## INTERNATIONAL INDIAN SCHOOL BURAIDAH Worksheet For The Academic Year 2023-24

## CLASS: <u>VIII</u> SUBJECT: <u>Mathematics</u> DATE: <u>12/11/2023</u> <u>LESSON-11 Mensuration</u>

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

## **ANSWERS**

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