MATHEMATICS

8th CBSE

- 1. \triangle ABC is isosceles in which AE \perp BC, AE = 6 cm , BC = 9 cm, the area of \triangle ABC is
 - (a) 27 cm^2
- (b) 54 cm^2
- (c) 22.5 cm^2
- (d) 45 cm^2

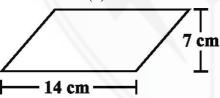
- 2. The area of parallelogram is
 - (a) base + height
- (b) base x height
- (c) base x base
- (d) height x height

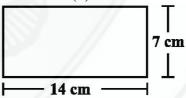
- 3. The base in the area of parallelogram is
 - (a) $\frac{area}{height}$
- (b) $\frac{height}{area}$
- (c) area x base
- (d) area x height

- 4. The height in the area of parallelogram is
 - (a) $\frac{area}{base}$
- (b) $\frac{base}{area}$
- (c) area x base
- (d) area x height
- 5. Which of the following has the formula: Base x Height
 - (a) area of parallelogram
- (b) area of quadrilateral
- (c) area of triangle

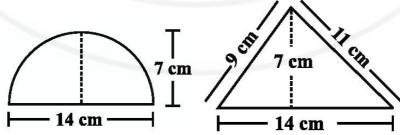
(d) area of trapezium

- **6.** The area of triangle is
 - (a) base x height
- (b) $\frac{1}{2}$ x base x height (c) $\frac{1}{2}$ x (base + height)(d) base +
- 7. The height in the area of a triangle
 - (a) $\frac{2.area}{base}$
- (b) $\frac{2.base}{area}$
- (c) $\frac{base}{2.area}$
- (d) $\frac{area}{2.base}$
- 8. The area of the given parallelogram in the below left figure is
 - (a) 98 cm^2
- (b) 77 cm^2
- (c) 49 cm^2
- (d) none of these

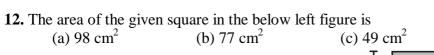


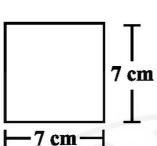


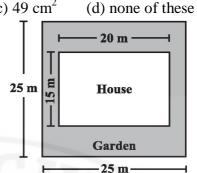
- 9. The area of the given rectangle in the above sided right figure is
 - (a) 98 cm^2
- (b) 77 cm^2
- (c) 49 cm^2
- (d) none of these
- 10. The area of the given parallelogram in the below left figure is
 - (a) 98 cm^2
- (b) 77 cm^2
- (c) 49 cm^2
- (d) none of these



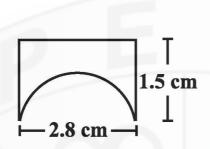
- 11. The area of the given triangle in the above sided right figure is
 - (a) 98 cm^2
- (b) 77 cm^2
- (c) 49 cm^2
- (d) none of these

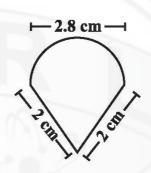






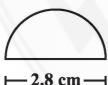
- 13. The area of the garden (shaded portion) in the above sided right figure is (a) 300m^2 (b) 625m^2 (c) 325m^2 (d) none of these
- **14.** The perimeter of the below left figure is (a) 11.6 cm (b) 14.6 cm (c) 12.8 cm (d) none of these



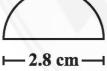


- **15.** The perimeter of the above sided right figure is
 - (a) 11.6 cm
- (b) 14.6 cm
- (c) 12.8 cm
- (d) none of these

- **16.** The perimeter of the below left figure is
 - (a) 11.6 cm
- (b) 14.6 cm
- (c) 12.8 cm
- (d) none of these



