Name:

Exam Style Questions

Volume: L-Shaped Prism

Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

Guidance

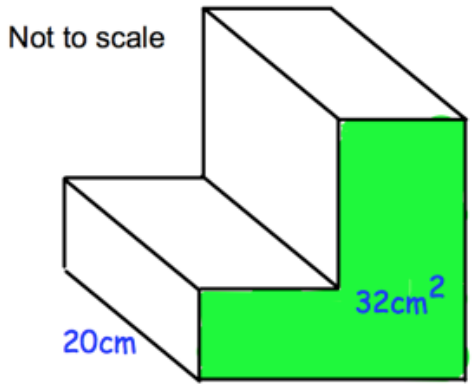
1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

www.corbettmaths.com/contents

Video 358

1. The diagram shows a prism.



The cross-sectional area is 32cm².

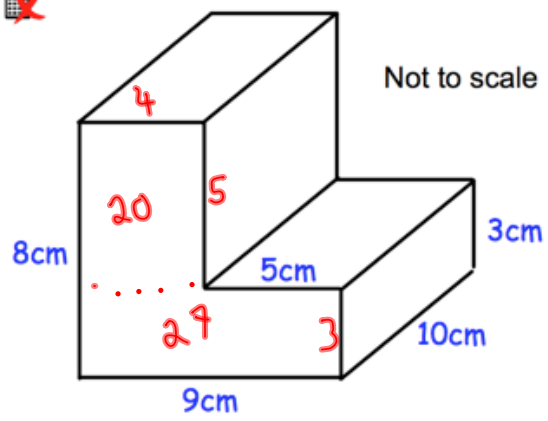
Work out the volume of the prism.

$32 \times 20 = 640 cm^3$

640 .....cm³

(2)

2. The diagram shows a prism.



Work out the volume of the prism.

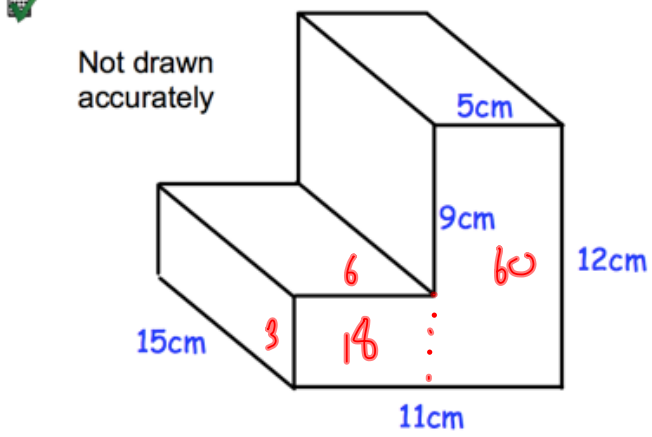
area of front: $4 \times 5 = 20$, $9 \times 3 = 27$ } $47 cm^2$

volume $47 \times 10 = 470$

470 .....cm^3

(4)

3. The diagram shows a prism.



Work out the volume of the prism.

area of front: $5 \times 12 = 60$, $3 \times 6 = 18$ } $78 cm^2$

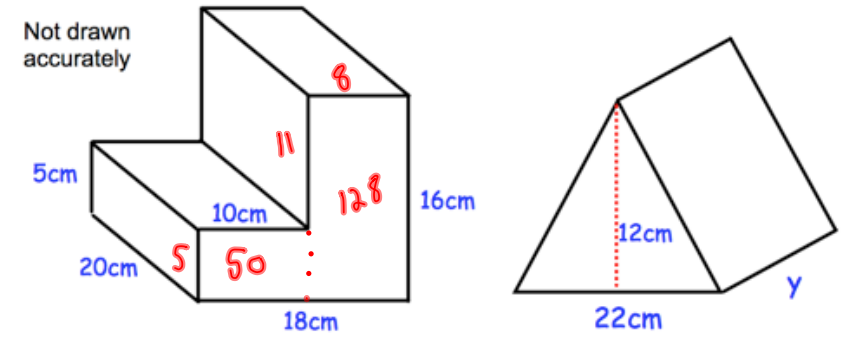
Volume: $78 \times 15 = 1170 cm^3$

1170

.....cm³

(4)

4. Shown below is an L-shaped prism and a triangular prism.



Both prisms have the same volume.

Calculate y.

Area of front (L-shape): $10 \times 5 = 50$, $8 \times 16 = 128$ } $178 cm^2$

Volume (L-shape): $178 \times 20 = 3560 cm^3$

Area of front (triangular prism): $\frac{1}{2} \times 22 \times 12 = 132 cm^2$

$3560 \div 132 = 26.9696...$ 26.97 (two decimal places)

26.97 cm

(6)