List all the quadrilaterals that have each of the following properties:

- All sides are ≅
  Rhombus, Square
- Both pair of opposite sides ≅
  Parallelogram, Rhombus, Rectangle, Square
- Both pair of opposite sides ||
  Parallelogram, Rhombus, Rectangle, Square
- Both pair of opposite angles ≅
  Parallelogram, Rhombus, Rectangle, Square
- All angles are rt angles
  Rectangle, Square

List all the quadrilaterals that have each of the following properties:

- All pairs of Consecutive angles supplementary
  Parallelogram, Rhombus, Rectangle, Square
- Diagonals bisect each other
  Parallelogram, Rhombus, Rectangle, Square
- Diagonals ≅
  Rectangle, Square
- Diagonals ⊥
  Rhombus, Square
- Each diagonal bisects opposite angles
  Rhombus, Square

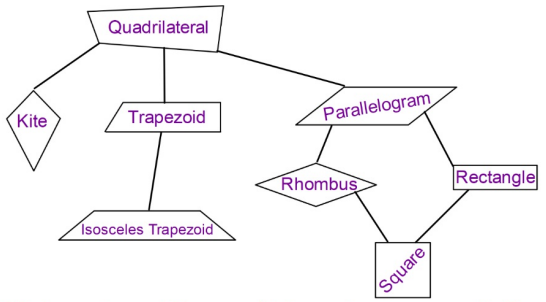
You are now ready for Quiz #1

Tomorrow

Sec 6-1 to 6-4

Sec 6-5: Trapezoids and Kites

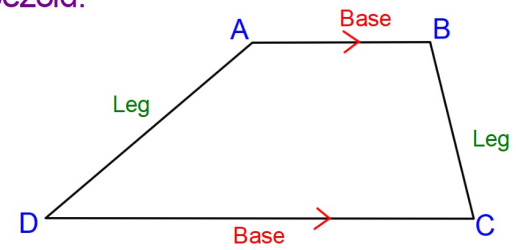
Quadrilateral Hierarchy:



Notice the Kite branch and Trapezoid branch are separate from each other which means that they are not related.

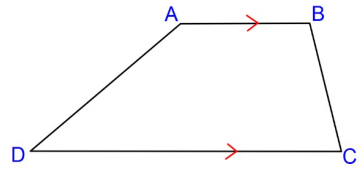
Also notice that Kites and Trapezoids are separate branches than the Parallelograms.

ABCD is a Trapezoid:



The bases of a trapezoid are The parallel sides

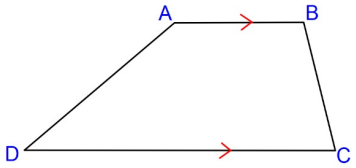
The legs of a trapezoid are The non-parallel sides



$\angle A$ & $\angle D$ are supplementary (same-side int $\angle's$)

$\angle B$ & $\angle C$ are supplementary (same-side int $\angle's$)

In a trapezoid angles that share a leg are supplementary



$\angle A$ & $\angle B$ are called base angles

$\angle C$ & $\angle D$ are called base angles

Base angles are angles that share a base.

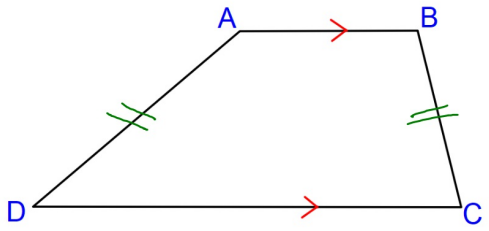
Quadrilateral Booklet

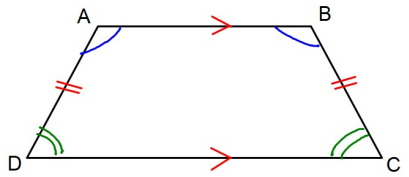
Trapezoid	Proving a Quad is a Trapezoid:
Def: Quad with exactly one pair of parallel sides. Angles that share a leg are supplementary	Show it has only one pair of parallel sides. To show this you need to show that only one pair of sides has the same slope.

Isosceles Trapezoid

Trapezoid whose legs are congruent.

In trapezoid ABCD, AD ≅ BC





Theorem 6-15

The base angles of an isosceles trapezoid are congruent.

base angles are the angles that share a base.