17. The area of the above sided right figure is (a) 24 cm^2 (b) 48 cm^2



- 3 cm 9 cm
- (c) 49 cm^2
- (d) none of these



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1.	What will be the area of (a) 154 cm ²	circular button of radi (b) 49 cm ²	us 7 cm (c) 154 cm	(d) 3.14 x 7 cm
2.	The circumference of cir (a) 44 cm	cle whose diameter is (b) 88 cm	14 cm will be (c) 44 cm ²	(d) 88 cm ²
3.	The perimeter of circle is (a) area	s its (b) circumference	(c) radius	(d) diameter
4.	Diameter is(a) twice radius ((b) half radius (c) ed	qual to radius (d)	one-third of radius
5.	π (pi) is (a) ratio of circumfer (c) 21/17	rence to diameter	(b) diameter to ci (d) 3.41	rcumference
6.	If the area of circle is 44 (a) 11 cm ² (c) 22 cm ²	cm ² , the perimeter will (b) 11 cm (d) none of these	l be	
7.	If the radius of pipe is 1 (a) 62.8 cm	cm, the circumference (b) 6.28 cm	of pipe will be (c) 62.8 cm ²	(d) 6.28 cm
8.	The circumference of a contact (a) π r (b) π	eircle is r^2 (c) $\pi \times 2r$	(d) $\pi + 2r$	
9.	The diameter of a circle (a) r ² (b) 2r	2	(d) πr^2	
10.	Which of the following i (a) a chair	s an example of circle? (b) a bottle cap	(c) a cup	(d) a table
11.	The area of a circle is (a) $2 \pi r$	(b) $2\pi r^2$	(c) πr^2 (d)	πd
12.	$1 \text{ m}^2 = \frac{1}{\text{(a) } 100 \text{ cm}^2}$.	(b) 1000 cm ² (c) 10	0000 m ² (d) 10000	cm ²
13.	One hectare is equal to (a) 100 m ²	(b) 1000 m ²	(c) $10,000 \text{ m}^2$ (d)	10,000 m
14.	The circumference of a c (a) 11 cm	eircle with radius 7 cm (b) 22 cm	is (c) 44 cm	(d) 49 cm
15.	The area of a circle is 49 (a) 7π cm (b) 14	2π cm ² . Its circumference 4π cm (c) 21π cm	ce is (d) 28π cm	



1. The perimeter of circular field is 242cm. The area of the field is

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	(a) 9317 cm^2	(b) 18634 cm ²	(c) 4658.5 cm	n ²	(d) none of the	ese	
2.	The area of a circle (a) 62 cm	le is 38.5 cm ² . I (b) 12.1 cm		ce is (d) 22 (em		
3.	is	(b) 184 cm ²				m. The area of the circle	
4.	The circumference	e of two circles	are in the ratio	o 2 : 3. T	he ratio of the	ir areas is	
	(a) 2:3	(b) 4:9	(c) 9 : 4	(d) non	e of these		
5.	On increasing the (a) 40%	diameter of circ (b) 80%	-		l be increased lee of these	by	
6.	In making 1000 re (a) 14 m		neel covers 88 (c) 28 m	km. The (d) 40 1		e wheel is	
7.	The diameter of a (a) 140	wheel is 40 cm (b) 150	a. How many re (c) 160	evolution (d) 166		an covering 176 m?	
8.	The radius of whe (a) 2800	el is 0.25 m. He (b) 4000	ow many revol (c) 5500	lutions w (d) 700		overing 11 km?	
9.	Find the circumfer (a) 62 cm		e of diameter 2 (c) 66 cm		em		
10.	Find the area of a (a) 221.76 cm				0.76 cm ²	(d) none of these.	
 11. A steel wire when bent in the form of a square, encloses an area of 121 sq. cm. The same wire is bent in the form of a circle. Find the area of the circle. (a) 111 cm² (b) 184 cm² (c) 154 cm² (d) 259 cm² 							
12.	If the perimeter of (a) 14 cm	f a semicircular (b) 16 cm	protractor is 3 (c) 18 cm	66 cm, fin (d) 12 c		(D)	
13	The area of a squa of the rectangle is (a) 60 cm		e length of the	rectangle	-	e is 40 cm and the breadth	-



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1.	The surface area of a cu (a) 2(lb + bh + lh)	aboid is (b) $3(lb + bh + lh)$	$(c) \ 2(lb - bh - lh)$	(d) 3(lb - bh - lh)			
2.	The surface area of a cu (a) $7a^2$ (b) 6	abe if edge 'a' is a^2 (c) $5a^3$	(d) 5a ²				
3.	walls at the rate of I	the length, breadth and height of a room is 5m, 4m and 3m. The cost of white washing its four walls at the rate of Rs. 7.50 per m ² is					
4.		_	(d) Rs. 105 Om. The cost of the wh	ite washing its four walls is			
	(a) 5m (b) 4		(d) 8m				
5.	The breadth of a room i	s twice its height and is	half of its length. The	volume of room is 512dm ³			
	(a) 16 dm, 8 dm, 4 d						
	(c) 8 dm, 4 dm, 2 dr	m (d) 10 dm, 1:	5 dm, 20 dm				
6.	The area of three adjace (a) $V = xyz$ (b) V	ent faces of a cube is x, $y^3 = xyz$ (c) $V^2 = xyz$		is			
7.	Two cubes each of edge (a) 140 cm ² (b) 1	e 12 cm are joined. The 440 cm ² (c) 144 cm ²	surface area of new cu (d) 72 cm ²	aboid is			
8.	The curved surface area	of cylinder of height 'h	n' and base radius 'r' is				
		$(c) \frac{1}{2} \pi rh$	(d) none of the				
9.	The total surface area o (a) $2\pi(r + h)$	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	s 'r' and height 'h' is $tr(r+h)$ (d) $4\pi r(r+h)$)			
10.	The curved surface area is	of a cylinder of height	14 cm is 88 cm ² . The o	liameter of its circular base			
	(a) 5cm	(b) 4cm	(c) 3cm	(d) 2cm			
11.		closed cylindrical tank any square meters a she .48m ² (c) 7.48m ²					
12.	A metal pipe is 77 cm lo	ong. Inner diameter of c	` '	d outer diameter is 4.4 cm.			

