



# INDIAN SCHOOL AL WADI AL KABIR

**Class VII**, Mathematics

## PERIMETER AND AREA- Worksheet- 1

### OBJECTIVE TYPE (1 Mark)

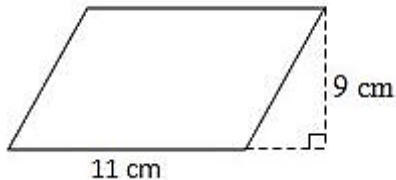
**Q.1.** The area of a parallelogram with base 8 cm and corresponding height 4 cm is

- A**  $24 \text{ cm}^2$       **B**  $16 \text{ cm}^2$       **C**  $32 \text{ cm}^2$       **D**  $12 \text{ cm}^2$

**Q.2.** The circumference of a circle with radius 3.5 cm is

- A** 7 cm      **B** 22 cm      **C** 21 cm      **D** 44 cm

**Q.3.**



Find the area of the parallelogram in the given Figure.

- A**  $90 \text{ cm}^2$       **B**  $99 \text{ cm}^2$       **C**  $49.5 \text{ cm}^2$       **D**  $40 \text{ cm}^2$

**Q.4.** The minute hand of a circular clock is 15 cm long. How far does the tip of the minute hand move in 1 hour? (Take  $\pi = 3.14$ )

- A** 94.2 cm      **B** 9.42 cm      **C** 48.6 cm      **D** 942 cm

**Q.5.** The altitude of a triangle with area  $210 \text{ cm}^2$  and base 35 cm is

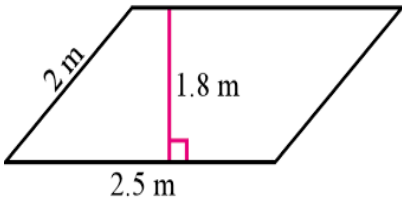
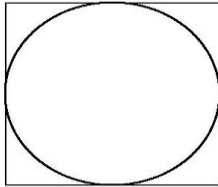
- A** 6 cm      **B** 24 cm      **C** 21 cm      **D** 12 cm

**Q.6.** If the circumference of a circle is  $22\pi$ , then its radius is

- A** 11 cm      **B** 22 cm      **C** 44 cm      **D** 7 cm

**Q.7.** A circle of area  $154 \text{ cm}^2$  is cut from a rectangular sheet of area  $200 \text{ cm}^2$  the area of the remaining sheet is

- A**  $64 \text{ cm}^2$       **B**  $66 \text{ cm}^2$       **C**  $56 \text{ cm}^2$       **D**  $46 \text{ cm}^2$

Q.8.			Area of the given parallelogram is			
	<b>A</b> 3.6 cm <sup>2</sup>	<b>B</b> 9cm <sup>2</sup>	<b>C</b> 5 cm <sup>2</sup>	<b>D</b> 4.5 cm <sup>2</sup>		
Q.9.	Area of a right -angled triangle is					
	<b>A</b> Base × height	<b>B</b> 2× base × hypotenuse	<b>C</b> $\frac{1}{2}$ × base × height	<b>D</b> None of these		
Q.10	The area of a parallelogram is 225 cm <sup>2</sup> and its altitude is 10 cm. Find the length of corresponding side of the parallelogram.					
	<b>A</b> 2.25 cm	<b>B</b> 1225cm	<b>C</b> 2250 cm	<b>D</b> 22.5 cm		
<b>Fill in the blanks (1 mark)</b>						
Q11.	The area of a circle of radius r is _____.					
Q12.	1 hectare = _____ m <sup>2</sup>					
Q13.	The length of the boundary of a circle is called its _____.					
Q14.	The circumference of a circle of radius 7 cm is _____					
Q15.	The area of a triangle with base 9 cm and corresponding height 6 cm is _____.					
<b>Section B (2 marks)</b>						
Q16.	A circle of radius 3 cm is cut out from a square piece of an aluminium sheet of side 6 cm. Find the area of the left over aluminium sheet. ( $\pi = 3.14$ )					
Q17.	The floral design of the floor of a building consists of 2800 tiles. If each tile is in the shape of a parallelogram of altitude 3 cm and base 5 cm, find the cost of polishing the design at a rate of ₹25 per m <sup>2</sup> . (Hint: $1 \text{ cm}^2 = \frac{1}{10000} \text{ m}^2$ )					
Q18.	Find the length of the base of a triangle whose area is 220 cm <sup>2</sup> and altitude is 11 cm.					
Q19.	Ritwi took a wire of length 44 cm and bent it in the shape of a circle. Find the radius of the circle. Also find its area. (Take $\pi = \frac{22}{7}$ ).					
Q20.	<div style="display: flex; justify-content: space-between; align-items: center;"> <div data-bbox="203 1892 1177 1927">A circle is inscribed in a square of side 28 cm. Find the area of the circle.</div>  </div>					

**Section C ( 4 Marks)**

<b>Q21.</b>	A cow is tied to the base of a pole with a 7 m long rope. The cow moves keeping the rope tight. i) Find the area of the ground swept by the rope in 1 complete revolution of the cow around the pole. ii) Find the distance moved by the cow in 1 complete revolution around the pole.
<b>Q22.</b>	One side of a parallelogram is 20 cm and the corresponding altitude is 12 cm. Find the length of the adjacent side of the parallelogram if the height of the altitude to the adjacent side is 10 cm.
<b>Q23.</b>	A plot is 60 m long and 40 m wide. A path 3 m wide is to be constructed around the plot. Find the area of the path.
<b>Q24.</b>	The perimeter of a right-angled triangle is 12 cm. Its hypotenuse is 5 cm and the base 4 cm. Find the area of the triangle.
<b>Q25.</b>	Through a rectangular field of length 90 m and breadth 60 m, two cross roads are constructed which are parallel to the sides and cut each other at right angles through the centre of the field. If the width of each road is 3 m, find: i) the area covered by the roads. ii) the cost of constructing the roads at the rate of ₹ 100 per m <sup>2</sup> .

<b>Answers</b>	<b>1</b>	C. 32 cm	<b>2</b>	B) 22 cm	<b>3</b>	B) 99 cm	<b>4</b>	A) 94.2 cm
	<b>5</b>	D) 12 cm	<b>6</b>	11 cm	<b>7</b>	D) 46 cm <sup>2</sup>	<b>8</b>	D) 4.5 cm <sup>2</sup>
	<b>9</b>	C) $\frac{1}{2} \times b \times h$	<b>10</b>	D) 22.5 cm	<b>11</b>	$\pi r^2$	<b>12</b>	10000 m <sup>2</sup>
	<b>13</b>	circumference	<b>14</b>	44 cm	<b>15</b>	27 cm <sup>2</sup>	<b>16</b>	7.74 cm <sup>2</sup>
	<b>17</b>	₹ 105	<b>18</b>	40 cm	<b>19</b>	7 cm, 154 cm <sup>2</sup>	<b>20</b>	616 cm <sup>2</sup>
<b>21</b>	Hint: i) Find area of the circle with radius 7 m Ans: 154 m <sup>2</sup> ii) $2 \times \pi \times 7 = 44\text{m}$	<b>22</b>	24 cm	<b>23</b>	636 m <sup>2</sup>	<b>24</b>	6 cm <sup>2</sup>	
<b>25</b>	i) 441 m <sup>2</sup> ii) ₹ 44100							

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