

VIII - Mathematics Assignment No-03 - Mensuration.

- Q1. Find the area of a quadrilateral one of whose diagonals is 48 cm and the length of perpendiculars from the other two vertices are 15cm and 8cm respectively.
- Q2. A parallelogram and rhombus are equal in area. The diagonals of the rhombus are 48 cm and 36 cm. respectively. If one of the sides of the parallelogram is 54 cm. Find its corresponding altitude.
- Q3. The cross section of a canal is trapezium in shape. If the canal is 9 m wide at the top and 6 m wide at the bottom and the area of trapezium is 75 m^2 . Find its depth.
- Q4. Two adjacent sides of a parallelogram are 3.5 cm and 5 cm. What is the ratio of their altitudes?
- Q5. The side of a regular hexagon is 10 cm. Find its area

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- Q6. There is a rectangular garden $80\text{m} \times 70\text{m}$. Anila walks round the field at the rate of 2.5 km per hour . What time will she take in making 8 rounds.
- Q7. Find the area and perimeter of a square, the sum of the lengths of whose diagonals is 16cm .
- Q8. A horse left for grazing inside a rectangular field $40\text{m} \times 36\text{m}$ is tethered to one corner of the field by a rope 14m long. Find the area of the field left ungrazed by the horse.
- Q9. A paper is of the form of a rectangle in which $AB = 18\text{cm}$ and $BC = 14\text{cm}$. A semi-circular portion with BC as diameter is cut off. Find the area of remaining portion.
- Q10. A race track is in the form of a ring whose inner circumference is 352m and outer circumference is 396m . Find the width of the track.

ANS:-

(Q1) 552 cm^2	(Q5) $150\sqrt{3}\text{ cm}^2$	(Q9) 175 cm^2
(Q2) 16 cm	(Q6) 57.6 min	(Q10) 7 m.
(Q3) 10 m	(Q7) $144\sqrt{2}\text{ cm}$	
(Q4) $10:7$	(Q8) 1286 m^2	