

Area ,Perimeter and Volume

Important formulas:

Area of a rectangle = $l \times w$

Perimeter = $2(l + w)$



Area of a square = s^2

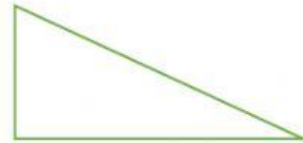
Perimeter = $4s$



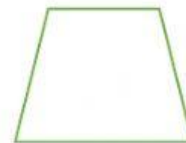
Area of a parallelogram = $b \times h$



Area of a triangle = $\frac{bh}{2}$ = $\frac{1}{2} \times b \times h$



Area of a trapezium = $(a + b)h/2$



Surface area of a cuboid = $2(l \times b + b \times h + l \times h)$

Volume of a cuboid = $l \times b \times h$



Surface area of a cube = $6a^2$

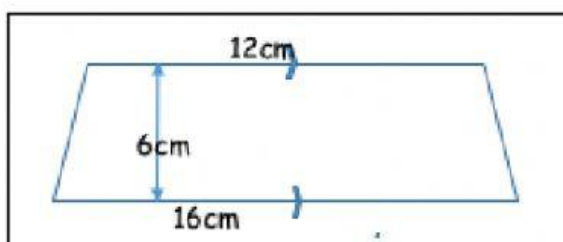
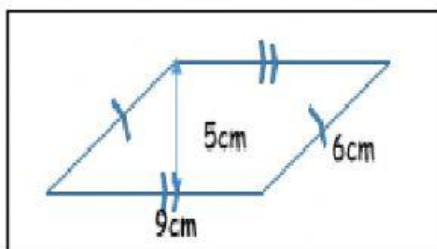
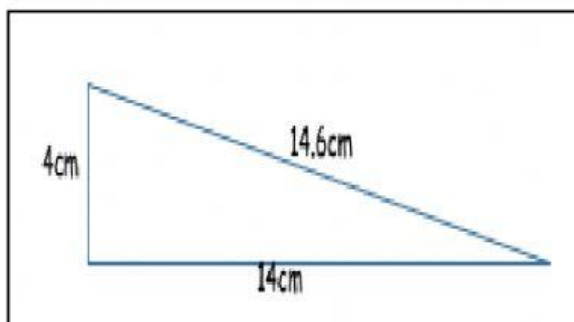
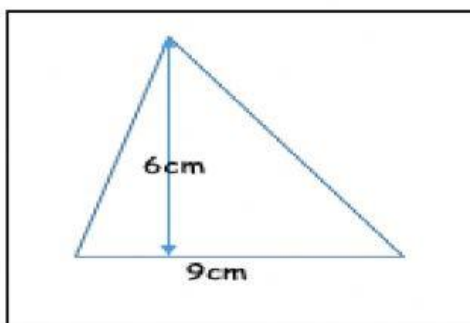
Volume of a cube = a^3



Practice questions

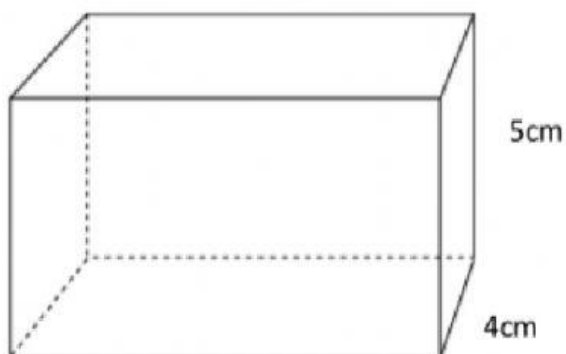
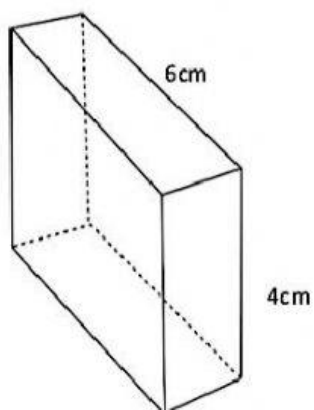
1. Find the area and perimeter of the rectangle whose dimensions are: length = 17 m breadth = 13 m
2. The perimeter of a rectangle is 230 cm. If the length of the rectangle is 70 cm, find its breadth and area.
3. The area of a rectangle is 96 cm^2 . If the breadth of the rectangle is 8 cm, find its length and perimeter.
5. Find the cost of tiling a rectangular plot of land 300 m long and 150 m wide at the rate of \$6 per hundred square m.
6. How many rectangles can be drawn with 40 cm as perimeter? Also, find the dimensions of the rectangle whose area will be maximum.

7. Find the area of the following shapes.



8. What is the volume of these cuboid?

WHERE IS THE 3RD DIMENSION? GIVE ONLY 1 QUESTION



10. What is the volume of a cube which has an edge measuring 12cm?

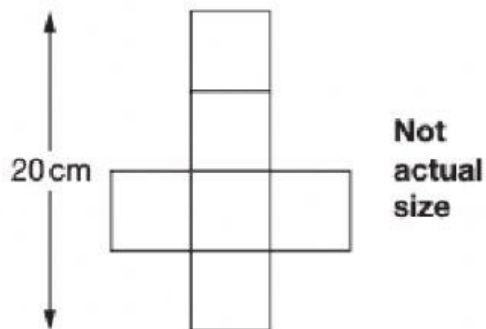
11. One face of a cube has an area of 25cm^2 . What is its volume?

14. A cuboid has volume 480cm^3 . Its base is 16 cm long and 6cm.

What is the height of the cuboid?

15. This is the net of a cube.

(SAT Question)



What is the **volume** of the cube?