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## MATHS

## BOOKS - SWAN PUBLICATION

## PERIMETER AND AREA

Exercise 111

1. Find the perimeter and the area of $a$ rectangle having

Length $=28 \mathrm{~cm}$, Breadth $=15 \mathrm{~cm}$
2. Find the perimeter and the area of a rectangle having

Length $=9.4 \mathrm{~cm}$, Breadth $=2.5 \mathrm{~cm}$
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3. Find the perimeter and the area of a square whose side measures

29 cm

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4. Find the perimeter and the area of a square whose side measures
8.3 cm

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5. The perimeter of a square park is 148 m .

Find its area.
6. The area of a rectangle is $580 \mathrm{~cm}^{2}$. Its length is 29 cm . Find its breadth and also, the perimeter.

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7. A wire is in the shape of a rectangle. Its
length is 48 cm and breadth is 32 cm . If the
same wire is rebent into the shape of a square,
what will be the measure of each side. Also
find which shape encloses more area and by how much ?

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8. The area of a square park is the same as
that of a rectangular park. If the side of the square park is 75 m . and the length of the rectangular park is 125 m , find the breadth of the rectangular park. Also, find the perimeter of rectangular park.
9. A door of length 2.5 m and breadth 1.5 m is
fitted in a wall. The length of wall is 9 m and breadth 6 m . Find the cost of painting the wall, if the rate of painting the wall is Rs. 30 per $m^{2}$.

10. A door of dimensions $3 m \times 2 m$ and $a$ window of dimensions $2.5 \mathrm{~m} \times 1.5 \mathrm{~m}$ is fitted in a wall. The length of the wall is 7.8 m and breadth is 3.9 m . Find the cost of painting the wall, if the rate of painting the wall is Rs. 25 per $m^{2}$.

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11. Find the area and the perimeter of the following figures.


## Exercise 111 Multiple Chocie Questions

1. What is the area of a rectangle of dimensions $12 \mathrm{~cm} \times 10 \mathrm{~cm}$ ?
A. $44 \mathrm{~cm}^{2}$
B. $120 \mathrm{~cm}^{2}$
C. $1200 \mathrm{~cm}^{2}$
D. $1440 \mathrm{~cm}^{2}$

Answer: B
2. Find the breadth of a rectangle whose length is 12 cm and perimeter is 36 cm .
A. 6 cm
B. 3 cm
C. 9 cm
D. 12 cm

Answer: A
3. If each side of a square is 1 m then its area is
?
A. $10 \mathrm{~cm}^{2}$
B. $100 \mathrm{~cm}^{2}$
C. $1000 \mathrm{~cm}^{2}$
D. $10000 \mathrm{~cm}^{2}$

Answer: D

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4. Find the area of a square whose perimeter is 96 cm .
A. $576 \mathrm{~cm}^{2}$
B. $626 \mathrm{~cm}^{2}$
C. $726 \mathrm{~cm}^{2}$
D. $748 \mathrm{~cm}^{2}$

Answer: A

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5. The area of a rectangular sheet is $500 \mathrm{~cm}^{2}$.

If the length of the sheet is 25 cm , What is its width ?
A. 30 cm
B. 40 cm
C. 20 cm
D. 25 cm

Answer: C

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6. What happens to the area of a square, if its side is doubled?
A. The area becomes 4 times, the area of
original square.
B. The area becomes $\frac{1}{4}$ times, the area of
original square.
C. The area becomes 16 times, the area of
original square.
D. The area becomes $\frac{1}{6}$ times, the area of original square.

Answer: A

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## Exercise 112

1. Estimate the area of the following figures by
counting unit squares

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## 2. In the following figures find the area of

$\triangle A B C$


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3. In the following figures find the area of
$\Delta C O D$


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4. Find the area of following parallelograms.


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## 5. Find the area of following parallelograms.



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6. Find the value of $x$ in the following parallelograms.


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7. Find the value of $x$ in the following parallelograms.


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8. The adjacent sides of a paralelogram are

28 cm and 45 cm and the altitude on longer side is 18 cm . Find the area of parallelogram.

