# INTERNATIONAL INDIAN SCHOOL <br> BURAIDAH 

Worksheet For The Academic Year 2023-24

## CLASS: VIII SUBJECT: Mathematics DATE: $\underline{12 / 11 / 2023}$ LESSON-11 Mensuration

1) Find the area of a trapezium whose parallel sides are 25 cm and 15 cm and the distance between these sides are 14 cm .
2) Find the area of a quadrilateral of diagonal 12.8 cm and the perpendiculars dropped from the opposite vertices to the diagonal are 6 cm and 4.5 cm .
3) Find the area of a rhombus of diagonals 12 cm and 40 cm .
4) The area of a rhombus is $120 \mathrm{~cm}^{2}$. If one of its diagonals is 20 cm , find the other diagonal.
5) The area of a quadrilateral is $342 \mathrm{~cm}^{2}$. The perpendiculars from the opposite vertices to the diagonal are 12 cm and 12 cm . What is the length of the diagonal?
6) Find the surface area of a cubical water tank of side 1.5 m .
7) The TSA of a cube is $96 \mathrm{~m}^{2}$. Find the length of each side of the cube.
8) The TSA of a cuboidal box of length 8 cm and breadth 6 cm is $208 \mathrm{~cm}^{2}$. Find the height of the box.
9) Find the cost of painting an open tank of dimensions $3 \mathrm{~m} \times 2 \mathrm{~m} \times 1.5 \mathrm{~m}$ at rupees 20 per m${ }^{2}$.
10) A rectangular swimming pool of dimensions $30 \mathrm{~m}, 20 \mathrm{~m}, 1.5 \mathrm{~m}$ is to be tiled. If each tile is $50 \mathrm{~cm} \times 50 \mathrm{~cm}$, how many tiles are required?
11) Find the TSA of a cylinder whose base radius is 5 cm and height is 10 cm .
12) Find the volume of a cuboid of dimensions $45 \mathrm{~cm}, 27 \mathrm{~cm}$ and 18 cm .
13) Find the volume of a cube of side 8 cm .
14) Find the volume of a cylindrical can of height 21 cm and base radius 8 cm .
15) The area of the floor of a room is $67.5 \mathrm{~m}^{2}$ and its volume is $270 \mathrm{~m}^{3}$. Find the height of the room.
16) Find the area covered by a roller of diameter 2.1 m and length 4 m in one revolution.
17) A rectangular piece of paper of length 44 cm and breadth 20 cm is rolled along its length to form a cylinder. Find the volume of the cylinder.
18) Estimate the cost of painting the inner wall of a well of depth 14 ft and diameter 8 ft at rupees 2.5 per sq.ft.
19) Find the CSA and TSA of a cylinder of diameter 28 cm and height 10 cm .
20) Find the difference of the TSA and LSA of a cube of side 10 m .

ANSWERS

| 1) $280 \mathrm{~cm}^{2}$ | 2) $67.2 \mathrm{~cm}^{2}$ | 3) 240 cm |
| :--- | :--- | :--- |
| 4) 12 cm | 5) 28.5 cm | 6) $13.5 \mathrm{~m}^{2}$ |
| 7) 4 m | 8) 4 cm | 9) Rs 420 |
| 10) 840 tiles | 11) $471 \mathrm{~cm}^{2}$ | 12) $21870 \mathrm{~cm}^{3}$ |
| 13) $512 \mathrm{~cm}^{3}$ | 14) $4224 \mathrm{~cm}^{3}$ | 15) 4 m |
| 16) $26.4 \mathrm{~m}^{2}$ | 17) $3080 \mathrm{~cm}^{3}$ | 18) Rs 880 |
| 19) $880 \mathrm{~cm}^{2}, 2112 \mathrm{~cm}^{2}$ | 20) $200 \mathrm{~m}^{2}$ |  |

