



**JAMMU SANSKRITI SCHOOL**  
**LEARN FOR LIFE**



**ASSIGNMENT FOR THE MONTH OF AUGUST**  
**SESSION (2024-25)**

**NAME:**

**ROLL NO :**

**CLASS-8<sup>TH</sup>**

**SUBJECT: MATH**

**LESSON/TOPIC : QUADRILATERAL**

1. Find the measure of an interior angle of a regular polygon of 9 sides.
2. A quadrilateral has three acute angles, each measure  $80^\circ$ . What is the measure of the fourth angle?
3. The angles of a quadrilateral are in the ratio of 1 : 2 : 3 : 4. What is the measure of the four angles?
4. In quadrilaterals,
  - (i) which of them have their diagonals bisecting each other?
  - (ii) which of them have their diagonal perpendicular to each other?
  - (iii) which of them have equal diagonals?
5. The opposite angles of a parallelogram are  $(3x + 5)^\circ$  and  $(61 - x)^\circ$ . Find the measure of four angles.
6. How many sides do a regular polygon have, if the measure of an exterior angle is given as  $24^\circ$  ?
7. What is the measure of each exterior angle of a regular polygon of 15 sides?  
(a)  $30^\circ$       (b)  $45^\circ$       (c)  $60^\circ$       (d)  $24^\circ$
8. When the sum of the internal angles of a polygon is 10 right angles, then how many sides does it have?  
(a) 6      (b) 5      (c) 8      (d) 7
9. Each of the angles of a square is:  
A. Acute angle      B. Right angle      C. Obtuse angle      D. 180 degrees
10. Which of the following is not a regular polygon?  
A. Square      B. Equilateral triangle      C. Rectangle      D. Regular hexagon

11. ABCD is a parallelogram. If angle A is equal to  $45^\circ$ , then find the measure of its adjacent angle.

- A.  $135^\circ$                       B.  $120^\circ$                       C.  $115^\circ$                       D.  $180^\circ$

### ASSERTION AND REASONING

Assertion (A) – The number of sides of a triangle is 3

Reason (R) - A triangle is a polygon with three edges and three vertices. It is one of the basic shapes in geometry.

- a) Both A and R are true and R is the correct explanation of A
- b) Both A and R are true but R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

2.) Assertion (A) – The number of vertices of a triangle is 2

Reason (R) – A triangle is a polygon with three edges and three vertices. It is one of the basic shapes in geometry.

3. Assertion (A) – The sum of the measures of all the three angles of a triangle is  $180^\circ$ .

Reason (R) – A triangle is a polygon with three edges and three vertices. It is one of the basic shapes in geometry

- a) Both A and R are true and R is the correct explanation of A
- b) Both A and R are true but R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

### CASE STUDY BASED QUESTION

Read the Source/Text given below and answer the questions:

During Math Lab Activity each student was given four broomsticks of lengths 8cm, 8cm, 5cm, 5cm to make different types of quadrilaterals.

1. How many quadrilaterals can be formed using these sticks?

- a. Only one type of quadrilateral can be formed
- b. Two types of quadrilaterals can be formed.
- c. Three types of quadrilaterals can be formed.
- d. Four types of quadrilaterals can be formed.

2. Name the types of quadrilaterals formed ?

- a. Rectangle, Square, Parallelogram
- b. Kite, Trapezium, parallelogram

c. Rectangle, Square, Kite

d. Rectangle, Kite, Parallelogram

3. In a trapezium ABCD,  $DC \parallel AB$  and  $\angle A = \angle B = 45^\circ$ , the teacher asked the student to find  $\angle D$ .

a. 105    b. 130    c. 120    d. 135

4 The quadrilateral formed by joining the mid-points of the sides of a quadrilateral PQRS, taken in order, is a rectangle, if

a. PQRS is a rectangle    b. PQRS is a parallelogram

c. diagonals of PQRS are perpendicular    d. diagonals of PQRS are equal

5 Which of the following is not true for a parallelogram?

a. opposite sides are equal

b. opposite angles are equal

c. opposite angles are bisected by the diagonals

d. diagonals bisect each other.

