

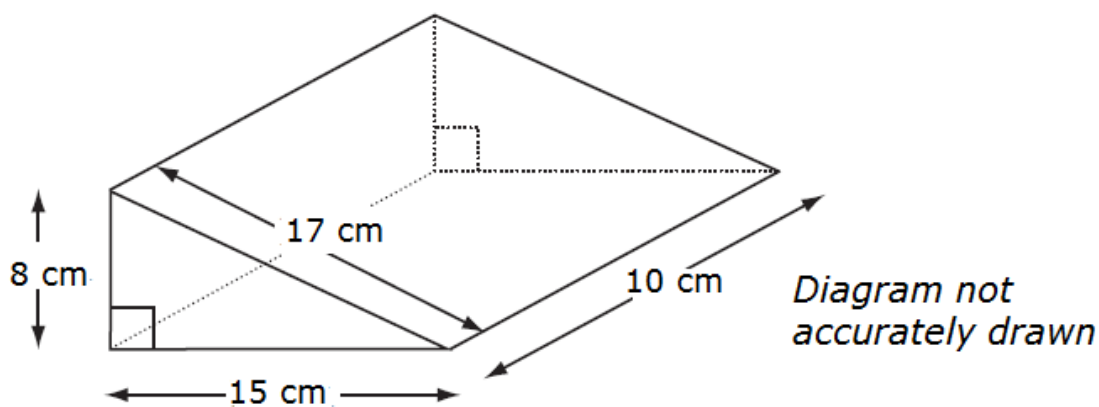
Work out the total surface area of the cube.

But there are 6 faces

$$6 \times 25 = 150 \text{ cm}^2$$

(3)

Make sure you know what formula you are given in the exam paper



Work out the **total** surface area of the triangular prism.

$8$   $15$   $17$   $60 \text{ cm}^2$   $17$  "slanting" face =  $170 \text{ cm}^2$   $15$  Bottom  $15 \times 10 = 150$   $10$  (4)

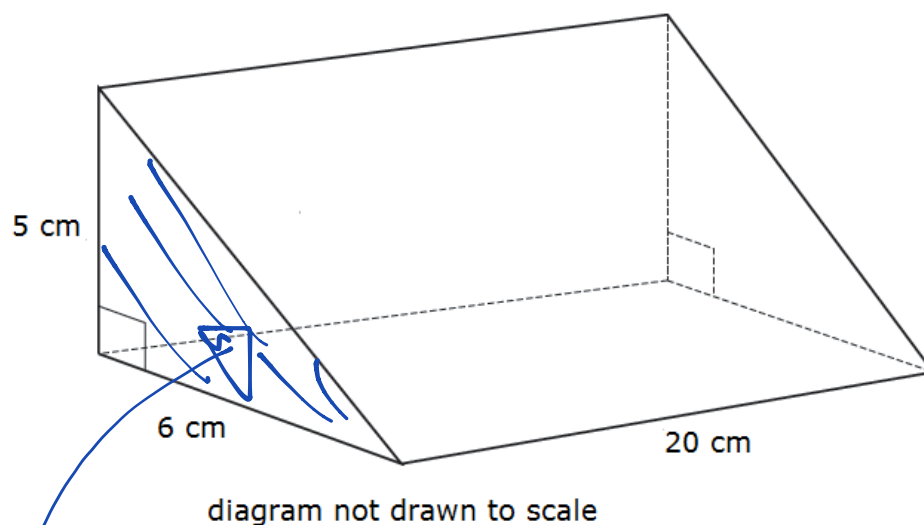
$8$   $15$   $17$   $60 \text{ cm}^2$   $8$  BACK  $80 \text{ cm}^2$   $10$

$$\frac{8 \times 15}{2} = \frac{120}{2} = 60 \text{ cm}^2$$

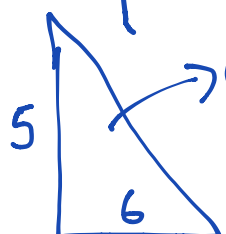
Total surface area =

$$\begin{array}{r}
 170 \\
 150 \\
 80 \\
 60 \\
 60 \\
 \hline
 520 \text{ cm}^2
 \end{array}$$

A triangular prism has dimensions as shown in the diagram.



Work out the volume of the prism.

