

Unit 10 Facts

Quadrilaterals

Topic #1 Definitions and Properties

Quadrilateral: a 4 sided closed figure

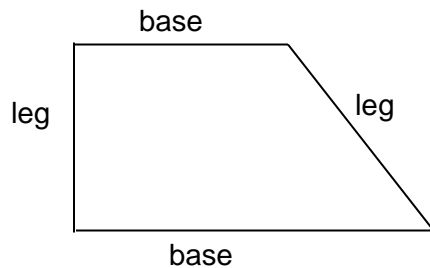
Parallelogram: Quadrilateral with both pairs of opposite sides parallel

Rectangle : parallelogram with four right angles

Rhombus : parallelogram with four congruent sides

Square : parallelogram with four right angles and four congruent sides

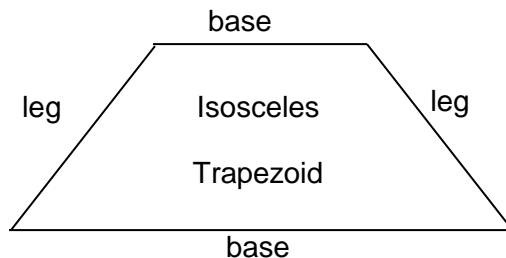
Trapezoid: quadrilateral with one pair of parallel sides



Leg: non parallel sides

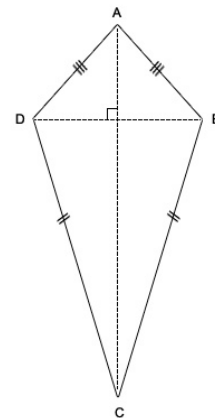
Base: parallel sides

Isosceles Trapezoid: Legs and base angles are congruent.



Trapezium: quadrilateral with no parallel sides

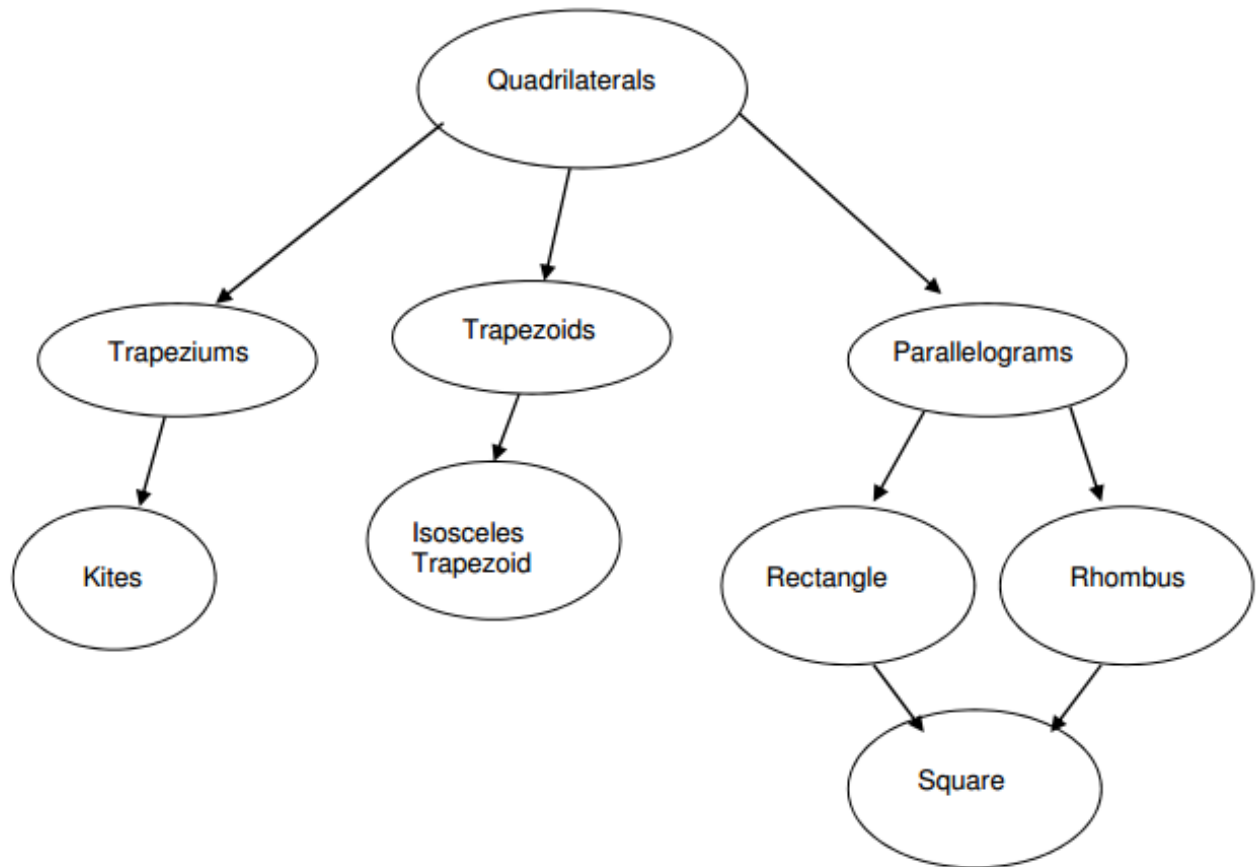
Kite: trapezium with two distinct pairs of equal adjacent sides.



Quadrilateral Properties

	Parallelogram	Rectangle	Rhombus	Square	Trapezoid	Isosceles Trapezoid	Kite
SKETCH EACH QUADRILATERAL							
Both pair of opposite sides are \parallel							
Exactly 1 pair of opposite sides are \parallel							
Both pair of opposite sides are \cong							
2 distinct pair of adjacent sides are \cong							
Exactly 1 pair of \cong sides							
All sides are \cong							
Both pair of opposite \angle 's \cong							
Exactly 1 pair of opposite angles \cong							
All \angle 's 90°							
Both diagonals bisect each other							
Diagonals are \cong							
Diagonals are perpendicular							
Exactly one diagonal is bisected							
Diagonals bisect both pair of opposite angles							
One diagonal bisects opposite angles							
Any 2 adjacent \angle 's are supplementary							
Base angles are congruent							

Topic #2: Flow chart



Topic #3: Median of a trapezoid

Median of a Trapezoid: segment joining the midpoints of the legs

1. Parallel to the bases
2. Its measure equals $\frac{1}{2}$ the sum of the bases

