

1. The measures of three angles of a quadrilateral are 39, 141 and 13. Find the fourth angle.
2. Find the number of sides of a regular polygon whose each exterior angle has a measure of  $15^\circ$ .
3. What is the measure of each interior angle of a regular pentagon?
4. In a parallelogram PQRS,  $\angle R$  measures  $115^\circ$ . What is the measure of  $\angle P$ ?
5. Name a parallelogram in which the diagonals are equal and bisect each other at right angles.
6. Find the number of sides of the polygon whose exterior angle of a regular polygon is one-third of its interior angle.
7. In a quadrilateral PQRS all interior angles are of equal measure. Find the measure of each of its exterior angle.
8. Find the angles of the parallelogram whose an angle of a parallelogram is two-third of its adjacent angles.
9. Find the sides of the parallelogram whose ratio of two sides is 3: 5 and its perimeter is 48 metre.
10. Find the number of sides of the polygon in which the difference between the exterior and interior angle of a regular polygon is  $60^\circ$ .
11. If the perimeter of a parallelogram is 150cm and one of its sides is greater than the other by 25cm. Find the length of all sides of the parallelogram.
12. Find the length of the sides of the rectangle in which the adjacent sides are in the ratio 3: 4 and if the measure of its diagonal is 20cm.
13. Find the measure of each angles of a parallelogram whose two adjacent angles are  $(3x - 4)^\circ$  and  $(3x + 16)^\circ$ . Also find the value of 'x'.
14. Find the length of each side of a rhombus and hence find its perimeter. If the diagonals measure 16cm and 12cm respectively.
15. Find the area of a rectangle in which the sides are in the ratio 5: 4 and its perimeter is 90cm. Also find the measure of its sides.
16. The diagonals of a rectangle ABCD intersect at point O. If  $\angle AOD = 58^\circ$ , find  $\angle OAD$  and  $\angle OBA$ .