

1) Definitions

Complementary angles - angles that add to 90°
 Supplementary angles - angles that add to 180°

corresponding angles - make "F" pattern

alternate angles - make "Z" pattern

interior angles - make "C" pattern (these add to 180°)

exterior angle - angle between the extended side of a polygon and the adjacent side

adjacent - "next to"

hypotenuse - longest side of a right angled triangle

bisect - cuts in half

diagonal - line that connects two non-adjacent vertices of a polygon

Types of Triangles

- isosceles
 - scalene
 - equilateral } by side length

- right-angled } by angle
 - obtuse
 - acute

Polygon - many sided closed figure

- regular polygon \rightarrow all sides equal length

Types of Polygons

1) Triangle - 3 sides

2) Quadrilateral - 4 sides \Rightarrow Types of Quadrilaterals

3) Pentagon - 5 sides

4) Hexagon - 6 sides

- square
 - rectangle
 - parallelogram
 - rhombus
 - trapezoid
 - kite

2) Formulas * know all from pg. 341 plus area/perimeter of a circle

* Pythagorean Theorem $a^2 + b^2 = c^2$

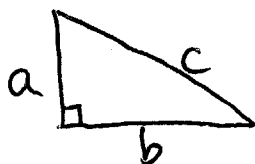
* Sum of interior angles of a polygon with "n" sides is $(n-2) \times 180$

* Sum of exterior angles is always 360°

- 3) Angle Properties
- opposite angles
 - complementary / supplementary angles
 - angles formed by transversal + parallel lines
 - sum of interior / exterior angles of triangle
 - properties of angles in isosceles or equilateral triangle
 - sum of interior / exterior angles of polygon

4) Properties of Diagonals in a Polygon (see pg 376)

5) Pythagorean Theorem
(use in a right angled triangle)



$a^2 + b^2 = c^2$ where
c is the hypotenuse
(longest side)

6) Area / Perimeter of

- square
- rectangle
- triangle
- trapezoid
- parallelogram
- rhombus
- circle
- *also composite shapes

7) Optimizing Area / Perimeter of a Rectangle