MATHEMATICS

CLASS – VIII

Chapter-03

Understanding Quadrilaterals



Section [A]

- Find the measure of each exterior angle of a regular polygon of :
 (a) 12 sides (b)18 sides
- 2. Find the number of sides of a regular polygon whose each interior angle has a measure of 135° .
- *3.* Identify all the quadrilateral that have :
 (a) Four sides of equal length
 (b) Four right angles
- 4. State true or false that "all squares are not parallelograms", justify.

Section [B]

- 5. Explain how a square is (a) A parallelogram (b) A rhombus
- **6.** *PLAN is a rectangle, its diagonal meets at O find x if OP = 2x+4 and ON = 3x+1.*
- 7. The sides of a parallelogram are in the ratio3:2. If its perimeter is 30 cm, find the length of the sides.
- 8. Two adjacent angles of a parallelogram have equal measure. Find the measure of each of the angles of the parallelogram.

Section [C]

- 9. 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.
- **10.** Find the angle measure x in the figure



- **11.** 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.
- 12. Three angles of a quadrilateral are in the ratio 3:4:5. The difference of the least and the greatest of these angles is 45. Find all the four angles of the quadrilateral.
- **13.** In the below figure, ABCD is a quadrilateral. Find x.



- 14. ABCD is a rhombus, its diagonal intersects at O in which AO = 4cm and OB = 3 cm. W_i is the length of the side of the rhombus?
- **15.** The diagonals of a rhombus ABCD intersect at O. If $\angle ADC = 120^{\circ}$ and OD = 6 cm , draw figure and find (i) $\angle OAD$ (ii) side AB (iii) perimeter of the rhombus ABCD.
- 16. Find unknown angles in the following figures





16. In the below figure, ABCD and SONI are parallelogram. What is the value of x?

