INDIAN SCHOOL AL WADI AL KABIR
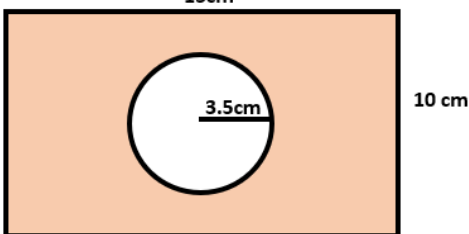
Class VII, Mathematics (2024-25)

Worksheet DTQ – Perimeter & Area

SHORT ANSWER TYPE QUESTIONS- 7 QUESTIONS. (2 Marks each)	
Q1.	The circumference of a circle is 88 m. Find its radius. (use $\pi = \frac{22}{7}$)
Q2.	The area of a triangle is 48 cm^2. If the altitude is 8cm, what is the length of its base?
Q3.	If the area of a circle is 154 cm^2, find its circumference.
Q4.	Find the perimeter of a semicircle whose diameter is 42cm.
Q5.	The base and the height of a field in the form of parallelogram are 18m and 5m respectively. Find the cost of ploughing the field at the rate of ₹ 6 per sq. m
Q6.	A rectangular piece of metal sheet measures 25 cm by 16 cm. A triangular piece with base 14 cm and height 10 cm is cut off from the sheet. Find the area of the remaining piece.
Q7.	The area of parallelogram is 24 cm^2. If base is 5 cm, find the altitude of the parallelogram.
SHORT ANSWER TYPE- 5 QUESTIONS. (3 Marks each)	
Q8.	In the given figure, find the area of the shaded portion.
Q9.	From a circular sheet of radius 8 cm, a circle of radius 3 cm is removed. Find the area of the remaining sheet. (Take π = 3.14)
Q10.	Jack took a wire of length 220 cm and bent it into the shape of a circle. Find the radius of that circle. Also find its area. If the same wire is bent into the shape of a square, what will be the length of each of its sides? Which figure encloses more area, the circle or the square? (Take $\pi = \frac{22}{7}$)
Q11.	ΔABC is right angled at A. Line segment AD is perpendicular to BC. If AB = 5 cm, BC = 13 cm and AC = 12 cm, Find the area of ΔABC. Also find the length of AD.
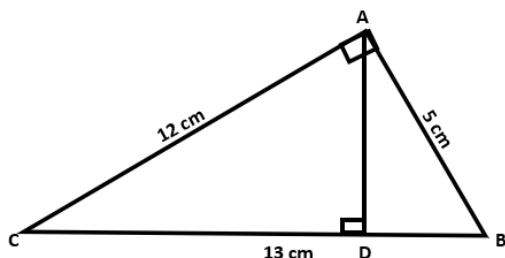
Q12.	In the adjoining figure, ABCD is a rectangle with dimensions 24m × 16m. ΔCED is such that EF⊥CD and EF = 10m. Calculate the area of the shaded portion.

<div align="center">LONG ANSWER TYPE- 3 QUESTIONS. (4 Marks each)</div>

Q.13	A nursery school playground is 160 m long and 80 m wide. In it 80 m × 80 m is kept for swings. The remaining area is covered by grass. Find the area covered by grass. Also find the cost of planting grass at the rate of ₹ 5 per sq.m
Q14.	A track is in the form of two circles with same centre. The radius of the larger circle is 14m and the radius of the smaller circle is 7m. find the area of track. (use $\pi = \frac{22}{7}$)
Q15.	From the adjoining figure, find the area of a parallelogram-shaped shaded region. Also, find the area of each triangle. What is the ratio of the area of shaded portion to the remaining area of the rectangle?

<div align="center">ANSWERS</div>

Q1.	14 m	Q2.	12 cm	Q3.	44 cm
Q4.	108 cm	Q5.	₹ 540	Q6.	330cm²
Q7.	4.8 cm	Q8.	111.5 cm²	Q9.	172.7cm²
Q10.	35 cm,3850 cm² , 55cm	Q11.	30 cm², 4.62 cm	Q12.	304 cm²
Q13.	6400 m², ₹ 32000	Q14.	462m²	Q15.	36 cm²,12cm², 3:2