MATHEMATICS 8th CBSE

1. The diameter of a roller is 84 cm and its length is 120 cm. It takes 500 complete revolutions to move once over to level a playground. The area of the playground in m² is:

(a) 1584

(b) 1284

(c) 1384

(d) 1184

2. A cylindrical pillar is 50 cm in diameter and 3.5 m in height. The cost of painting its curved surface at the rate of Rs. 12.50 per m² is:

(a) Rs. 68.75 (b) Rs. 58.75 (c) Rs. 48.75 (d) Rs. 38.75

3. The inner diameter of circular well is 3.5m. It is 10m deep. Its inner curved surface area in m² is:

(a) 120

(b) 110

(c) 130

(d) 140

4. In a hot water heating system there is a cylindrical pipe of length 28 m and diameter 5 cm. The total radiating surface area in the system in m² is:

(a) 6.6

(b) 5.5

(c) 4.4

(d) 3.4

5. A matchbox measures 4 cm x 2.5 cm x 1.5 cm. The volume of packet containing 12 such boxes

(a) 160 cm^3

(b) 180 cm^3 (c) 160 cm^2

(d) 180 cm^2

6. A cuboidal water tank is 6 m long, 5 m wide and 4.5 m deep. How many litre of water can it hold?

(a) 1350 liters (b) 13500 liters

(c) 135000 liters

(d) 135 liters

7. A cuboidal vessel is 10 m long and 8 m wide. How high must it be made to hold 380 cubic metres of a liquid?

(a) 4.75 m

(b) 7.85 m

(c) 4.75 cm

(d) none of these

8. The capacity of a cuboidal tank is 50000 litres. The length and depth are respectively 2.5 m and 10 m. Its breadth is

(a) 4 m

(b) 3 m

(c) 2 m

(d) 5 m

9. A godown measures $40 \text{ m} \times 25 \text{ m} \times 10 \text{ m}$. Find the maximum number of wooden crates each measuring 1.5 m \times 1.25 m \times 0.5 m that can be stored in the godown.

(a) 18000

(b) 16000

(c) 15000

(d) 14000

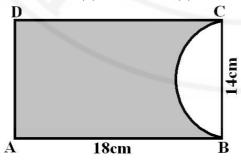
10. A paper is in the form of a rectangle ABCD in which AB = 18cm and BC = 14cm. A semicircular portion with BC as diameter is cut off. Find the area of the remaining paper (see in below figure).

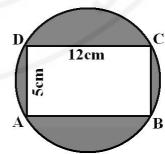
(a) 175 cm^2

(b) 165 cm^2

(c) 145 cm^2

(d) none of these





11. Find the area of the shaded region in the above sided figure. Take $\pi = 3.14$

(a) 75 cm^2

(b) 72 cm^2

(c) 70 cm^2

(d) none of these

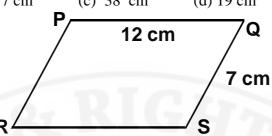
12. The perimeter of parallelogram PQRS is:

(a) 12 cm

(b) 7 cm

(c) 38 cm

(d) 19 cm



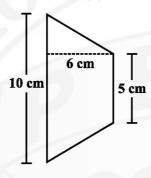
13. The area of the given below left figure is

