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# POLYGON FAMILY TREE

## Trilateral
3-sided polygon

- EQUILATERAL
  All 3 sides equal
  All 3 angles equal
- ISOSCELES
  2 equal sides
  2 equal angles
- SCALENE
  No sides equal
  No angles equal
- RIGHT
  One inside angle = 90°
- OBTUSE
  One inside angle > 90°
  *"blunt"*
- ACUTE
  All inside angles < 90°
  *"sharp"*

## Quadrilateral
4-sided polygon

- CONCAVE
  Having angles that are pointed towards the inside of the figure
  - ARROWHEAD
    No right angles
    Adjacent sides parallel
    *Aka Chevron*
- CONVEX
  Each interior angle of the figure is pointed
  - PARALLELOGRAM
    Two pairs of sides parallel
    No right angles
    Opposite sides and angles equal
    *Aka rhomboid*
    - RECTANGLE
      With 4 right angles
      *Aka oblong when not equilateral*
      - SQUARE
        With 4 right angles
        All sides equal
    - KITE
      No right angles
      Adjacent sides parallel
      - RHOMBUS
        No right angles
        All sides equal
        *Aka diamond*
  - TRAPEZOID
    Only one pair of opposite sides parallel
    - TRAPEZIUM *(not British)*
      No two sides parallel
      *Aka common quadrilateral*
    - ISOSCELES
      The two sides not parallel are equal length
    - RIGHT-ANGLED
      Right angle on perpendicular side
    - SCALENE-ANGLED
      No two sides or angles are the same
    - OBTUSE-ANGLED
      Two opposite angles are obtuse

## Multilateral

- PENTAGON
  5 sides
- HEXAGON
  6 sides
- HEPTAGON
  7 sides
- OCTAGON
  8 sides
- NONAGON
  9 sides
- DECAGON
  10 sides
- UNDECAGON
  11 sides
- DODECAGON
  12 sides
- ICOSAGON
  20 sides