GCSE Exam Questions

Volume of a Cuboid | Geometry & Measure

GCSE Exam Questions: Volume of a Cuboid

1) **(a)** Work out the volume of a cube with side length $11cm$.
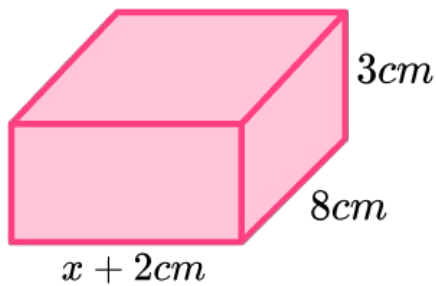
_ _

(2)

(b) Convert the volume to m^3.

_ _

(2)

(4 marks)

2) The volume of the cuboid below is $264cm^3$.

Work out the value of x.

$3cm$

$8cm$

$x + 2cm$

_ _

(2 marks)

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1

GCSE Exam Questions: Volume of a Cuboid

3) **(a)** The volume of this cuboid is $3744 cm^3$.
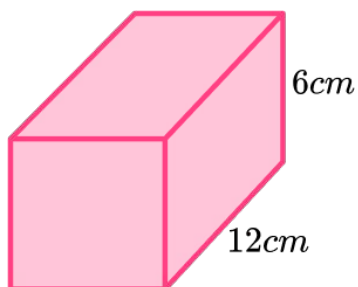
Work out the length of the cuboid.

Diagram
not to scale

- -

(2)

(b) Convert the volume to mm³.

- -

(2)
(4 marks)

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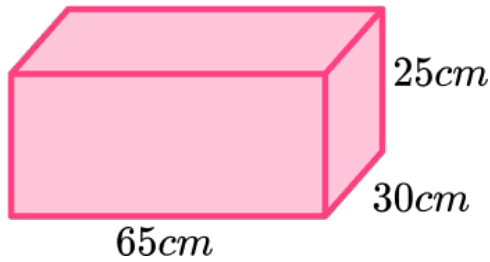
2

GCSE Exam Questions: Volume of a Cuboid

4) **(a)** The fuel tank from Samantha's car is pictured below.

The tank is currently $\frac{1}{5}$ full.

Samantha wants to fill the tank completely.

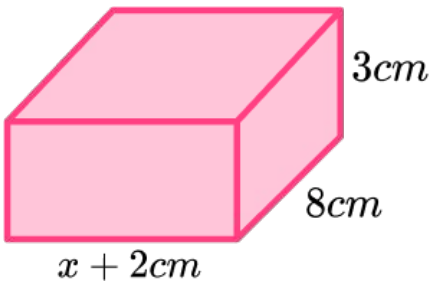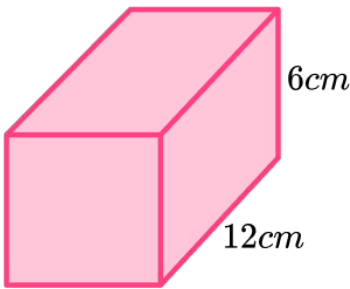How many litres does she need to fill up so that the tank is full?

$(1l = 1000cm^3)$

25cm

30cm

65cm

(4)

(b) Fuel costs £1.95 per litre.

How much will it cost Samantha to fill her tank?

(2)

(6 marks)

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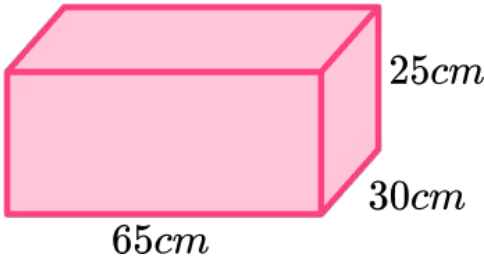
GCSE Exam Questions: Volume of a Cuboid Answers

		Question	Answer	Marks
1) (a)		Work out the volume of a cube with side length $11cm$.	**(a)** $11 \times 11 \times 11$ $1331cm^3$	**(1)** **(1)**
(b)		Convert the volume to m³.	**(b)** $1331 \div 1000000$ **oe** $0.001331m^3$	**(1)** **(1)**
2)		The volume of the cuboid on the right is $264cm^3$. Work out the value of x in the diagram below. 	$264 \div 24 = 11$ $x + 2 = 11$ $x = 9$	**(1)** **(1)**
3) (a)		The volume of this cuboid is $3744cm^3$. Work out the length of the cuboid. 	**(a)** $3744 \div 12 \div 6$ $= 52cm$	**(1)** **(1)**
(b)		Convert the volume to m^3.	**(b)** $3744 \times 10 \times 10 \times 10$ **oe** $3\ 744\ 000\ mm^3$	**(1)** **(1)**

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GCSE Exam Questions: Volume of a Cuboid Answers

|	Question	Answer	Marks
4) (a)	The fuel tank from Samantha's car is pictured below. The tank is currently $\frac{1}{5}$ full. Samantha wants to fill the tank completely. How many litres does she need to fill up so that the tank is full? ($1l = 1000cm^3$) 	**(a)** $\quad V = l \times w \times h$ $V = 65 \times 30 \times 25$ $V = 48750cm^3$ $48750 \div 1000 = 48.75l$ $48.750 \times \dfrac{4}{5} = 39l$	**(1)** **(1)** **(1)** **(1)**
(b)	Fuel costs £1.95 per litre. How much will it cost Samantha to fill her tank?	**(b)** $\quad 39 \times 1.95$ £76.05	**(1)** **(1)**

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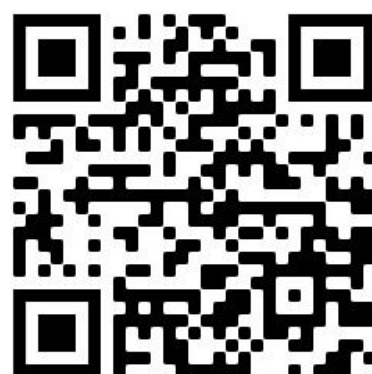
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