

Quadrilateral Hierarchy

Quadrilateral

- ✓ Four sided polygon

Kite

- ✓ A quadrilateral that has two pairs of consecutive congruent sides, BUT opposite sides are not congruent
- ✓ Diagonals are not congruent
- ✓ ONLY ONE pair of opposite angles are congruent
- ✓ The OTHER pair of opposite angles are bisected by one of the diagonals

(This is the line of symmetry)

*Diagonals are **not** congruent

Parallelogram

- ✓ A quadrilateral with both pairs of opposite sides parallel
- ✓ Opposite sides and angles are congruent
- ✓ Consecutive angles are supplementary
- ✓ The diagonals bisect each other

*Diagonals are **not** congruent

Trapezoid

- ✓ A quadrilateral with EXACTLY one pair of opposite sides parallel
- ✓ Leg angles are supplementary

*Diagonals are **not** congruent

Isosceles Trapezoid

- ✓ A trapezoid whose legs are congruent
- ✓ Both pairs of base angles (separately) are congruent
- ✓ Diagonals are congruent

Rhombus

- ✓ A parallelogram with 4 congruent sides
- ✓ Diagonals are perpendicular AND bisect a pair of opposite angles

* Diagonals are **not** congruent

Rectangle

- ✓ A parallelogram with 4 congruent angles (all 90 degrees)
- ✓ Diagonals are congruent
- ✓ Diagonals form 4 isosceles triangles

Square

- ✓ A parallelogram with 4 congruent angles and sides
- ✓ Diagonals are congruent
- ✓ Holds all properties for a rhombus and a rectangle