(a) 45 cm^2

(b) 11 cm^2

(c) 49 cm^2

(d) none of these



14. The area of the above sided right figure is

(a) 45 cm^2

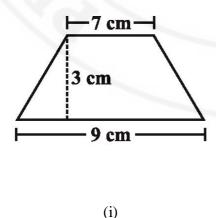
(b) 11 cm^2

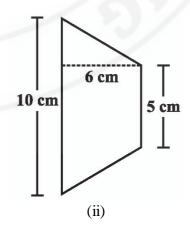
(c) 49 cm^2

(d) none of these

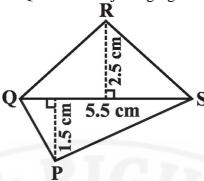
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- **1.** Find the area of trapezium whose parallel sides are 24 cm and 20 cm and the distance between them is 15 cm.
- 2. The area of trapezium is 1080 cm². If the lengths of its parallel sides are 55.6 cm and 34.4 cm, find the distance between them.
- **3.** The area of trapezium is 352 cm² and the distance between its parallel sides is 16 cm. If one of the parallel sides is of length 25 cm, find the length of the other side.
- **4.** Find the lateral surface area of the cuboids whose dimensions are:
 - (i). Length = 22cm, breadth = 12 cm and height = 7.5 cm
 - (ii). Length = 15cm, breadth = 6 cm and height = 9 cm
 - (iii). Length = 24 m, breadth = 25 cm and height = 6 m
- **5.** The circumference of the base of a cylinder is 176 cm and its height is 65 m. Find its curved surface area and total surface area of the cylinder.
- **6.** Find the curved surface area and total surface area of the cylinders whose dimensions are:
 - (i). radius = 7 cm and height = 35 cm.
 - (ii). radius = 14 cm and height = 10 cm.
 - (iii). radius = 10 cm and height = 25 cm.
- 7. Find the area of a rhombus whose diagonals are of lengths 15 cm and 25 cm.
- 8. The area of a rhombus is 360 cm² and one of the diagonals is 18 cm. Find the other diagonal.
- **9.** The diagonal of a quadrilateral shaped field is 25 m and the perpendiculars dropped on it from the remaining opposite vertices are 18 m and 12 m. Find the area of the field.
- 10. An aquarium is in the form of a cuboid whose external measures are $40 \text{ cm} \times 15 \text{ cm} \times 20 \text{ cm}$. The base, side faces and back face are to be covered with a coloured paper. Find the area of the paper needed?
- **11.** Find the area of the following trapeziums

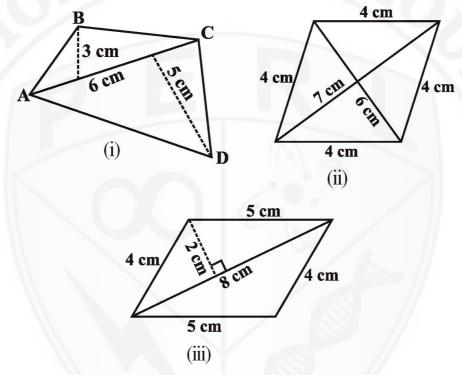




12. Find the area of the quadrilateral PQRS in the adjoining figure:



- 13. Find the area of a rhombus whose diagonals are of lengths 10 cm and 8.2 cm.
- **14.** Find the area of the quadrilaterals in the adjoining figures:



- **15.** The length, breadth and height of a room are 5 m, 4 m and 3 m respectively. Find the cost of white washing the walls of the room and the ceiling at the rate of Rs 7.50 per m².
- **16.** The floor of a rectangular hall has a perimeter 250 m. If the cost of painting the four walls at the rate of Rs 10 per m² is Rs 15000, find the height of the hall.
- **17.** A cubical box has each edge 10 cm and another cuboidal box is 12.5 cm long, 10 cm wide and 8 cm high.
 - (i) Which box has the greater lateral surface area and by how much?
 - (ii) Which box has the smaller total surface area and by how much?
- **18.** The curved surface area of a right circular cylinder of height 14 cm is 88 cm2. Find the diameter of the base of the cylinder.
- **19.** It is required to make a closed cylindrical tank of height 1 m and base diameter 140 cm from a metal sheet. How many square metres of the sheet are required for the same?

- **20.** The diameter of a roller is 84 cm and its length is 120 cm. It takes 500 complete revolutions to move once over to level a playground. Find the area of the playground in m².
- **21.** Curved surface area of a right circular cylinder is 4.4 m². If the radius of the base of the cylinder is 0.7 m, find its height.
- **22.** Find the lateral or curved surface area of a closed cylindrical petrol storage tank that is 4.2 m in diameter and 4.5 m high.
- **23.** A matchbox measures $4 \text{ cm} \times 2.5 \text{ cm} \times 1.5 \text{ cm}$. What will be the volume of a packet containing 12 such boxes?
- **24.** A cuboidal water tank is 6 m long, 5 m wide and 4.5 m deep. How many litres of water can it hold?
- **25.** A cuboidal vessel is 10 m long and 8 m wide. How high must it be made to hold 380 cubic metres of a liquid?
- **26.** The capacity of a cuboidal tank is 50000 litres of water. Find the breadth of the tank, if its length and depth are respectively 2.5 m and 10 m.
- **27.** The circumference of the base of a cylindrical vessel is 132 cm and its height is 25 cm. How many litres of water can it hold?
- **28.** If the lateral surface of a cylinder is 94.2 cm² and its height is 5 cm, then find (i) radius of its base (ii) its volume. (Use π = 3.14)