1. Find the area and perimeter of the following figures.
a) Rectangle with length 5 cm and breadth 4 cm .
b) Right triangle with base 4 cm and height 3 cm .
c) Square with side 6 cm .
d) Rhombus with base 14 cm and height 9 cm .
2. Find the area of the shaded portion in the following figures. $(\pi=3.14)$
a.

b.


d.

3. Find the area of a triangle having base 7 cm and height 8 cm .
4. A rectangular field has dimensions 30 mX 50 m . Find the cost of fencing the field at the rate of 20 Rs. per m .
5. The diameter of a wheel is 70 cm . Find the distance covered by Itie wheel In 5 revolutions. $\left(\pi=\frac{22}{7}\right)$
6. The base and the height of a parallelogram are in the ratio $1: 3$. Its area is 12 sq cm . Find the base and height.
7. The base and the hypotenuse of a right angled triangle are 12 cm and 20 cm . Find its perimeter and area.
8. The floor of a rectangular room has length 4 m and breadth 3.2 m . Find the number of tiles required to cover the floor, if each side of a tile measures 40 cm .
9. Four maximum equal sized circular plates are cut from a rectangular sheet of paper with dimensions $56 \mathrm{~cm} \times 15 \mathrm{~cm}$. What is the area of the remaining sheet of paper?
10. What is the perimeter of each circular plate? $\left(\pi=\frac{22}{7}\right)$

## MATHEMATICS

CLASS $8^{\text {TH }}$

1. Find the area of the quadrilaterals in the following figures.
a. $\mathrm{BD}=12 \mathrm{~cm}$
$\mathrm{AD}=8 \mathrm{~cm}$
$C F=5 \mathrm{~cm}$

b. $\mathrm{DE}=7 \mathrm{~cm}$
$\mathrm{BF}=5 \mathrm{~cm}$
$\mathrm{AC}=13 \mathrm{~cm}$

c. $\mathrm{AB}=14 \mathrm{~cm}$
$B D=12 \mathrm{~cm}$
$\mathrm{DE}=5 \mathrm{~cm}$
$\mathrm{CF}=4 \mathrm{~cm}$
d. $\mathrm{AB}=16 \mathrm{~cm}$
$\mathrm{DE}=6 \mathrm{~cm}$
$\mathrm{BD}=10 \mathrm{~cm}$
$\mathrm{DC}=12 \mathrm{~cm}$
2. Find the length or the diagonal, if the area of the quadrilateral $P Q R S$, given below, is 60 sq. cm.
3. Find the area or quadrilateral ABCD whose one diagonal, AC is 10 cm long and the vertices, $B$ and $D$, on the other diagonal are at a distance of 6 cm from the diagonal $A C$.
4. The area or trapezium is 100 sq cm and its height is 8 cm . Find the lengths of the two parallel sides if one side is longer than the other by 5 cm .
5. Find area of a trapezium, if its parallel sides are 7 cm and 8 cm and the distance between the parallel sides is 4 cm .
6. The area of a rhombus is 24 sq cm and one of its diagonal is 6 cm . Find the length of the other diagonal.
7. Divide a regular hexagon to get the following shapes
a) 6 triangles
c) 2 trapeziums
b) I rectangle and 2 triangles
d) 1 trapezium, 1 rectangle and 2 triangles
8. Find the area or the polygon In the figure given below.

9. The diagonals of parallelogram are of lengths 6 cm and San. If the diagonals are perpendicular to each other find the area and the perimeter or the parallelogram.
10. Select the correct alternative.
(a) The perimeter of n rhombus with side 14 cm is $\qquad$ .
i. 56 sq cm
ii. 56 cm
iii. 106 sq cm
iv. 106 cm
(b) The area of a square with side 14 cm is $\qquad$ .
i. 56 sq cm
ii. 56 cm
iii. 196 sq cm
iv. 196 cm
(c) The perimeter of a parallelogram with adjacent sides 14 cm and 12 cm is $\qquad$ .
i. 52 cm
ii. 52 sq cm
iii. 160 cm
iv. 168 sq cm
(d) The area of a circle with radius 14 cm is $\qquad$
i. 616 cm
ii. 616 sq cm
iii. 88 cm
iv. 88 sq cm
11. State true or false.
(a) Area of a rhombus Is the same as the product of its adjacent sides.
(b) Area of a right triangle is half the product of its sides including the right angle.
(c) Area of a trapezium Is half the product of its height and sum of its parallel sides.
(d) Area of a parallelogram is the same as the product of its diagonals.
12. The area of a trapezium is 44 sq cm and its height Is 4 cm . Find the lengths of the two parallel sides if one side is shorter than the other by 2 cm .
13. Find the area of a rhombus with diagonals having lengths 8 cm and 10 cm .
14. If the area of the quadrilateral $A B C D$, given below, is 52 sq cm , find the length of segment BD.

15. Find the area of the polygon given below.

