## Mathematics $9^{\text {th }}$ class objective Notes

## CHAPTER\#16

1. The region enclosed by the bounding lines of a closed figure is called the _ of the figure:
(a) Area
(b) Circle
(c) Boundary
(d) None
2. $\quad$ Base $\times$ altitude $=$
(a) Area of parallelogram
(b) Area of square
(c) Area of Rectangular
(d) Area of Triangle
3. The union of a rectangle and its interior is called:
(a) Circle region
(b) Rectangular region
(c) Triangle region (d) None
4. If a is the side of a square, its area will be equal to...
(a) a square unit (b) $\mathrm{a}^{2}$ square units
(c) $\mathrm{a}^{3}$ square units (d) $\mathrm{a}^{4}$ square units
5. The union of a triangle and its interior is called as:
(a) Triangular region
(b) Rectangular region
(c) Circle region (d) None of these
6. Altitude of a triangle means perpendicular distance to base from its opposite
(a) Vertex
(b) Side
(c) Midpoint
(d) None
7. Area of given figure
is.......
(a) 18 cm
(b) 9 cm
(c) $18 \mathrm{~cm}^{2}$

(d) $9 \mathrm{~cm}^{2}$
8. Area of given figure is......
(a) 4 cm
(b) $8 \mathrm{~cm}^{2}$

(c) 16 cm
(d) $16 \mathrm{~cm}^{2}$
9. Area of given figure is......
(a) $4 \mathrm{~cm}^{2}$
(b) $12 \mathrm{~cm}^{2}$
(c) 32 cm
(d) $32 \mathrm{~cm}^{2}$

10. Area of given figure is.
(a) $160 \mathrm{~cm}^{2}$
(b) $80 \mathrm{~cm}^{2}$
(c) 80 cm
(d) 160 cm
11. Area of triangle is ......
(a) $\mathrm{A}=\frac{1}{2}$ Base $\times$ Height
(b) A $=$ Base $\times$ Height
(c) $\mathrm{A}=\mathrm{L} \times \mathrm{w}$
(d) $\mathrm{A}=\mathrm{L}^{2}$
12. Area of square is $\qquad$
(a) $\mathrm{A}=\frac{1}{2}$ Base $\times$ Height
(b) $\mathrm{A}=$ Base $\times$ Height
(c) $\mathrm{A}=\mathrm{L} \times \mathrm{w}$
(d) $\mathrm{A}=\mathrm{L}^{2}$
13. Area of rectangle is $\qquad$
(a) $\mathrm{A}=\frac{1}{2}$ Base $\times$ Height
(b) A $=$ Base $\times$ Height
(c) $\mathrm{A}=\mathrm{L} \times \mathrm{w}$
(d) $\mathrm{A}=\mathrm{L}^{2}$
14. Area of parallelogram is
(a) $\mathrm{A}=\frac{1}{2}$ Base $\times$ Height
(b) $\mathrm{A}=$ Base $\times$ Height
(c) $\mathrm{A}=\mathrm{L} \times \mathrm{w}$
(d) $\mathrm{A}=\mathrm{L}^{2}$
15. If the length and breadth of a rectangle are ' $a$ ' and ' $b$ ' then its area will be:
(a) $a+b$
(b) $\mathrm{a} \times \mathrm{b}$
(c) $a-b$
(d) $\quad a=b$
16. In most cases similar figures have
$\qquad$ areas.
(a) same
(b) different
(c) equal
(d) congruent
17. All congruent figures have $\qquad$ areas.
(a) same
(b) different
(c) zero
(d) non-congruent
18. Area of a geometrical figure is always $\qquad$ real number.
(a) zero
(b) positive
(c) negative
(d) rational

| 1 | a | 2 | a | 3 | b | 4 | b | 5 | a | 6 | a | 7 | c | 8 | d | 9 | d |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 10 | b | 11 | a | 12 | d | 13 | c | 14 | b | 15 | b | 16 | b | 17 | a | 18 | b |

## Question no 2:

Find the area of the following:
(i)


Area of rectangle $=\mathrm{L} \times \mathrm{W}$

$$
\begin{aligned}
& \text { Area }=6 \mathrm{~cm} \times 3 \mathrm{~cm} \\
& \text { Area }=18 \mathrm{~cm}^{2}
\end{aligned}
$$

(ii)


Area of square $=L^{2}$
Area $=(4 \mathrm{~cm})^{2}$
Area $=16 \mathrm{~cm}^{2}$


Area of $\square^{\beta m}=$ base $\times$ height
Area $=8 \mathrm{~cm} \times 4 \mathrm{~cm}$
Area $=32 \mathrm{~cm}^{2}$
(iv)


Area of triangle $=\frac{1}{2}$ base $\times$ height

$$
\text { Area }=\frac{1}{2} \times 16 \mathrm{~cm} \times 10 \mathrm{~cm}
$$

$$
\text { Area }=\frac{1}{2} \times 160 \mathrm{~cm}^{2}
$$

Area $=80 \mathrm{~cm}^{2}$

