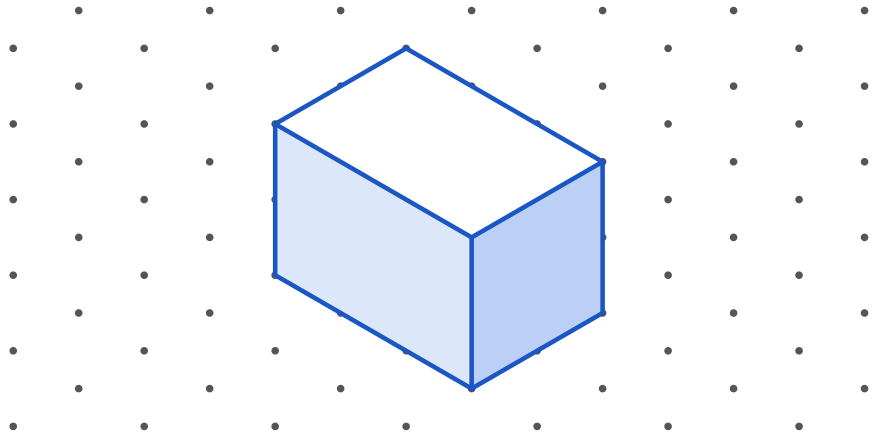
Plans and elevations: drawing the solid

ANSWERS

1

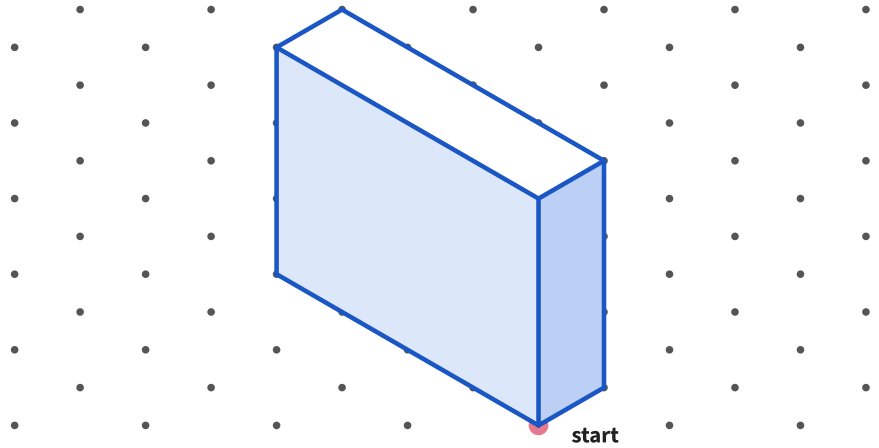
Each line joins two dots. 1 space = 1 cm.

Draw a cuboid 3 cm long, 2 cm wide and 2 cm high. Its front upright edge is drawn for you.



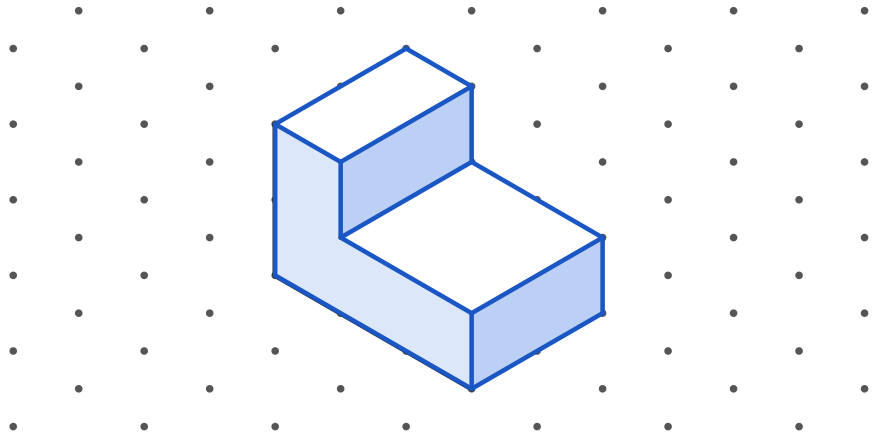
2

Draw a cuboid 4 cm long, 1 cm wide and 3 cm high. Start at the dot.



