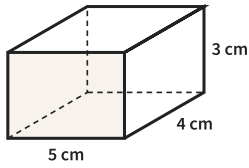


Interleaved: volume and surface area

ANSWERS 

1

Find the volume of the cuboid.



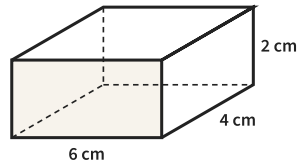
Which method? ☒ Volume ☐ Total surface area
☐ Area of one face

volume: $5 \times 4 \times 3$, so 60 cm^3

Answer 60 cm³

2

Find the total surface area of the cuboid.

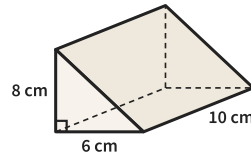


Which method? ☐ Volume ☒ Total surface area
☐ Area of one face

Answer 88 cm²

3

Find the area of the triangular end face of the prism.

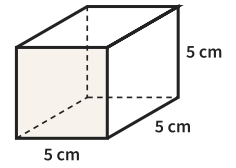


Which method? ☐ Volume ☐ Total surface area
☒ Area of one face

Answer 24 cm²

4

Find the total surface area of the cube.

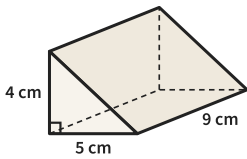


Which method? ☐ Volume ☒ Total surface area
☐ Area of one face

Answer 150 cm²

5

Find the volume of the prism.



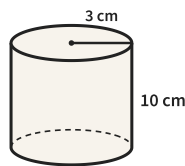
Which method? ☒ Volume ☐ Total surface area
☐ Area of one face

cross section 10 cm^2 , $\times 9$

Answer 90 cm³

6

Find the area of the circular top of the cylinder. Give your answer to 1 decimal place.

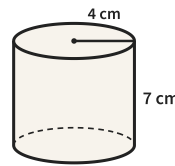


Which method? ☐ Volume ☐ Total surface area
☒ Area of one face

Answer 28.3 cm²

7

Find the volume of the cylinder. Give your answer to 1 decimal place.

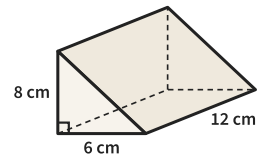


Which method? ☒ Volume ☐ Total surface area
☐ Area of one face

Answer 351.9 cm³

8

The sloping face of this prism is 10 cm wide. Find the total surface area of the prism.



Which method? ☐ Volume ☒ Total surface area
☐ Area of one face

two triangles 48 cm^2 , three rectangles 6, 8 and 10 by 12

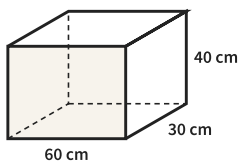
Answer 336 cm²

Interleaved: volume and surface area *further practice*

ANSWERS 

9

A fish tank is 60 cm long, 30 cm wide and 40 cm tall. How many litres of water does it hold when full? (1 litre = 1000 cm³)



Answer 72 litres

10

A gift box is 20 cm by 15 cm by 10 cm. How much paper covers it exactly, with no overlap?

Answer 1300 cm²

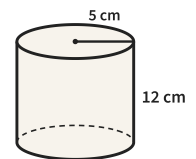
11

A tent is a triangular prism. Its triangular front is 1.6 m wide and 1.2 m tall. Find the area of the front.

Answer 0.96 m²

12

A tin is a cylinder with radius 5 cm and height 12 cm. Find its volume to the nearest cm³.



Answer 942 cm³

13

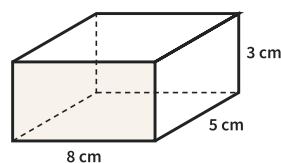
A cube has a volume of 64 cm³. Find its total surface area.

the side is 4 cm

Answer 96 cm²

14

A cuboid is 8 cm by 5 cm by 3 cm. Find the area of its largest face.



Answer 40 cm²

15

A box with no lid is 30 cm long, 20 cm wide and 10 cm tall. How much card is needed to make it?

the base once, the four sides

Answer 1600 cm²

16

Leo says the volume of a cuboid 10 cm by 4 cm by 3 cm is $2(40 + 30 + 12) = 164 \text{ cm}^3$. Explain his mistake and find the volume.

he found the surface area; volume is $10 \times 4 \times 3$

Answer 120 cm³