _____

AQA-style questions**Q6** 

Grade 4

AQA style

Find the volume of the cuboid shown.

*Diagram NOT accurately drawn*

Answer _____

Q7

Grade 4

AQA style

Find the surface area of the cuboid shown.

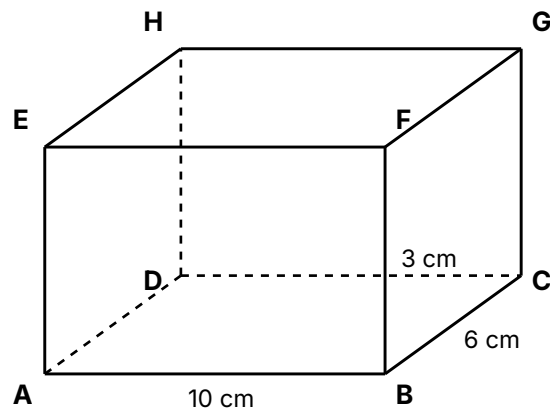


Diagram NOT accurately drawn

Answer _____

Q8

Grade 5

AQA style

Find the volume of the triangular prism shown.

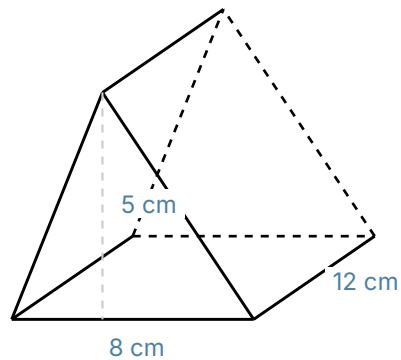


Diagram NOT accurately drawn

Answer _____

Q9

Grade 5

AQA style

The triangular cross-section shown is right-angled, with legs 6 cm and 8 cm and hypotenuse 10 cm. Find the surface area of the prism.

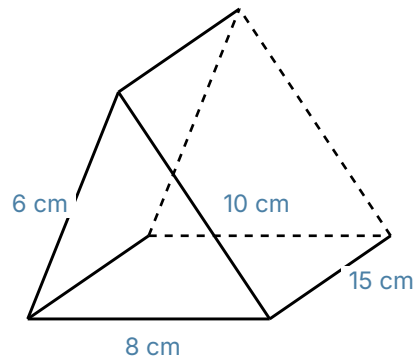


Diagram NOT accurately drawn

Answer _____

Q10

Grade 5

AQA style

The diagram shows the trapezium cross-section of a prism, with parallel sides 8 cm and 2 cm and a perpendicular height of 5 cm. The prism has a length of 12 cm. Find the volume of the prism.

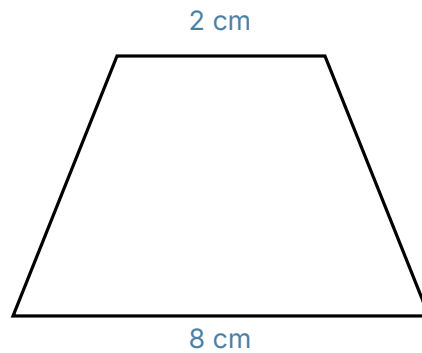


Diagram NOT accurately drawn

Answer _____

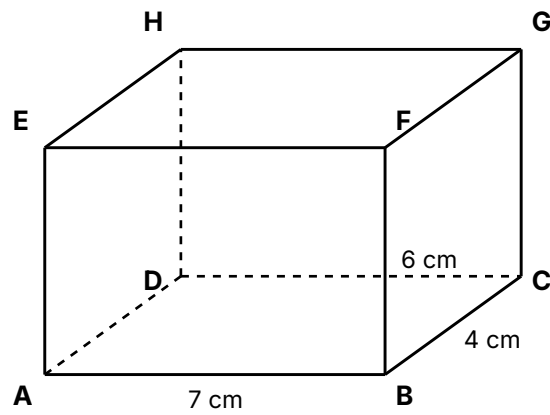
OCR-style questions

Q11 

Grade 4

OCR style

Find the volume of the cuboid shown.

*Diagram NOT accurately drawn*

Answer _____

Q12

Grade 4

OCR style

Find the surface area of the cuboid shown.

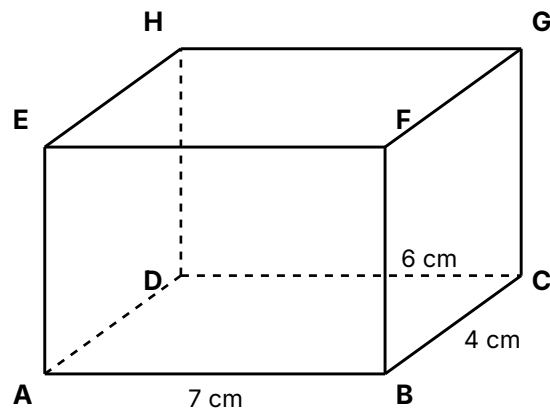


Diagram NOT accurately drawn

Answer _____

Q13

Grade 5

OCR style

Find the volume of the triangular prism shown.

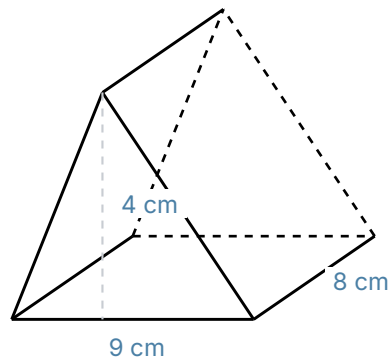


Diagram NOT accurately drawn

Answer _____

Q14

Grade 5

OCR style

A cuboid has a volume of 150 cm^3 . Its length is 10 cm and its width is 5 cm. Find its height.