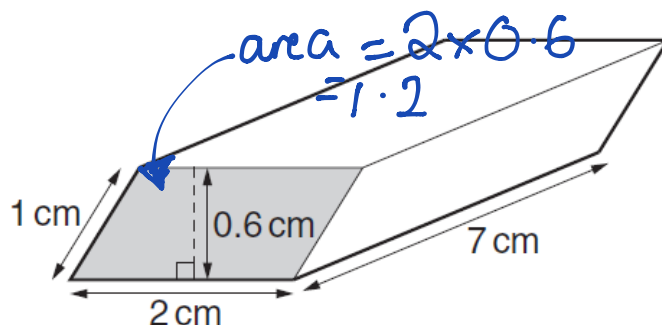


$$\begin{aligned} \text{area of this triangle} \\ &= \frac{5 \times 6}{2} = \frac{30}{2} = 15 \text{ cm}^2 \end{aligned}$$

(3)

$$\begin{aligned} \text{Volume} &= 15 \times 20 \\ &= 300 \text{ cm}^3 \end{aligned}$$

An eraser is a prism with a parallelogram as its cross section.

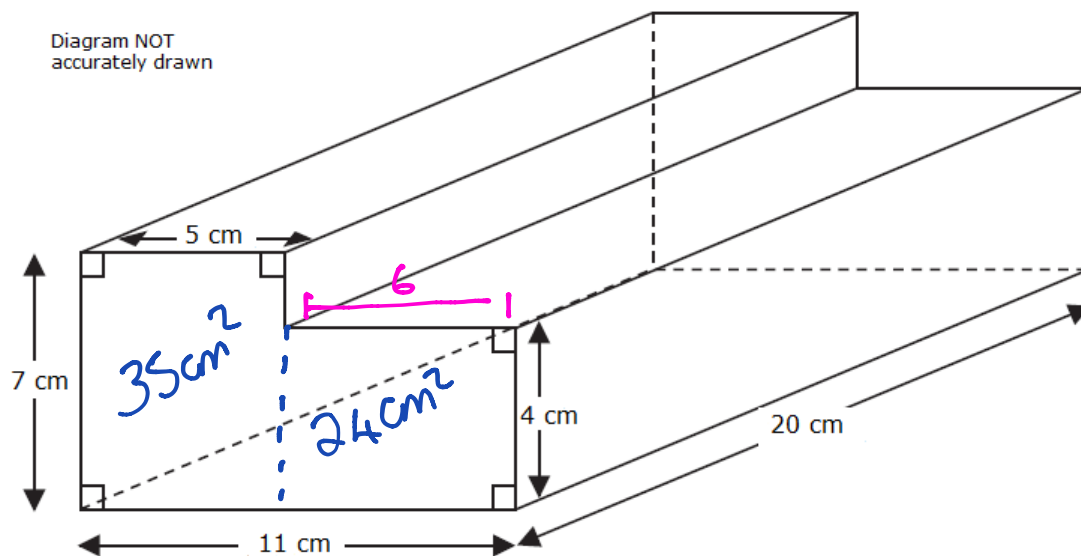


Work out the volume of the eraser. Give the units of your answer.

$$1.2 \times 7 = \underline{8.4 \text{ cm}^3}$$

(3)

Here is a solid prism.



Work out the volume of the prism.

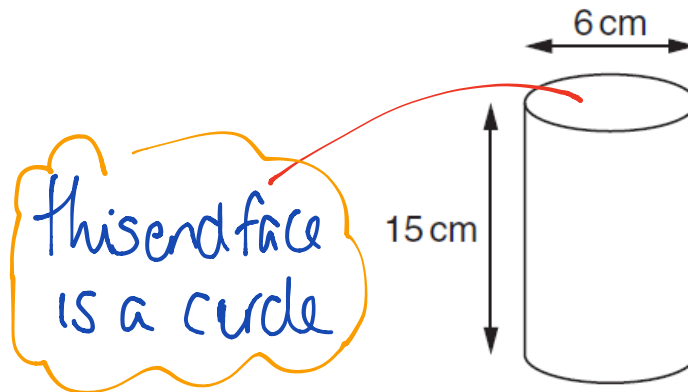
$$35 + 24 = 59 \text{ cm}^2$$

$$59 \times 20 = 1180 \text{ cm}^3$$

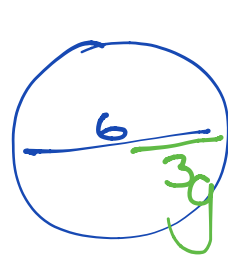
1180 cm<sup>3</sup>

(3)

A drinking glass is a cylinder. The interior dimensions of the glass are as shown.



Work out the volume of liquid needed to fill the glass.



$$A = \pi r^2$$

$\times$  we are using, so  $r = 3$

$$= \pi \times 3^2$$

$$= 28.27433388$$

$$\times 15$$

$$= 424.1150085 \text{ cm}^3$$

$$424.12 \text{ cm}^3 (3)$$

(2 decimal places).

no accuracy is given so I'm going to round to 2 decimal places.... BUT. will state this too!

