



Class 9 Mathematics | Math Of Space: Surface Area And Volume

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. A cube of side 4 cm has total surface area:

A. 16 cm^2 B. 48 cm^2 C. 64 cm^2 D. 96 cm^2

2. The volume of a cuboid 6 cm $\times$ 4 cm $\times$ 3 cm is:

A. 36 cm^3 B. 144 cm^3 C. 72 cm^3 D. 26 cm^3

3. The total surface area of a cuboid 5 cm $\times$ 3 cm $\times$ 2 cm is:

A. 60 cm^2 B. 30 cm^2 C. 62 cm^2 D. 31 cm^2

4. A cylinder of radius 3 cm and height 7 cm has curved area:

A. $42\pi \text{ cm}^2$ B. $63\pi \text{ cm}^2$ C. $60\pi \text{ cm}^2$ D. $21\pi \text{ cm}^2$

5. Volume of a cylinder of radius 2 cm and height 9 cm is:

A. $36\pi \text{ cm}^3$ B. $18\pi \text{ cm}^3$ C. $12\pi \text{ cm}^3$ D. $72\pi \text{ cm}^3$

6. A cone has radius 5 cm and height 12 cm. Slant height is:

A. 10 cm B. 17 cm C. 13 cm D. 7 cm

7. Curved surface area of a cone of radius 4 cm and slant height 9 cm is:

A. $48\pi \text{ cm}^2$ B. $72\pi \text{ cm}^2$ C. $36\pi \text{ cm}^2$ D. $16\pi \text{ cm}^2$

8. Volume of a cone of radius 3 cm and height 8 cm is:

A. $24\pi \text{ cm}^3$ B. $72\pi \text{ cm}^3$ C. $8\pi \text{ cm}^3$ D. $36\pi \text{ cm}^3$

9. Surface area of a sphere of radius 5 cm is:

A. $125\pi \text{ cm}^2$ B. $100\pi \text{ cm}^2$
C. $50\pi \text{ cm}^2$ D. $25\pi \text{ cm}^2$

10. Volume of a sphere of radius 3 cm is:

A. $27\pi \text{ cm}^3$ B. $12\pi \text{ cm}^3$ C. $36\pi \text{ cm}^3$ D. $108\pi \text{ cm}^3$

11. Total surface area of a hemisphere of radius r is:

A. $4\pi r^2$ B. πr^2 C. $3\pi r^2$ D. $2\pi r^2$

12. If every edge of a cube is doubled, volume becomes:

A. 2 times B. 4 times C. 8 times D. 6 times

13. 1 litre equals:

A. 100 cm^3 B. 10 cm^3
C. 10000 cm^3 D. 1000 cm^3

14. A cube has volume 125 cm^3 . Its edge is:

A. 5 cm B. $\sqrt{125} \text{ cm}$ C. 25 cm D. 15 cm

15. A cylinder and cone have the same base and height. Volume ratio cylinder:cone is:

A. 2:1 B. 1:3 C. 1:1 D. 3:1

ANSWER KEY — check after completing all 15 questions

1.D 2.C 3.C 4.A 5.A 6.C 7.C 8.A 9.B 10.C 11.C 12.C 13.D 14.A 15.D

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper