

GCSE Exam Questions

Surface Area of a Cuboid | Geometry & Measure



GCSE Exam Questions: Surface Area of a Cuboid

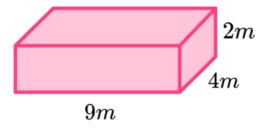
1) (a) Work out the surface area of a cube with side length 11cm.

(2)

(b) Convert the surface area in (a) to m^2 .

(2) (4 marks)

2) Work out the surface area of the cuboid.



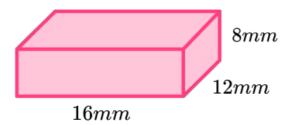
(2)

(2 marks)



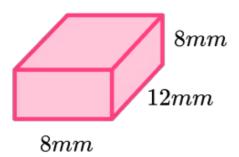
GCSE Exam Questions: Surface Area of a Cuboid

3) (a) Work out the surface area of the cuboid.



(2)

(b) Paula says that the surface area of this cuboid will be half of the surface area of the cuboid above. Is she correct? Show your working.

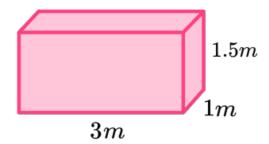


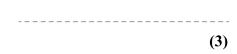
(2) (4 marks)



GCSE Exam Questions: Surface Area of a Cuboid

4) (a) Amanda wants to wrap the present on the right with wrapping paper.Wrapping comes in 2m long rolls with width 1.5m.How many rolls of wrapping paper will she need to wrap the entire present?





(b) If each roll of paper costs £17.50, how much will it cost to wrap the entire present?

(2) (5 marks)



GCSE Exam Questions: Surface Area of a Cuboid Answers

| | Question | Ansv | wer | Marks |
|--------|--|------|--|------------|
| 1) (a) | Work out the surface area of a cube with side length 11 <i>cm</i> . | (a) | SA = 2lw + 2lh + 2wh SA = 2(11)(11) + 2(11)(11) + 2(11)(11) $726cm^{2}$ | (1) (1) |
| (b) | Convert the surface area is (a) to m^2 . | (b) | $726cm^2 \div 100^2 \\ 0.0726m^2$ | (1) (1) |
| 2) | Work out the surface area of the cuboid. $2m$ $4m$ $9m$ | | $SA = 2lw + 2lh + 2wh$ $SA = 2(9)(4) + 2(4)(2) + 2(9)(2)$ $124m^{2}$ | (1) |
| 3) (a) | Work out the surface area of the cuboid. $8mm$ $12mm$ | (a) | $SA = 2lw + 2lh + 2wh$ $SA = 2(16)(12) + 2(12)(8) + 2(16)(8)$ $832mm^{2}$ | (1) |
| (b) | Paula says that the surface area of this cuboid will be half of the cuboid above. Is she correct? Show your working. 8mm 8mm | (b) | No she is not correct because the surface area of this cuboid is $512mm^2$ $SA = 2lw + 2lh + 2wh$ $SA = 2(8)(12) + 2(12)(8) + 2(8)(8)$ $512mm^2$ | (1) |



GCSE Exam Questions: Surface Area of a Cuboid Answers

| | Question | Answer | Marks |
|--------|---|---|------------|
| 4) (a) | Amanda wants to wrap the present on the right with wrapping paper. Wrapping comes in $2m$ long rolls and the width is $1.5m$. How many rolls of wrapping paper will she need to wrap the entire present? 1.5m | (a) $SA = 2lw + 2lh + 2wh$ SA = 2(3)(1) + 2(1)(1.5) + 2(3)(1.5) Surface Area = $18m^2$ Area of roll = $l \times w$ Area of roll = 2×1.5 Area of roll = $3m^2$ $18m^2 \div 3m^2 = 6$ 6 rolls will be needed to wrap the entire present | (1) |
| | 3m | | |
| (b) | If each roll of paper costs £17.50, how much will it cost to wrap the entire present? | (b) 6 × 17.50 £105 | (1) (1) |

Where to go next?

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