


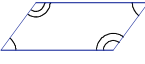
CHAPTER 6

def || ogram

A quadrilateral with both pairs of opposite sides parallel.


If || ogram, then 

If parallelogram, then opposite sides are congruent.

If || ogram, then 


If parallelogram, then opposite angles are congruent.

If parallelogram, then consecutive angles are supplementary.

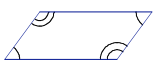
If || ogram, then 

If a parallelogram has one right angle, then it has four right angles.

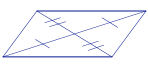
If parallelogram, then diagonals bisect each other.

If  , then || ogram


If both pairs of opposite sides of a quad. are congruent, then parallelogram.

If  , then || ogram

If both pairs of opposite angles of a quad. are congruent, then parallelogram.

If  , then || ogram

If diagonals of a quad. bisect each other, then parallelogram.

If  , then || ogram

If one pair of opposite sides of a quad. are both parallel and congruent, then parallelogram.

def rectangle

A quadrilateral with four right angles

If  , then diagonals \cong

If parallelogram is a rectangle, then diagonals congruent.



If diagonals of parallelogram congruent, then rectangle.

def rhombus


A quadrilateral with four congruent sides.

def square

A quadrilateral with four right angles and four congruent sides.

If  , then 

If rhombus, then diagonals are perpendicular.

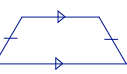
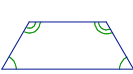
If  , then 

If diagonals of parallelogram are perpendicular, then rhombus.

If rhombus, then each diagonal bisects a pair of opposite angles.

Def trapezoid

A quadrilateral with exactly one pair of parallel sides.

If  , then 

If isosceles trapezoid, then both pairs of base angles congruent.

If isosceles trapezoid, then diagonals congruent.

If trapezoid, then median is parallel to bases and its measure is one-half the sum of the measures of the bases.

