

**15.** The volume of a cube whose edge is  $3x$  is

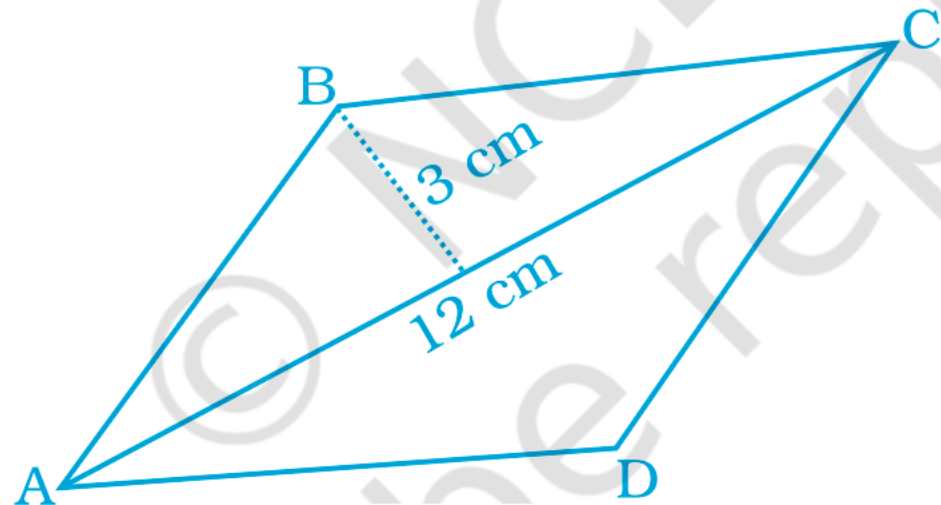
(a)  $27x^3$

(b)  $9x^3$

(c)  $6x^3$

(d)  $3x^3$

**16.** The figure ABCD is a quadrilateral in which  $AB = CD$  and  $BC = AD$ . Its area is



(a)  $72 \text{ cm}^2$

(b)  $36 \text{ cm}^2$

(c)  $24 \text{ cm}^2$

(d)  $18 \text{ cm}^2$

- 37.** The surface area of a cylinder which exactly fits in a cube of side  $b$  is \_\_\_\_\_.
- 38.** If the diagonal  $d$  of a quadrilateral is doubled and the heights  $h_1$  and  $h_2$  falling on  $d$  are halved, then the area of quadrilateral is \_\_\_\_\_.
- 39.** The perimeter of a rectangle becomes \_\_\_\_\_ times its original perimeter, if its length and breadth are doubled.
- 40.** A trapezium with 3 equal sides and one side double the equal side can be divided into \_\_\_\_\_ equilateral triangles of \_\_\_\_\_ area.
- 41.** All six faces of a cuboid are \_\_\_\_\_ in shape and of \_\_\_\_\_ area.

**91.** The thickness of a hollow metallic cylinder is 2 cm. It is 70 cm long with outer radius of 14 cm. Find the volume of the metal used in making the cylinder, assuming that it is open at both the ends. Also find its weight if the metal weighs 8 g per  $\text{cm}^3$ .

used in it:

- 99.** A river 2 m deep and 45 m wide is flowing at the rate of 3 km per hour. Find the amount of water in cubic metres that runs into the sea per minute.

- 74.** In the year 2001, the number of malaria patients admitted in the hospitals of a state was 4,375. Every year this number decreases by 8%. Find the number of patients in 2003.
- 75.** Jyotsana bought a product for Rs 3,155 including 4.5% sales tax. Find the price before tax was added.

- 89.** Find the difference between Compound Interest and Simple Interest on Rs 45,000 at 12% per annum for 5 years.
- 90.** A new computer costs Rs 1,00,000. The depreciation of computers is very high as new models with better technological advantages are coming into the market. The depreciation is as high as 50% every year. How much will the cost of computer be after two years?