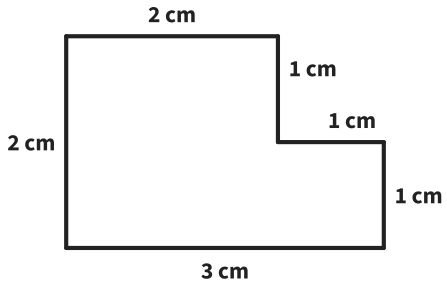
3

The front face of an L-shaped prism is drawn on the dots. The prism is 2 cm deep. Finish the drawing.

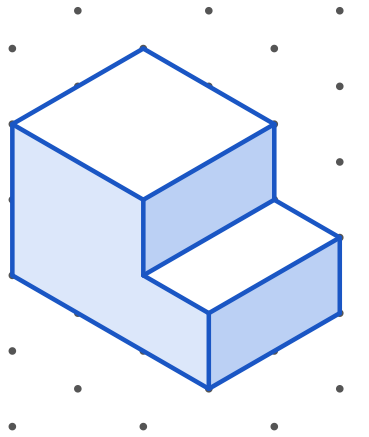


4

This is a sketch of the front face of an L-shaped prism. The prism is 2 cm deep. Draw it on the isometric paper.



2 cm deep

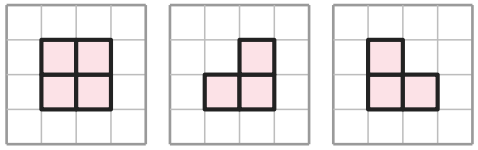


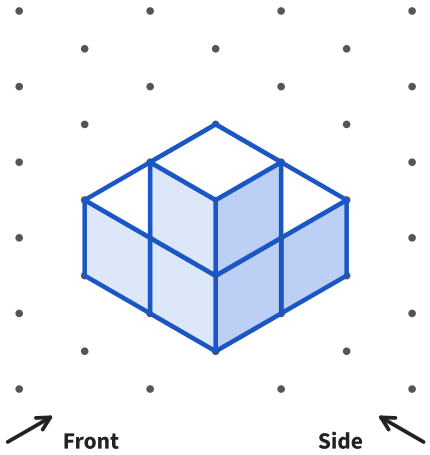
Plans and elevations: drawing the solid

ANSWERS

5

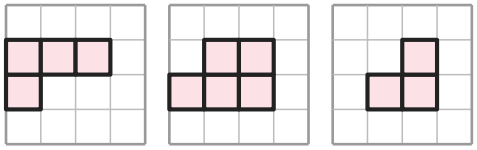
Here are the plan, front elevation and side elevation of a solid made from cubes.
Draw the solid. The first cube is drawn for you.

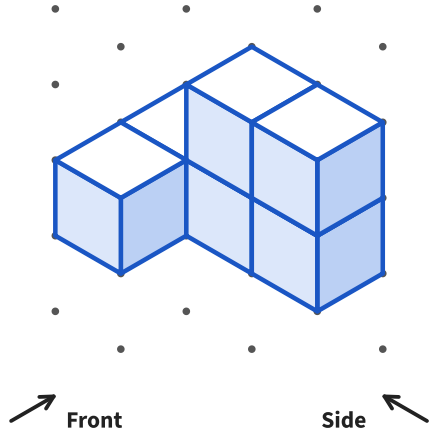




6

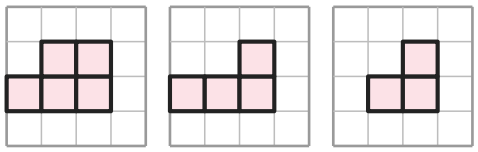
Here are the plan, front elevation and side elevation of a solid made from cubes.
Draw the solid on the isometric paper.

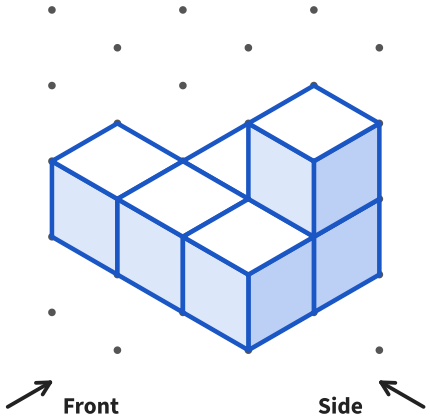




7

Draw the solid with these three views. How many cubes is it made from?

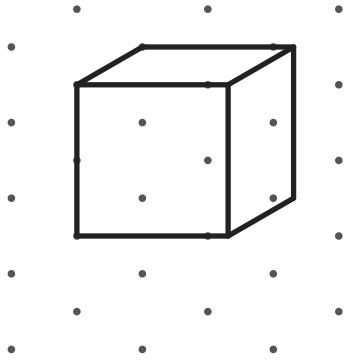


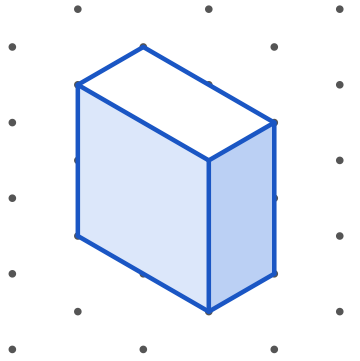


Number of cubes 6 cubes

8

Jamal tried to draw a cuboid 2 cm long, 1 cm wide and 2 cm high. What has he done wrong? Draw it properly on the right.





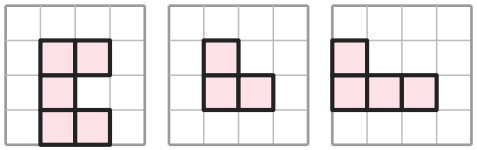
Answer Some edges go straight across and miss the dots. Every edge should go straight up or slope along the dots.

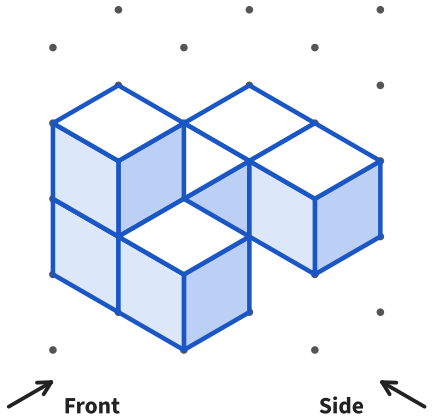
Plans and elevations: drawing the solid *further practice*

ANSWERS

9

Draw the solid made from cubes with these three views. How many cubes does it have?

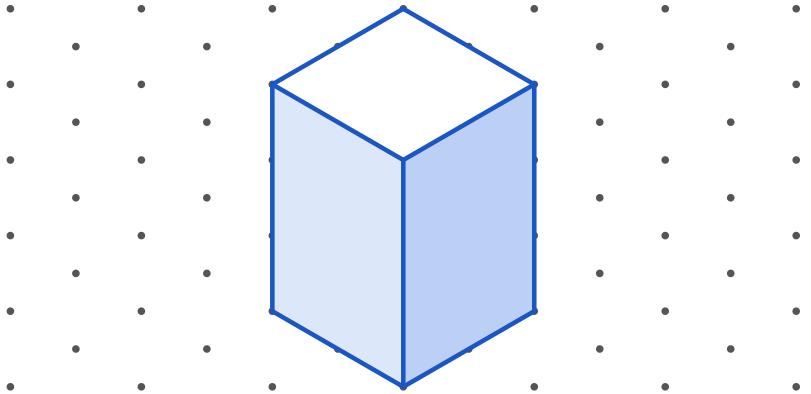




Number of cubes *6 cubes*

10

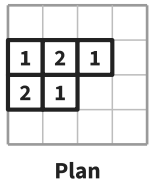
Draw a cuboid 2 cm long, 2 cm wide and 3 cm high. How many centimetre cubes would it take to build it?

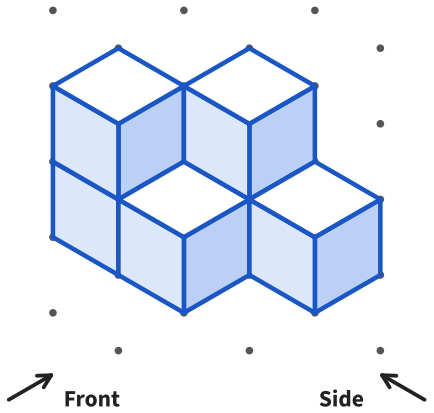


Number of cubes *12 cubes (4 in a layer, 3 layers)*

11

The plan shows how many cubes are in each column. Draw the solid. How many cubes are there?

