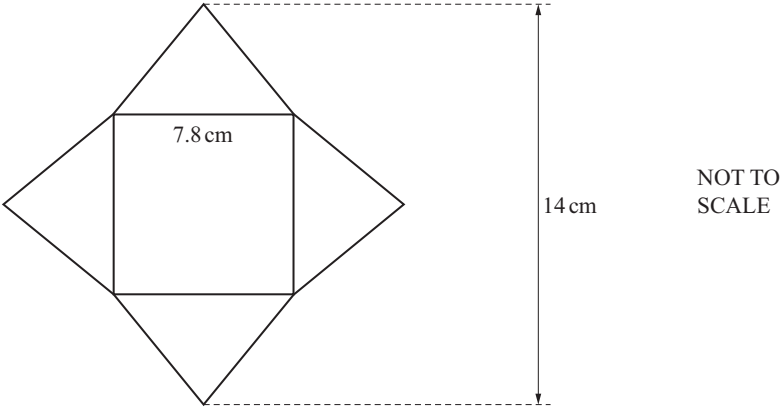


16 The diagram shows a shape made from a square and four congruent isosceles triangles.



Work out the area of this shape.

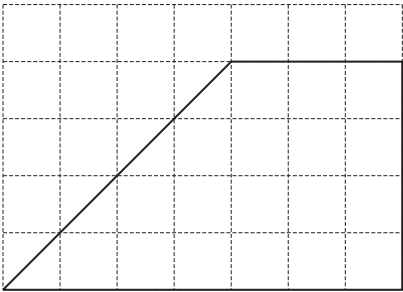
..... cm² [3]

17 The volume of a cylinder is 863.5 cm³.
The height of the cylinder is 12.3 cm.

Find the radius of the cylinder.

..... cm [3]

10 A shape is drawn on a 1 cm² grid.



(a) Find the area of the shape.

..... cm² [1]

(b) On the grid, shade 50% of the shape.

[1]

- 12 (a)** Kat has a method for finding the difference between two square numbers, $a^2 - b^2$.
Her method is

(the sum of a and b) $\times$ (the difference between a and b) .

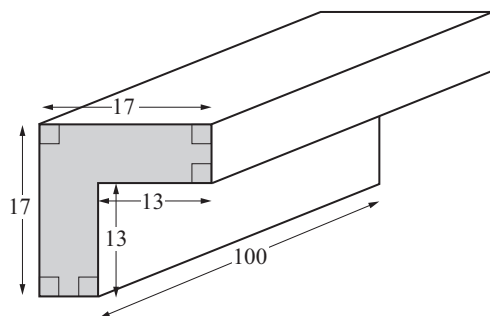
She shows her method for $17^2 - 13^2$.

$$\begin{aligned}
 &17^2 - 13^2 \\
 &= (17 + 13) \times (17 - 13) \\
 &= 30 \times 4 \\
 &= 120
 \end{aligned}$$

Work out $29^2 - 21^2$ using Kat's method.

..... [2]

- (b)** In this part, all lengths are in centimetres.



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The diagram shows a prism.

Work out the volume of the prism.