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9. $A B C D$ is a parallelogram given in figure. $D N$ and $D M$ are the altitudes on side $A B$ and $C B$ respectively. If area of the parallelogram is
$1225 \mathrm{~cm}^{2}, \mathrm{AB}=35 \mathrm{~cm}$ and $\mathrm{CB}=25 \mathrm{~cm}$, find DN and DM.


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10. Find the area of the following triangles


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11. Find the area of the following triangles


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12. Find the value of $x$ in the following triangles.


D Watch Video Solution
13. Find the value of $x$ in the following triangles.

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14. Area of a square plot is $2304 m^{2}$. Find the side of the square plot.

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15. $\triangle A B C$ is right angled at A as shown in
figure. $A D$ is prependicular to $B C$, if $A B=9 \mathrm{~cm}$,
$B C=15 \mathrm{~cm}$ and $A C=12 \mathrm{~cm}$. Find the area of
$\Delta A B C$, also find the length of AD.

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16. $\triangle A B C$ is isosceles with $A B=A C=7.5 \mathrm{~cm}$
and $B C=9 \mathrm{~cm}$. The height $A D$ from $A$ to $B C$ is 6
cm find the area of $\triangle A B C$ What will be the height from $C$ to $A B . i . e, C E$ ?

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Exercise 112 Multiple Choice Questions

1. Find the base of parallelogram whose are is
$400 \mathrm{~cm}^{\wedge} 2$ and whose height is 8 cm .
A. $1.23 \mathrm{~cm}^{2}$
B. $13.2 \mathrm{~cm}^{2}$
C. $12.3 \mathrm{~cm}^{2}$
D. $1.32 \mathrm{~cm}^{2}$

## Answer: C

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2. One of the sides and the corresponding height of a parallelogram are 4 cm and 3 cm respectively. Find the area of the
parallelogram
A. $21 \mathrm{~cm}^{2}$
B. $24.5 \mathrm{~cm}^{2}$
C. $21.5 \mathrm{~cm}^{2}$
D. $24 \mathrm{~cm}^{2}$

Answer: B
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## 3. The height of a triangle whose base is 13 cm

 and area is $65 \mathrm{~cm}^{2}$ is.A. 12 cm
B. 15 cm
C. 10 cm
D. 20 cm

Answer: C
(D) Watch Video Solution
4. Find the area of an isosceles right angled triangle, whose equal sides are of length 40 cm each.
A. $400 \mathrm{~cm}^{2}$
B. $200 \mathrm{~cm}^{2}$
C. $600 \mathrm{~cm}^{2}$
D. $800 \mathrm{~cm}^{2}$

## Answer: D

5. A field in the form of a parallelogram has sides 60 m and 40 m and one of its diagonals is 80 m long. Find the area of te parallelogram.
A. 1.5 times
B. 2 times
C. 3 times
D. 4 times

Answer: B

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6. In a right angled triangle .......... is the longest side.
A. 8 cm
B. 16 cm
C. 24 cm
D. 32 cm

Answer: A
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1. Find the circumference of circle whose

Radius ( $r$ ) $=3.5 \mathrm{~cm}$

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2. Circumference of circle $=2 \pi d$

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## 3. The circumference of a circle of diameter

## 10 cm is

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4. If the circumference of a circular sheet is

176 m , find its radius.

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5. A circular disc of diamter 8.4 cm is divided into two parts what is the perimeter of each semicircular part?

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6. Find the area of the circle having

Radius $r=49 \mathrm{~cm}$

- Watch Video Solution


## 7. Find the area of the circle having

Radius $\mathrm{r}=2.8 \mathrm{~cm}$

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8. Find the area of the circle having

Radius $r=4.2 \mathrm{~cm}$

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9. A gardener wants to fence a circular garden
of radius 15 m . Find the length of wire, if he makes three rounds of fence. Also, find the cost of wire if it costs Rs. 5 per meter (Take $\pi=3.14)$

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10. Which of the following has larger area and by how much?
(a) Rectangle with length 15 cm and breadth

## 5.4 cm

(b) Circle of diameter 5.6 cm .

