



Wada Nirmiti Education Society's
GURUKUL GLOBAL SCHOOL
WORKSHEET

SUB: MATHS

LESSON: 4 – QUADRILATERALS

STD: VIII

NAME: _____ **ROLL No:** _____

DATE: _____

Q. 1. Multiple Choice Questions:

1. If the diagonals of a quadrilateral are equal and bisect each other but are not perpendicular, the quadrilateral must be:
A. Rectangle B. Square C. Rhombus D. Kite
2. A parallelogram has one angle of 30° . What are the measures of the remaining angles?
A. $30^\circ, 150^\circ, 30^\circ$ B. $150^\circ, 30^\circ, 150^\circ$
C. $120^\circ, 60^\circ, 120^\circ$ D. Cannot be determined
3. In a trapezium, one pair of opposite sides is parallel. If the non-parallel sides are equal, the trapezium is called:
A. Rhombus B. Isosceles trapezium
C. Kite D. Parallelogram

Q. 2. Solve the following questions.

1. Can a quadrilateral have three right angles and one obtuse angle? Justify mathematically.
2. Prove that the diagonals of a rhombus are perpendicular bisectors of each other using congruence.
3. A quadrilateral has diagonals of lengths 8 cm and 6 cm intersecting at right angles. Identify the quadrilateral and justify.
4. Draw a quadrilateral whose diagonals are equal but do not bisect each other. What type of quadrilateral is this?
5. Draw a quadrilateral whose diagonals bisect each other but are not equal. Name the figure and list its properties.
6. A quadrilateral has three angles of $80^\circ, 100^\circ,$ and 90° . Find the fourth angle. What type of quadrilateral is it?
7. A farmer wants to fence a plot in the shape of a parallelogram with sides 50 m and 30 m. If the cost of fencing is ₹120 per meter, find the total cost.
8. Consider a circle with centre O. Line segments PL and AM are two perpendicular diameters of the circle. What is the figure APML? Reason and/or experiment to figure this out.

