

# Quadrilateral Worksheet for Class 9

1. If area of a parallelogram with sides  $a$  and  $b$  is  $A$  and that of a rectangle with sides  $a$  and  $b$  is  $B$  then, (choose the correct option)  
 $A > B$     $A = B$     $A < B$
2. All the angles of the quadrilateral can be obtuse. Is this statement true. Give reason?
3. Diagonals of a parallelogram are perpendicular to each other. Is this statement true? Give reason.
4. The figure formed by joining the mid points of the adjacent sides of a quadrilateral is a \_\_\_\_\_.
5. The diagonals of a quadrilateral  $ABCD$  are equal. Prove that the quadrilateral formed by joining the midpoints of its sides is a rhombus.
6. The lengths of the diagonals of a rhombus are  $24\text{cm}$  and  $18\text{cm}$  respectively. Find the length of each side of the rhombus.
7. The bisectors of the angles of a parallelogram enclose a \_\_\_\_\_.
8. In a quadrilateral  $PQRS$ , Opposite angles are equal. If  $SR = 2\text{cm}$  and  $PR = 5\text{cm}$  then determine  $PQ$ .
9. Prove that the line segments joining the middle points of the sides of a triangle divide it into four congruent triangles.