Surface Area Exam Practice

Q1. Work out the surface area of the cuboid shown, stating the units.
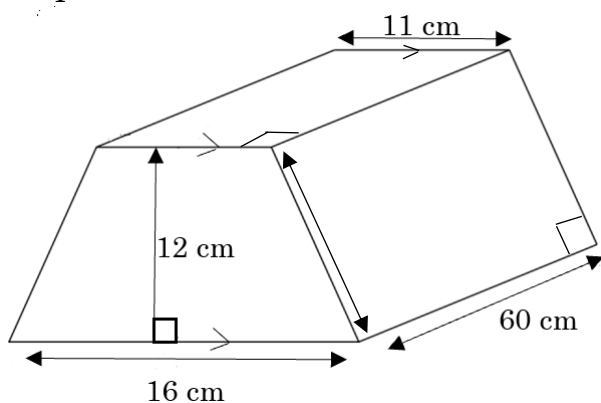
8 cm

7 cm

3 cm
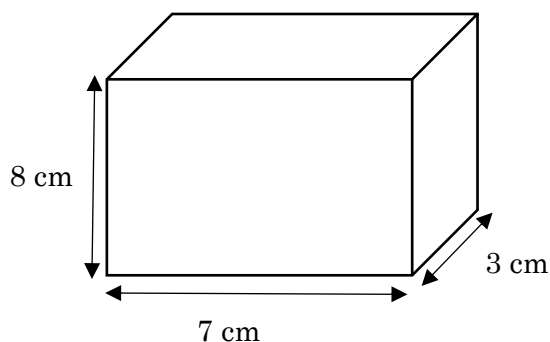
(3 marks)

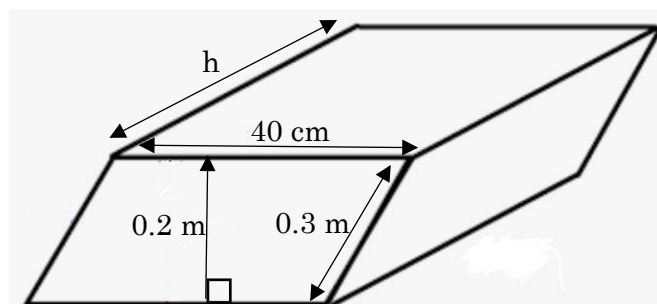**Q2.** Work out the surface area of the shape shown, stating the units.

12 cm

15 cm

35 cm
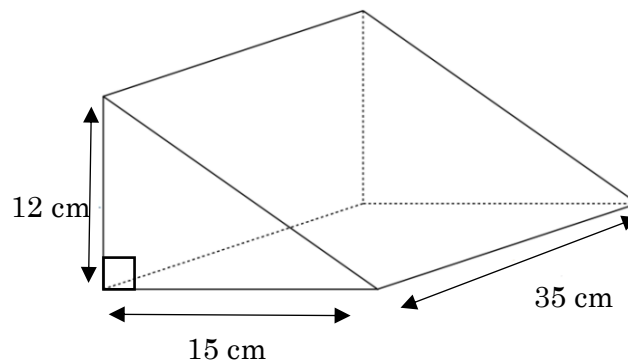
(5 marks)

Q3. Work out the surface area of the prism shown:

11 cm

12 cm

16 cm

60 cm

(3 marks)

Q4. The prism below, which has a parallelogram cross-section, has volume 60000 cm³. Find the length h.

h

40 cm

0.2 m

0.3 m

(4 marks)

Q5. Find the surface area of the L-shaped prism below.

13 cm

9 cm

30 cm

4 cm

21 cm
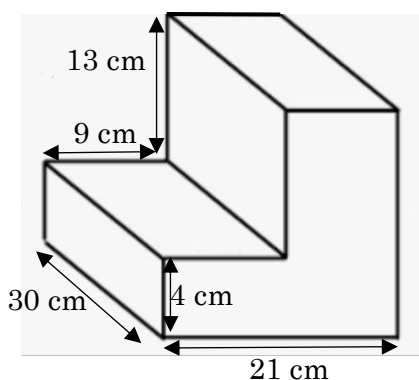
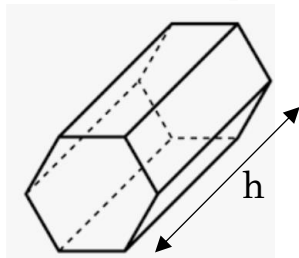(4 marks)

Q6. A prism has a volume of 4.5 m² and length 150 cm.
The cross-section is made up of two separate shapes, shape A and shape B, which are joined together.
Shape A has area 120 cm².
Find the area of shape B, stating the units.

(3 marks)

Q7. The total surface area of this prism is 1200 cm². The cross-section is a regular hexagon with side length 8 cm and has area $96\sqrt{3}$ cm². Work out the length h shown to 1 d.p.


h

(3 marks)

Q8. Below is a wooden cuboid. The cross-section is square and has a prism with square cross-section removed from the centre as shown. Find the surface area of the shape.

3   3   30

14
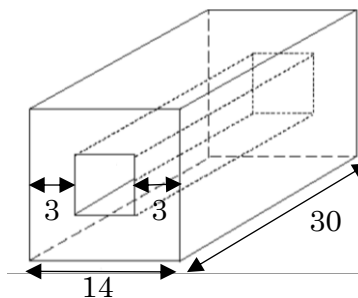
(4 marks)

Q9. For a display, a tower of 9 bricks, each one placed directly on top of another, is to be built, using cuboid shaped bricks as shown below. Once built, the visible faces will be painted red.
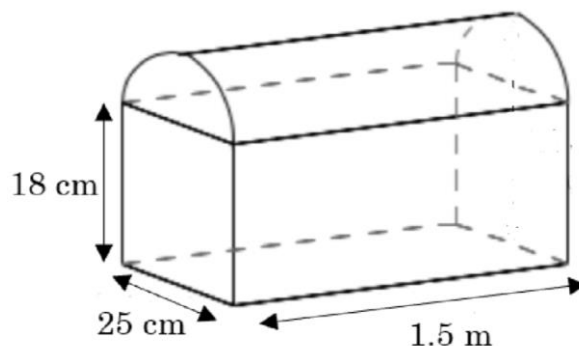

15 cm

13 cm

30 cm
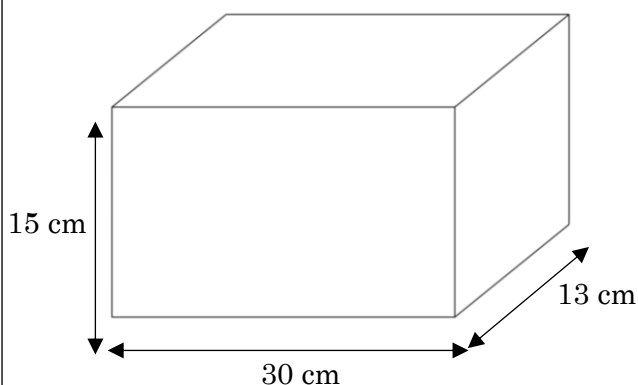
Red paint costs £1.20 per 250 ml pot, and 100 ml of paint will cover 800 cm².

Work out the cost of painting the display.

(5 marks)

Q10. Below is a picture of a mail box which is a semi-cylinder on top of a cuboid. Find the total surface area of the mail box.

18 cm

25 cm   1.5 m

(6 marks)