

Class – VIII

Mathematics

Understanding Quadrilaterals

Worksheet (BASIC)

Section – A

Choose the correct option :

1. A simple closed curve made up of only line segments is called a

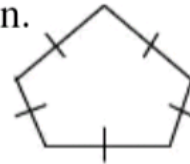
- (a) Circle (b) Polygon (c) Line segment (d) None of them

2. The sum of the measures of the exterior angles of any polygon is -

- (a) 180° (b) 360° (c) 270° (d) 540°

3. Find x in the given figure, if it is a regular pentagon.

- (a) 110° (b) 108° (c) 105° (d) 100°



4. One angle of a quadrilateral is 150° and other three angles are equal. What is the measure of each of these equal angles ?

- (a) 75° (b) 85° (c) 95° (d) 70°

Fill the blanks for the following statements :

6. A parallelogram having all sides equal is called a
7. A quadrilateral having exactly one pair of parallel sides is called a
8. If the consecutive sides of a parallelogram are equal, then it is necessarily a
9. Sum of interior angles of a polygon of 10 sides is
10. The number of sides of a regular polygon whose each exterior angle is 60° is

Section – B

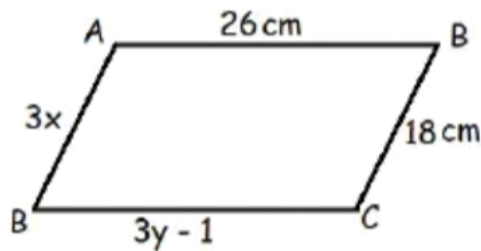
(1 x 5 = 5)

11. Five angles of a hexagon are 150° , 95° , 80° , 135° & 125° . Find the sixth angle.
12. How many diagonals are there in a hexagon ?
13. Find the measure of each interior angle of a regular pentagon.
14. One angle of a parallelogram is 60° . Find its opposite angle and the adjacent angle.
15. ABCD is a trapezium with $AB \parallel DC$. If $\angle A = 50^\circ$, then find $\angle D$.

Section – C

(2 x 5 = 10)

16. An exterior angle and the interior angle of a regular polygon are in the ratio 2 : 7. Find the number of sides of the polygon.
17. In parallelogram ABCD. Find x and y.

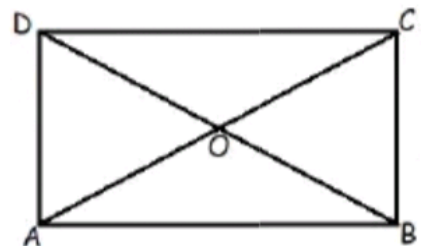


18. Find the number of sides of a regular polygon whose each exterior angle measures 60° .
19. Four angles of a quadrilateral are in the ratio 3 : 4 : 5 : 6. Find its angles.
20. ABCD is a rhombus with $\angle DAB = 56^\circ$. Determine $\angle DBC$.

Section – D

(3 x 5 = 15)

21. In the given figure, ABCD is a rectangle and its diagonals meet at O. Find x, if $OA = (2x + 4)$ and $OD = (3x + 1)$. Also find BD.



29. The diagonals of a rhombus are 6 cm and 8 cm respectively. Find the length of the sides of the rhombus. Also find its perimeter.

30. Find $x + y + z + w$ in the given figure.

