# Surface areas and volumes: worksheet -1

1. Area of an equilateral triangle whose side is 'a' units is _ _ _ _ _. ( )

(a) $\frac{\sqrt{3}}{4}a^2$ (b) $\frac{\sqrt{3}}{2}a$ (c) $\frac{\sqrt{3}}{5}a^3$ (d) None of the above

2. Area of the hexagonal prism whose side is 'a' units is _ _ _ _ . ( )

(a) $\frac{\sqrt{3}}{4}a^2$ (b) $2\times\frac{\sqrt{3}}{4}a^2$ (c) $4\times\frac{\sqrt{3}}{4}\times a^2$ (d) $6\times\frac{\sqrt{3}}{4}\times a^2$

3. L.S.A. of a cube is _ _ _ _ _ _ _ _ _ _ _ _ . ( )

(a) $4a^2$ (b) $3a^2$ (c) $2a^2$ (d) $a^2$

4. T.S.A. of a cube is _ _ _ _ _ _ _ _ _ _ _ _ . ( )

(a) $3a^2$ (b) $4a^2$ (c) $5a^2$ (d) $6a^2$

5. Volume of a cube is _ _ _ _ _ _ _ _ _ _ _ _ . ( )

(a) a (b) $a^2$ (c) $a^3$ (d) $a^4$

6. L.S.A. of cuboid is _ _ _ _ _ _ _ _ _ _ _ _ . ( )

(a) $2(l+b)$ (b) $2h(l+b)$ (c) $2(lb+bh+lh)$ (d) None

7. T.S.A. of a cuboid is _ _ _ _ _ _ _ _ _ _ _ _ . ( )

(a) $2(l+b)$ (b) $2h(l+b)$ (c) $2(lb+bh+lh)$ (d) None

8. Volume of cuboid is _ _ _ _ _ _ _ _ _ _ _ _ . ( )

(a) $2(l+b)$ (b) $2h(l+b)$ (c) $2(lb+bh+lh)$ (d) $lbh$

9. Diagonal of a cuboid is _ _ _ _ _ _ _ _ _ _ _ _ . ( )

(a) $4(l+b+h)$ (b) $\sqrt{l^2+b^2+h^2}$ (c) $\sqrt{l^2+b^2}$ (d) $\sqrt{b^2h^2}$

10. Perimeter of the base × height of the prism = _ _ _ _ _ _ _ _ . ( )

(a) L.S.A. (b) T.S.A. (c) Volume (d) A or B