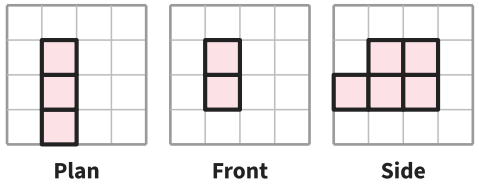


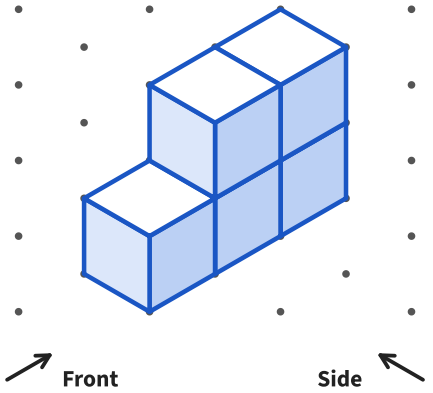


Number of cubes *7 cubes*

12

Leah stacks cube shaped storage boxes against a wall. Here are the plan, front elevation and side elevation. Draw the stack. How many boxes are there?





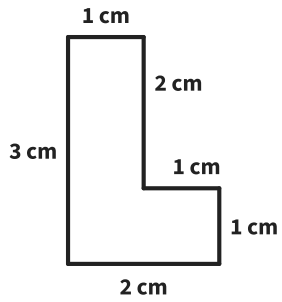
Number of boxes *5 boxes*

Plans and elevations: drawing the solid *further practice*

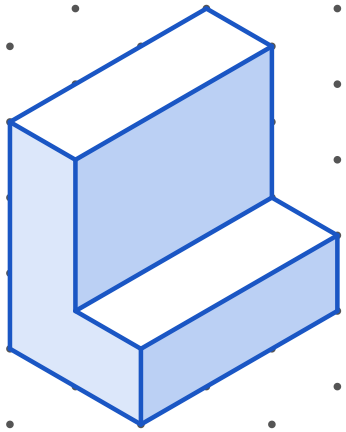
ANSWERS

13

A bookend is an L-shaped prism. Here is a sketch of its front face, and it is 3 cm deep. Draw the bookend on the isometric paper.

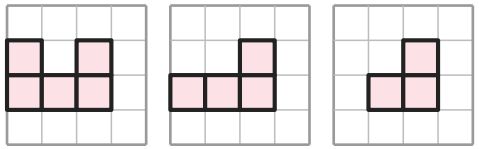


3 cm deep

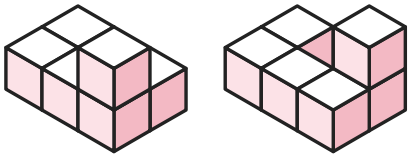


14

Which drawing, A or B, matches this plan, front elevation and side elevation? Explain how you know.



Plan Front Side

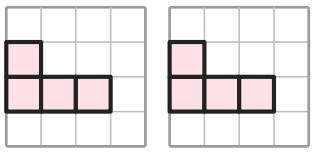


A B

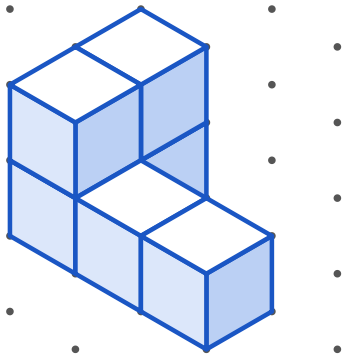
Answer *B. The side elevation shows the back row is 2 tall.*

15

A solid is made from 6 cubes. Here are its plan and front elevation. Draw the solid on the isometric paper.



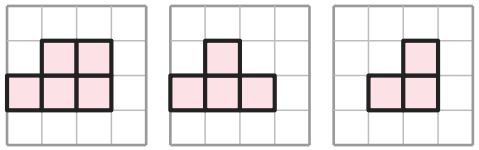
Plan Front



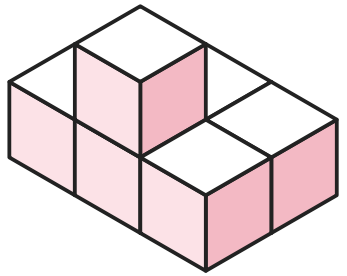
Front Side

16

Sami drew this solid from the plan, front elevation and side elevation. Explain what Sami has done wrong.



Plan Front Side



Sami's drawing

Answer *The side elevation shows the back row is 2 tall, so the column of 2 is at the back, not the front.*