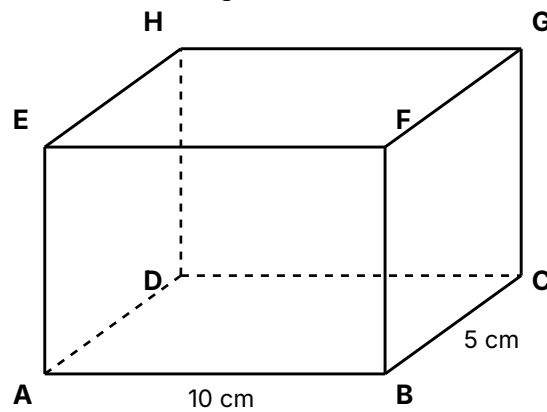


Diagram NOT accurately drawn

Answer _____

Q15

Grade 5

OCR style

A cuboid water tank measures 50 cm by 40 cm by 30 cm. Find the volume of the tank in litres (1000 cm³ = 1 litre).

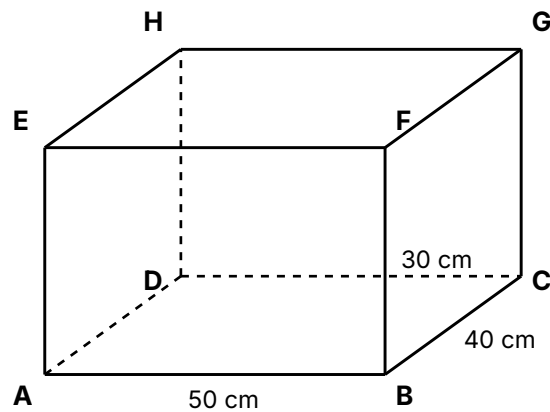


Diagram NOT accurately drawn

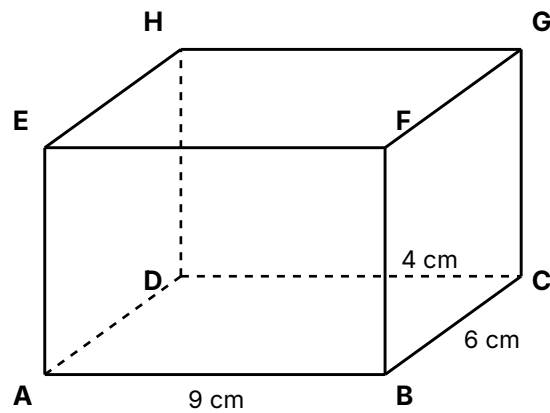
Answer _____

Teachably-style questions**Q16** 

Grade 4

Teachably style

Find the volume of the cuboid shown.

*Diagram NOT accurately drawn*

Answer _____

teachably

[2 marks]

Q17

Grade 4

Teachably style

Find the surface area of the cuboid shown.

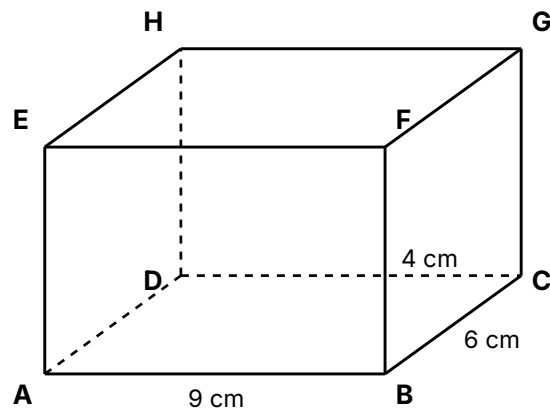


Diagram NOT accurately drawn

Answer _____

teachably**[3 marks]**

Q18

Grade 5

Teachably style

Find the volume of the triangular prism shown.

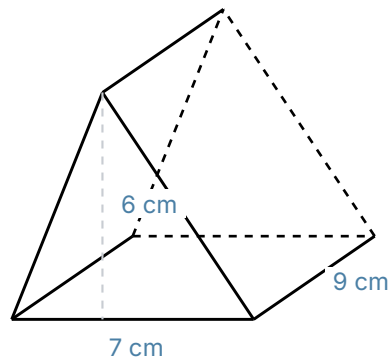


Diagram NOT accurately drawn

Answer _____

teachably

[3 marks]

Q19

Grade 5

Teachably style

A cuboid has a volume of 210 cm^3 . Its length is 7 cm and its height is 5 cm. Find its width.

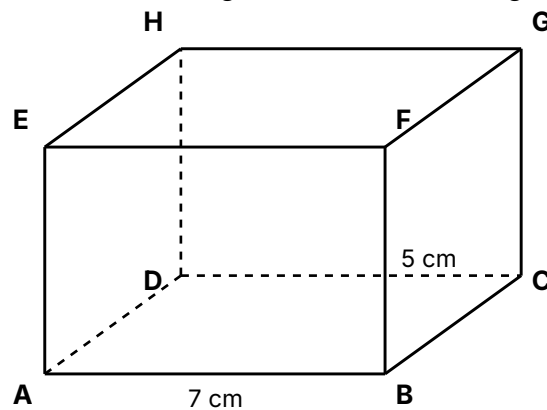


Diagram NOT accurately drawn

Answer _____

teachably

[3 marks]

Q20

Grade 5

Teachably style

A triangular prism has a volume of 180 cm^3 . Its triangular cross-section has a base of 6 cm and a height of 5 cm. Find the length of the prism.

Answer _____

teachably

[3 marks]

END OF PAPER

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