# Downloaded from www.studiestoday.com MCQ WORK SHEET-I <br> CLASS IX: CHAPTER - 13 <br> SURFACE AREAS AND VOLUMES 

1. The surface area of a cuboid is
(a) $2(\mathrm{lb}+\mathrm{bh}+\mathrm{lh})$
(b) $3(\mathrm{lb}+\mathrm{bh}+\mathrm{lh})$
(c) $2(\mathrm{lb}-\mathrm{bh}-\mathrm{lh})$
(d) $3(\mathrm{lb}-\mathrm{bh}-\mathrm{lh})$
2. The surface area of a cube if edge ' $a$ ' is
(a) $7 a^{2}$
(b) $6 a^{2}$
(c) $5 a^{3}$
(d) $5 a^{2}$
3. The length, breadth and height of a room is $5 \mathrm{~m}, 4 \mathrm{~m}$ and 3 m . The cost of white washing its four walls at the rate of Rs. 7.50 per $\mathrm{m}^{2}$ is
(a) Rs. 110
(b) Rs. 109
(c) Rs. 220
(d) Rs. 105
4. The perimeter of floor of rectangular hall is 250 m . The cost of the white washing its four walls is Rs. 15000. The height of the room is
(a) 5 m
(b) 4 m
(c) 6 m
(d) 8 m
5. The breadth of a room is twice its height and is half of its length. The volume of room is $512 \mathrm{dm}^{3}$. Its dimensions are
(a) $16 \mathrm{dm}, 8 \mathrm{dm}, 4 \mathrm{dm}$
(b) $12 \mathrm{dm}, 8 \mathrm{dm}, 2 \mathrm{dm}$
(c) $8 \mathrm{dm}, 4 \mathrm{dm}, 2 \mathrm{dm}$
(d) $10 \mathrm{dm}, 15 \mathrm{dm}, 20 \mathrm{dm}$
6. The area of three adjacent faces of a cube is $x, y$ and $z$. Its volume $V$ is
(a) $V=x y z$
(b) $\mathrm{V}^{3}=x y z$
(c) $V^{2}=x y z$
(d) none of these
7. Two cubes each of edge 12 cm are joined. The surface area of new cuboid is
(a) $140 \mathrm{~cm}^{2}$
(b) $1440 \mathrm{~cm}^{2}$
(c) $144 \mathrm{~cm}^{2}$
(d) $72 \mathrm{~cm}^{2}$
8. The curved surface area of cylinder of height ' $h$ ' and base radius ' $r$ ' is
(a) $2 \pi \mathrm{rh}$
(b) $\pi \mathrm{rh}$
(c) $\frac{1}{2} \pi \mathrm{rh}$
(d) none of these
9. The total surface area of cylinder of base radius ' $r$ ' and height ' $h$ ' is
(a) $2 \pi(r+h)$
(b) $2 \pi r(r+h)$
(c) $3 \pi \mathrm{r}(\mathrm{r}+\mathrm{h})$
(d) $4 \pi r(r+h)$
10. The curved surface area of a cylinder of height 14 cm is $88 \mathrm{~cm}^{2}$. The diameter of its circular base is
(a) 5 cm
(b) 4 cm
(c) 3 cm
(d) 2 cm
11. It is required to make a closed cylindrical tank of height 1 m and base diameter 140 cm from a metal sheet. How many square meters a sheet are required for the same?
(a) $6.45 \mathrm{~m}^{2}$
(b) $6.48 \mathrm{~m}^{2}$
(c) $7.48 \mathrm{~m}^{2}$
(d) $5.48 \mathrm{~m}^{2}$.
12. A metal pipe is 77 cm long. Inner diameter of cross section is 4 cm and outer diameter is 4.4 cm . Its inner curved surface area is:
(a) $864 \mathrm{~cm}^{2}$
(b) $968 \mathrm{~cm}^{2}$
(c) $768 \mathrm{~cm}^{2}$
(d) none of these