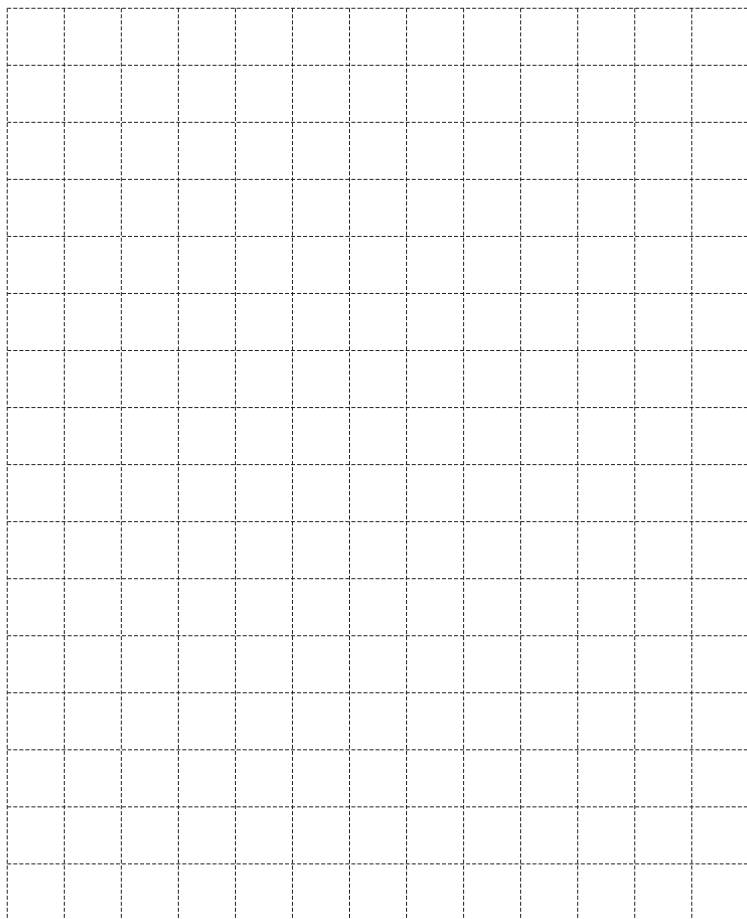
..... cm^3 [2]

- 13** Convert 8 litres into cm^3 .

..... cm^3 [1]

10 A cuboid has length 5 cm, width 2 cm and height 3 cm.

(a) Draw a net of the cuboid on the 1 cm^2 grid.

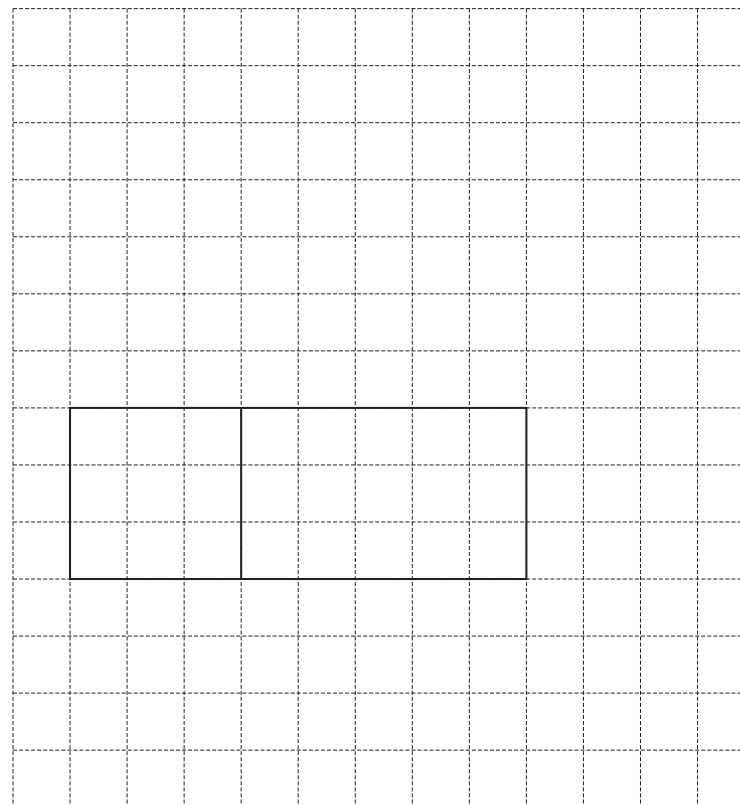


(b) Work out the volume of the cuboid.
Give the units of your answer.

..... [2]

[3]

8 The diagram shows two faces of a net of a cuboid on a 1 cm^2 grid.



(a) Complete the statement.

The dimensions of the cuboid are cm by cm by cm. [1]

(b) On the grid, complete a net of the cuboid. [3]

(c) Work out the volume of the cuboid.

..... cm^3 [2]