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11. From a rectangular sheet of length 15 cm and breadth 12 cm a circle of radius 3.5 cm is removed. Find the area of remaining sheet.

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12. From a circular sheet of radius 7 cm , a circle of radius 2.1 cm is removed, find the area of remaining sheet.

## D Watch Video Solution

13. Smeep took a wire of length 88 cm and bent
it into the shape of a circle, find the radius and area of the circle. If the same wire is bent into a square, what will be the side of the square ? Which figure encloses more area ?
14. A garden is 120 m long and 85 m broad.

Inside the garden, there is a circular pit of diameter 14 m . Find the cost of planting the remaining part of the garden at the rate of Rs.
5.50 per square meter.

## D Watch Video Solution

15. In the figure $P Q=Q R$ and $P R=56 \mathrm{~cm}$. The radius of inscribed circle is 7 cm . $Q$ is centre of
semi circle. What is the area of shaded region
?


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16. The minute hand of a circular clock is 18 cm
long. How far does the tip of minute hand move in one hour?

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## Exercise 113 Multiple Choice Questions

1. The circumference of a circle of diameter

10 cm is
A. 31.4 cm
B. 3.14 cm
C. 314 cm
D. 35.4 cm

## D Watch Video Solution

# 2. The circumference of a circle with radius 

14 cm is
A. 88 cm
B. 44 cm
C. 22 cm
D. 85 cm

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3. What is the area of the circle of radius 7 cm ?
A. 49 cm
B. $22 \mathrm{~cm}^{2}$
C. $154 \mathrm{~cm}^{2}$
D. $308 \mathrm{~cm}^{2}$

# 4. Find the diameter of a circle whose area is 

$154 \mathrm{~cm}^{2}$
A. 4 cm
B. 6 cm
C. 14 cm
D. 12 cm

Answer: C
5. A circle has area 100 times the area of another circle. What is the ratio of their cirumferences ?
A. $10: 1$
B. 1: 10
C. 1:1
D. $2: 1$
6. Diameter of a circular garden is 9.8 cm .

Which of the following is its area?
A. $75.46 \mathrm{~cm}^{2}$
B. $76.46 \mathrm{~cm}^{2}$
C. $74.4 \mathrm{~cm}^{2}$
D. $76.4 \mathrm{~cm}^{2}$

Answer: A

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## Exercise 114

1. A rectangular park is 45 m long and 30 m wide. A path 2.5 m wide is constructed outside the park. Find the area of the path.

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2. A rectangular garden is 110 m long and 72 m
broad. A path of uniform width 8 m has to be
constructed around it. Find the cost of gravelling the path at Rs. 11.50 per $m^{2}$.

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3. A room is 12 m long and 8 m broad. It is surrounded by a verandah, which is 3 m wide all around it. Find the cost of flooring the verandah with marble at Rs. 275 per $m^{2}$.

## D Watch Video Solution

4. A sheet of paper measures $30 \mathrm{~cm} \times 24 \mathrm{~cm}$. A strip of 4 cm width is cut from it, all around.

Find the area of remaining sheet and also the area of cut out strip.

## - Watch Video Solution

5. A path of 2 m wide is built along the border inside a square garden of side 40m. Find
(i)The Area of path.
(ii) The cost of planting grass in the remaining
portion of the garden at the rate of Rs. 50 per $m^{2}$.

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6. A nursery school play ground is 150 m long and 75 m wide. A portion of $75 \mathrm{~m} \times 75 \mathrm{~m}$ is kept for see-saw slides and other park equipments. In the remaining portion $3 m$ wide path parallel to its width and parallel to remaining length (as shown in fig). The remaining area is covered by grass. Find the
area covered by grass.


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7. Two cross roads each of width 8 m cut at right angle through the centre of a rectangular park of length 480m and breadth

250 m and parallel to its sides. Find the area of roads. Also, find the area of park excluding cross roads.

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8. In a rectangular field of length 92 m and breadth 70 m , two roads are constructed which are parallel to the sides and cut each other at right angles through the centre of field. If the width of each road is 4 m , find.
(i) The area covered by roads.
(ii) The cost of constructing the roads at the rate of Rs. 150 per $m^{2}$.

