03-30-2025 Polygons

C&L Math Tutoring

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Types of polygons

A **polygon** is a closed figure made up of straight lines in a two-dimensional plane. Polygons are named according to the number of sides they have.

They are named as follows:

1. n/a
2. n/a
3. trigon (triangle), 180 degrees
    - equiangular equilateral (60 degree angles)
    - right isosceles (45-45-90)
    - acute isosceles
    - obtuse isosceles
    - right scalene
    - acute scalene
    - obtuse scalene
4. quadrilateral, 360 degrees
    - kites
    - parallelogram
        - square
        - rectangle
        - rhombus
    - trapezoid
5. pentagon, 540 degrees
6. hexagon, 720 degrees
7. heptagon, 900 degrees
8. octagon, 1080 degrees

9. nonagon, 1260 degrees
10. decagon, 1440 degrees
11. hendecagon, 1620 degrees
12. dodecagon, 1800 degrees

Sum of angle measures

The sum of angle measures is determined by this formula:

$$S = 180 \times (n - 2)$$

where:

- n is the number of sides
- S is the sum of angle measures