

# SARALA BIRLA PUBLIC SCHOOL

Birla Knowledge City, Mahilong, Ranchi  
CLASS- VIII (2020-21)

## Sub: Mathematics..... Assignment-5

A.. Choose the correct option :

1. Is it possible to have a regular polygon each of whose exterior angles is  $50^\circ$ ?

a ) yes.    b ) no.

2. Is it possible to have a regular polygon each of whose interior angles is  $100^\circ$ ?

a ) yes.    b ) no

3. How many diagonals are there in a polygon having 12 sides?

(a) 12

(b) 24

(c) 36

(d) 54

4. In a regular polygon, each interior angle is thrice the exterior angle. The number of sides of the polygon is

(a) 6

(b) 8

(c) 10

(d) 12

5.: The sum of all interior angles of a hexagon is

(a) 6 right  $\angle$  s

(b) 8 right  $\angle$  s

(c) 9 right  $\angle$  s

(d) 12 right  $\angle$  s

6. The interior angle of a regular polygon exceeds its exterior angle by  $108^\circ$ . How many sides does the polygon have?

(a) 16

(b) 14

(c) 12

(d) 10

7. Three angles of a quadrilateral are equal and the measure of the fourth angle is  $120^\circ$ . Find the measure of each of the equal angles.

(a) 45

(b) 60

(c) 80

(d) 100

8. Two adjacent angles of a parallelogram are  $(3x - 4)^\circ$  and  $(3x + 16)^\circ$ . Find the value of  $x$  ?

(a) 28

(b) 10

(c) 24

(d) 30

9. The lengths of the diagonals of a rhombus are 16 cm and 12 cm. The length of each side of the rhombus is

(a) 8 cm

(b) 9 cm

(c) 10 cm

(d) 12 cm

10. The bisectors of any two adjacent angles of a parallelogram intersect at

(a)  $30^\circ$

(b)  $45^\circ$

(c)  $60^\circ$

(d)  $90^\circ$

11. In a square ABCD,  $AB = (2x + 3)$  cm and  $BC = (3x - 5)$  cm. Then, the value of  $x$  is

(a) 4

(b) 5

(c) 6

(d) 8

12. If one angle of a parallelogram is  $24^\circ$  less than twice the smallest angle then the largest angle of the parallelogram is

(a)  $68^\circ$

(b)  $102^\circ$

(c)  $112^\circ$

(d)  $176^\circ$

13. Formula for getting sum of all interior angle of a polygon is

(a)  $(n + 2) \times 180$ .

(b)  $(n - 2) \times 180$

(c)  $n \times 180$

(d)  $n \div 180$

14. Formula for finding number of diagonals in any polygon

(a)  $n(n - 3) \div 2$

(b)  $n \div 2$

(c)  $(n - 3)$

(d) none of the above.

15. A polygon has 27 diagonals. How many sides does it have?

(a) 7

(b) 8

(c) 9

(d) 12

**B. PROJECT : (From - Maths plus activity book)**

**1) Activity 1 - To fold a paper 8 times in any way. Unfold and locate various convex and concave polygon.**

**2) Activity 2 - To verify by paper cutting and pasting , that the sum of interior angles of a quadrilateral is 360.**

**NOTE : [ Project should be done in activity book.]**