

Characteristics of Quadrilaterals

Name: _____ Per. _____ Group# _____

Place an A(Always), S(Sometimes), N(Never) in the boxes for each polygon and the given characteristic.

CHARACTERISTICS	Parallelogram	Rectangle	Rhombus	Square	Trapezoid	Isosceles Trapezoid	Kite
Both Pairs of Opposite Sides Parallel							
Diagonals Congruent							
Both Pairs of Opposite Sides Congruent							
At least one right angle							
Both Pairs of Opposite Angles Congruent							
Exactly one pair of opposite sides parallel							
Diagonals Perpendicular							
At Least One Pair of Consecutive Sides Congruent							
At Least One pair of Consecutive Angles Congruent							
Diagonals Bisect Each Other							
At Least One Diagonal Bisects Opposite Angles							

Fill in each blank with **True** or **False**. If false, change the statement so that it would be true.

1. _____ Every quadrilateral is a parallelogram.
2. _____ The diagonals of a parallelogram are congruent.
3. _____ If both pairs of opposite angles in a quadrilateral are congruent, then the quadrilateral is a parallelogram.
4. _____ If REKT is a rectangle, then it is a parallelogram.
5. _____ You can prove that a quadrilateral is a rectangle by proving that the diagonals are congruent.
6. _____ If a quadrilateral is a rhombus or a square, then the diagonals are perpendicular.
7. _____ If a quadrilateral has four right angles, then it must be a square.
8. _____ If QUAD is a square, then it is also a parallelogram, a rectangle, a rhombus, a quadrilateral, and a trapezoid.
9. _____ The diagonals of a trapezoid are congruent.
10. _____ If quadrilateral ABCD is a parallelogram, then $\overline{AB} \parallel \overline{CD}$.
11. _____ The diagonals of a rectangle are congruent.
12. _____ A quadrilateral has two pairs of opposite sides parallel.

Fill in each blank with **sometimes**, **always** or **never**.

13. A parallelogram is _____ a square.
14. A square is _____ a rectangle.
15. A rectangle is _____ a square.
16. A rhombus is _____ a kite.