## 9. Find the area of shaded region of the

## following figures.



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10. Find the area of shaded region of the
following figures.


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## Other Important Questions Multiple Choice Questions

1. Which of the following statement is not true?
A. Perimeter of a regular pentagon=5 $\times$
length of one side
B. Perimeter of a square $=4 \times$ side
C. Perimeter of a rectangle = Length $\times$ Breadth
D. Perimeter of a regular hexagon=6 $\times$

## Length of one side

2. Which of the following statement is not true?
A. Area of circle $=\pi r^{2}$
B. Area of parallelogram $=\frac{1}{2}$ (Base $\times$ Height)
C. Area of rectangle $=$ Length $\times$ Breadth.
D. Area of square=Side $\times$ Side

Answer: B

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3. Which Figure has the greatest perimeter?

A. (i)
B. (ii)
C. (iii)
D. All figures have same perimeter

## Answer: C

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4. The area of a rectangular sheet is $500 \mathrm{~cm}^{2}$. If the length of the sheet is 25 cm , What is its width ?
A. 25 cm
B. 30 cm
C. 20 cm
D. 40 cm

## Answer: C

## D Watch Video Solution

5. Side of a square park is 80 m . What is its area?
A. $320 m^{2}$
B. $20 m^{2}$
C. $6400 m^{2}$
D. $3200 m^{2}$

## Answer: C

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6. What is area of this parallelogram?

A. $14 \mathrm{~cm}^{2}$
B. $56 \mathrm{~cm}^{2}$
C. $28 \mathrm{~cm}^{2}$
D. $42 \mathrm{~cm}^{2}$

Answer: C

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7. What is the area of this triangle ?

A. $6 \mathrm{~cm}^{2}$
B. $12 \mathrm{~cm}^{2}$
C. $3 \mathrm{~cm}^{2}$
D. $\frac{3}{2} \mathrm{~cm}^{2}$

Answer: C

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8. $1 \mathrm{~cm}^{2}=\ldots . . \ldots . . . m^{2}$
A. 10
B. 10000
C. 1000
D. 100

## Answer: D

# 9. $1 m^{2}=\ldots . . . . . m^{2}$ 

A. 100
B. 1000
C. 10000
D. 100000

Answer: C

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10. 1 Hectare $=\ldots \ldots \ldots m^{2}$
A. 1000
B. 10000
C. 100000
D. 1000000

Answer: B
11. Radius of a circle is 28 cm . What is the perimeter?
A. 112 cm
B. 176 cm
C. 784 cm
D. 7 cm

Answer: B
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## Other Important Questions Fill In The Blanks

1. Perimeter of rectangle = ..................

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2. Side of square is 2.5 cm Its area will be

D Watch Video Solution
3. Area of rectangle is $416 m^{2}$ and breadth is 16 m . Its length will be ................... m.

D Watch Video Solution
4. Area of parallelogram=

## - Watch Video Solution

5. In a right angled triangle the side opposite to right angle is known as

## - Watch Video Solution

6. Circumference of circle=

- Watch Video Solution

7. $1 m^{2}=\ldots . . . . m^{2}$

- Watch Video Solution


## 8. $1 \mathrm{~km}=$

## Watch Video Solution

## 9. Area of circle = .................

## - Watch Video Solution

## 10. Radius =..................

## D Watch Video Solution

Other Important Questions True Or False

1. The area of a square having side 'a' is $4 a$ square units.

## D Watch Video Solution

2. The area of a rectangular plot is $462 \mathrm{~m}^{2}$. If
its breadth is 21 m then its length will be 24 m .

## - Watch Video Solution

3. Side of a square is 1 m , its area will be $2 \mathrm{~m}^{2}$.

## Watch Video Solution

4. Area of parallelogram $=\frac{1}{2} \times$ Base $\times$ height

## - Watch Video Solution

5. An equilateral triangle has all sides of different length.

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6. Line segment joining any two points on circumference of circle is called chord.

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7. Side of square $=\sqrt{\text { Area }}$

## - Watch Video Solution

8. Circumference of circle $=2 \pi d$

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