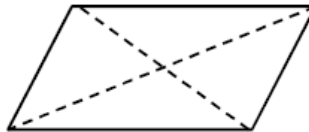


Quadrilateral

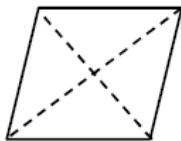
PROPERTIES

Parallelograms



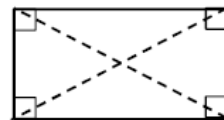
- Opposite sides parallel
- Opposite sides congruent.
- Opposite angles congruent.
- Consecutive angles supplementary.
- Diagonals bisect each other.

Rhombi



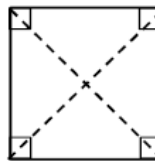
- Four congruent sides.
- Diagonals are perpendicular.
- Diagonals bisect opposite angles.

Rectangles



- Four right angles.
- Diagonals are congruent.

Squares



Squares have ALL the properties of parallelograms, rectangles, and rhombi!

Interior & Exterior Angles of Polygons

Sum of Interior Angles of a Polygon	$S = (n - 2) * 180$
Each Interior Angles of a Regular Polygon	$\frac{(n - 2) * 180}{n}$
Sum of Exterior Angles of a Polygon	360
Each Exterior Angles of a Regular Polygon	$\frac{360}{n}$

Trapezoids

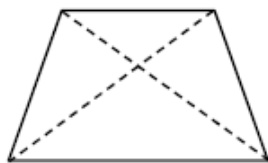


- Only ONE pair of opposite sides parallel (called bases).
- Consecutive angles are supplementary.

Midsegment of a Trapezoid:

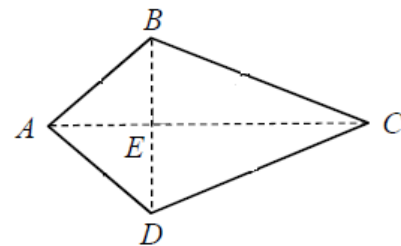
A midsegment of a trapezoid connects the midpoints of the legs. This segment is equal to the average of the two bases.

Isosceles Trapezoids



- Non-parallel sides (legs) are congruent.
- Diagonals are congruent.
- Base angles are congruent.
- Opposite angles are supplementary.

Kites



- Exactly two pairs of consecutive congruent sides
($\overline{AB} \cong \overline{AD}$ and $\overline{BC} \cong \overline{DC}$)
- One pair of opposite angles are congruent ($\angle ABC \cong \angle ADC$)
- Diagonals are perpendicular