

Quadrilateral conjectures:

Q1. The sum of interior angles of a quadrilateral is 360°

P1. Every parallelogram has opposite congruent sides

P2. Every parallelogram has opposite congruent angles

P3. Every parallelogram has interior angles that add up to 360°

P4. Every parallelogram has exterior angles that add up to 360°

P5. The diagonals of a parallelogram intersect at the midpoint of _____ (what should go here?)

P6. If a quadrilateral has opposite congruent sides, then it is a parallelogram

P7. If a quadrilateral has opposite congruent angles then it is a parallelogram

R1. Every rectangle has two sets of congruent sides

R2. Every rectangle has two set of parallel sides

R3. Every rectangle has congruent diagonals

R4. The intersection of the two diagonals of a rectangle is the same point as the intersection of

R5. the transversals through the midpoints of the opposite sides of the rectangle

R6. If a quadrilateral has congruent opposite sides, and one 90° angle, then it is a rectangle

H1. Every rhombus is convex

H2. Every rhombus is a parallelogram

H3. The adjacent angles of a rhombus are supplementary

H4. The opposite angles in a rhombus are congruent

H5. The diagonals of a rhombus are not equal

H6. The diagonals of a rhombus are perpendicular

H7. If a quadrilateral has

- ~~4 congruent sides~~
- 2 pairs of opposite angles that are congruent
- diagonals that are not equal
- diagonals that are perpendicular

Then it is a quadrilateral

K1. Every kite has exactly one pair of congruent angles

K2. Every kite has perpendicular diagonals

K3. In every kite, the intersection of the diagonals is the midpoint of one of the diagonals

K4. If a quadrilateral has one pair of congruent adjacent sides, and a pair of congruent angles, then it is a kite.

K5. Every kite has perpendicular opposite sides

K6. If a quadrilateral has perpendicular diagonals, then it is a kite