**SAINIK SCHOOL GOPALGANJ**

**SUMMER VACATION HOMEWORK**

**SUBJECT-MATHS**

**CLASS: - VIII**

**UNDERSTANDING QUADRILATERALS**

1. The diagonal of a rectangle is 10 cm and its breadth is6 cm. What is its length?

2. Find the measure of each exterior angle of a regular polygon of 9 sides.

3. If the sides of a triangle are produced in order, What is the sum of the exterior angles so formed?

4. The measures of the three angles of a quadrilateral are 65°, 75° and 85°. Find measure of the fourth angle.

5. The measures of two angles of a quadrilateral are 110° and 100″. The remaining two angles are equal. What is the measure of each of the remaining two angles?

6. *PQRS* is a rhombus with *PQ* = 10 cm. If *OQ* = 6 cm then what is the length of the diagonal *PR*?

7. Find the number of sides of a regular polygon, whose each exterior angle has a measure of 45°.

8. Find the number of sides of a regular polygon whose each exterior angle has a measure of 45°.

9. Find the measure of each exterior angle of a regular polygon of (i) 9 sides (ii) 15 sides

10. How many sides does a regular polygon have if the measure of an exterior angle is 24°?

11. How many sides does a regular polygon have if each of its interior angles is 165°?

12. Find the number of sides of a regular polygon whose each exterior angle has a measure of 15°.

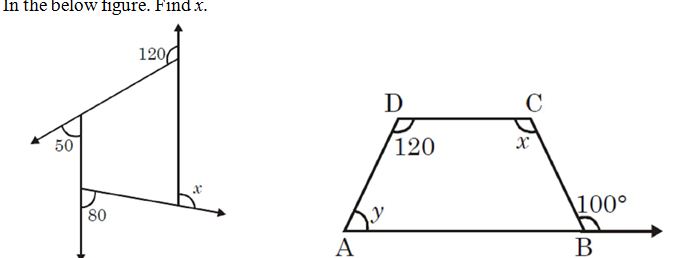
13. The five angles of a pentagon are in the ratio 5 : 6 : 7: 8 :10. Find all the angles.

14.GOAL is a quadrilateral in which GO || AL. If L G = LO = 400. What are the measures of L A and LL.

15. ABCD is a rhombus whose diagonals AC and BD intersect at a point O. If side AB =10cm and diagonal BD = 16 cm, find the length of diagonal AC.

16. The ratio of two adjacent sides of a parallelogram is 5:4. Its perimeter is 18 cm then, what is the length of the adjacent sides.

17.Find the value of x and y as applicable in below figures A and B

  
 ( A) (B)

18. Construct a quadrilateral ABCD in which AB = AD = 5cm, BC = CD = 7cm and BD = 6cm. What type of quadrilateral is this?

19. How will you construct this rhombus if instead of side 4. cm diagonal 4. cm is given?

20. To construct a unique parallelogram, what are the minimum number of Measurements required?