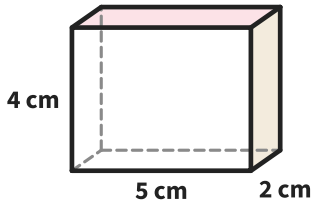
Surface Area of Cuboids

ANSWERS

1

Work out the surface area of this cuboid.



Top and bottom	5 × 2 = 10
Front and back	5 × 4 = 20
Two sides	2 × 4 = 8

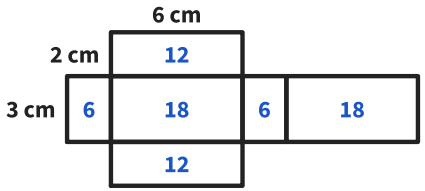
Surface area = 2 × (top + front + side)

2 × (10 + 20 + 8) = 76

Answer 76 cm²

2

This is the net of a cuboid. Work out the surface area of the cuboid.



Top and bottom	6 × 2 = 12
Front and back	6 × 3 = 18
Two sides	2 × 3 = 6

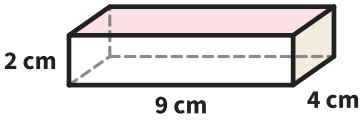
Surface area = 2 × (top + front + side)

2 × (12 + 18 + 6) = 72

Answer 72 cm²

3

Work out the surface area of this cuboid.



Top and bottom	9 × 4 = 36
Front and back	9 × 2 = 18
Two sides	4 × 2 = 8

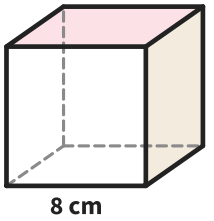
Surface area = 2 × (top + front + side)

2 × (36 + 18 + 8) = 124

Answer 124 cm²

4

This is a cube. Every edge is 8 cm.
Work out its surface area.

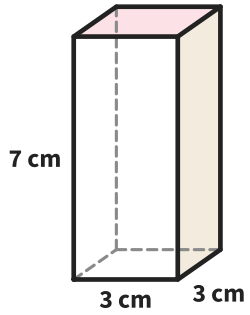


One face	8 × 8 = 64
Six faces	6 × 64 = 384

Answer 384 cm²

5

Work out the surface area of this cuboid.



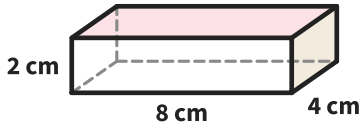
9 + 21 + 21 = 51

2 × 51 = 102

Answer 102 cm²

6

Ravi works out the surface area of this cuboid as 32 + 16 + 8 = 56 cm².
Explain Ravi's mistake, then work out the surface area.



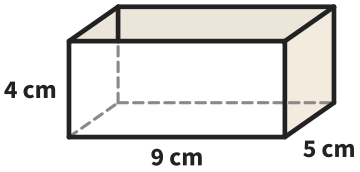
He only added the 3 faces he can see

2 × 56 = 112

Answer 112 cm²

7

This box is a cuboid with no lid.
Work out its surface area.



bottom 9 × 5 = 45

45 + 2 × 36 + 2 × 20 = 157

Answer 157 cm²

8

A storage tin is a cuboid 12 cm long, 10 cm wide and 5 cm high. Work out the surface area of the tin.

120 + 60 + 50 = 230

2 × 230 = 460

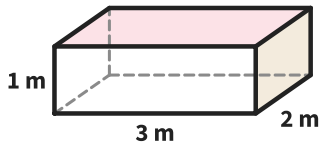
Answer 460 cm²

Surface Area of Cuboids *further practice*

ANSWERS

9

A wooden crate is a cuboid.
Work out its surface area.



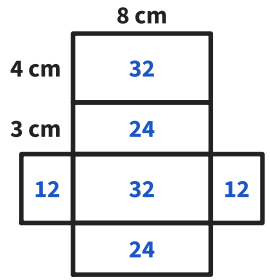
6 + 3 + 2 = 11

2 × 11 = 22

Answer 22 m²

10

This is the net of a cuboid. Work out the surface area of the cuboid.



32 + 24 + 12 = 68

2 × 68 = 136

Answer 136 cm²

11

A wooden building block is a cube with edges of 3 cm. Work out its surface area.

one face 3 × 3 = 9

6 × 9 = 54

Answer 54 cm²

12

A plant tray is a cuboid with no lid.
It is 30 cm long, 20 cm wide and
6 cm high. Work out its surface area.

bottom 30 × 20 = 600

600 + 2 × 180 + 2 × 120

Answer 1200 cm²

13

Cuboid A is 6 cm by 6 cm by 1 cm.
Cuboid B is 4 cm by 3 cm by 3 cm.
Which has the bigger surface area, and by how much?

A: 2 × (36 + 6 + 6) = 96

B: 2 × (12 + 12 + 9) = 66

Answer A, by 30 cm²

14

A cuboid is 10 cm long, 4 cm wide and 3 cm high. Mia says its surface area is $10 \times 4 \times 3 = 120$ cm².
Explain Mia's mistake, then work out the surface area.

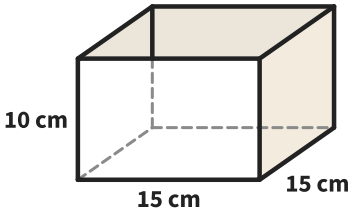
10 × 4 × 3 is the volume

2 × (40 + 30 + 12) = 164

Answer 164 cm²

15

This box has a square base and no lid.
Work out its surface area.



225 + 4 × 150

Answer 825 cm²

16

A cuboid is 2 cm long, 3 cm wide and 4 cm high. Jo says that if the length doubles, the surface area doubles.
Is Jo right? Show how you know.

2 by 3 by 4: 52 cm²

4 by 3 by 4: 80 cm²

Answer No, 80 is not 2 × 52