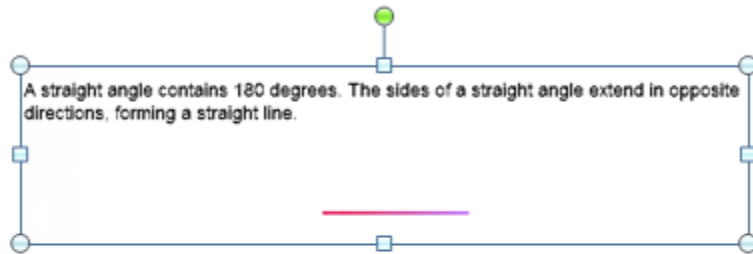# Unit 6 Study Guide

Notes for 6.01

Geometric Concepts

Angles

An angle of 90° is a right angle.

A straight angle contains 180 degrees. The sides of a straight angle extend in opposite directions, forming a straight line.

The symbol ⌐ denotes a right angle.
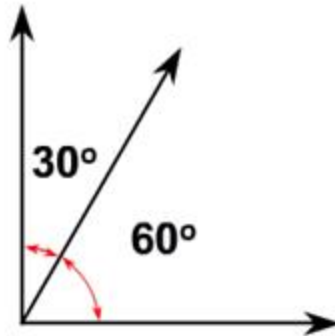
An angle of less than 90° is an acute angle.

An angle of more than 90° but less than 180° is an obtuse angle.

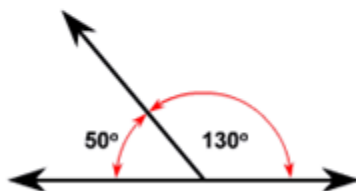# Complementary angles

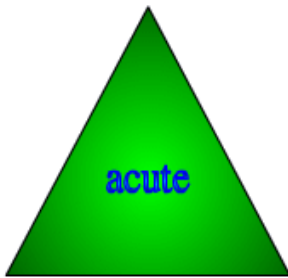When the sum of the measures of two angles is 90°, the angles are said to be complementary.

30°

60°

Supplementary Angles

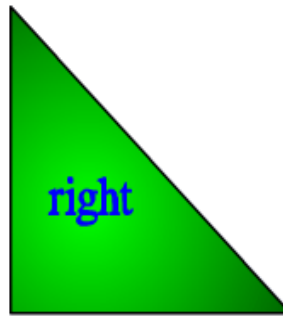When the sum of the measures of two angles is 180°, the angles are said to be

Supplementary

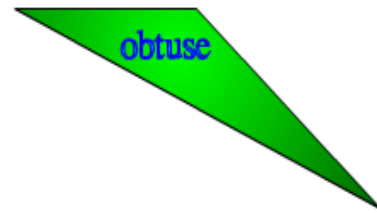50°   130°

Geometry and Statistics
6.02 Plane Figures

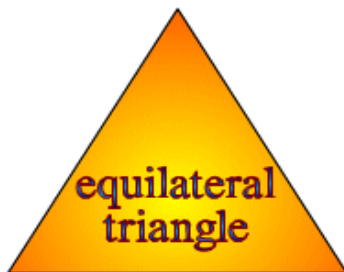Triangles are also named by their angles.

acute

right

obtuse

three acute angles

one right angle

one obtuse angle

Triangles are named by their sides.

equilateral triangle
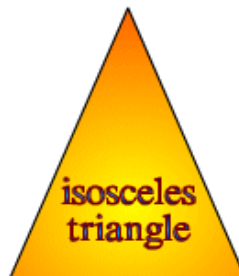
isosceles triangle

scalene triangle

all sides congruent

at least 2 sides congruent

no sides congruent
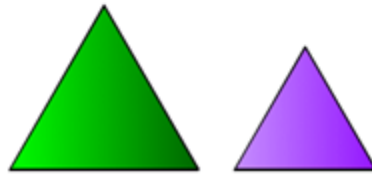
Geometry and Statistics
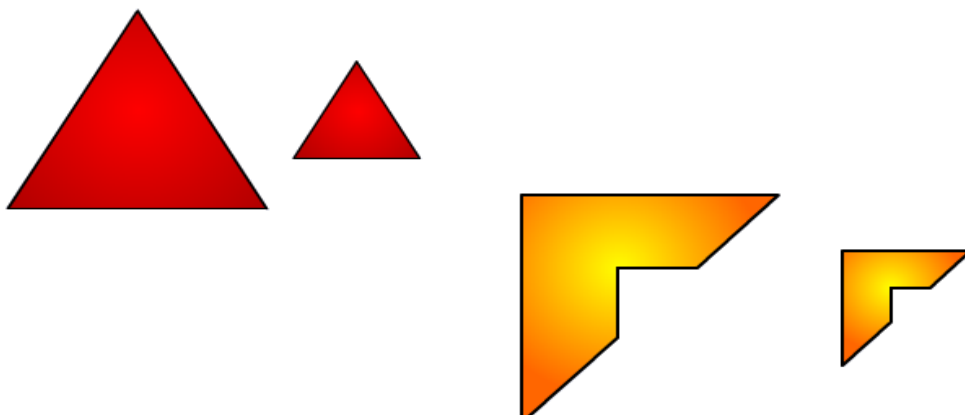
6.03 Motion Geometry

Figures:

- **Congruent figures** have the same shape and size.

- **Similar figures** have the same shape.
- They <u>DO NOT</u> have the same size.

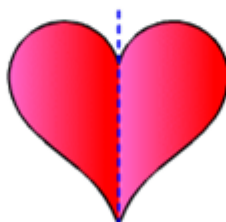Similar figures have the same shape, but not the same size.

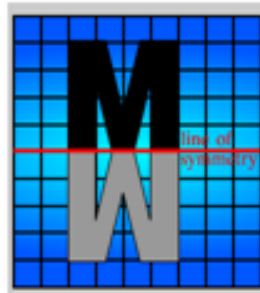Figures are congruent if they have the same shape and the same size.

Symmetry:

- A figure is **symmetric** if a line can be drawn through it so that each half is exactly alike.
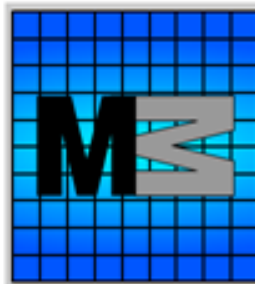
Motion Geometry

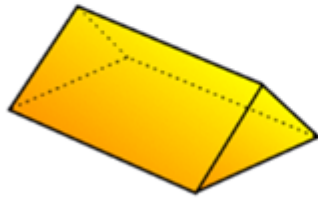**Flip = Reflection**

Slide = Translation

Turn = Rotation
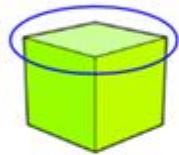
6.04 Space Figures

What is a PRISM?

A **PRISM** is a 3D shape with **2** congruent (equal) **bases**:
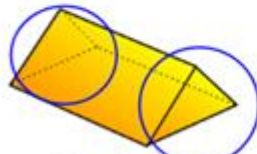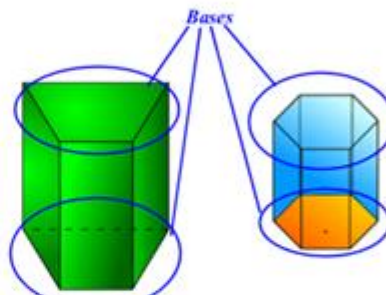

How are prisms named?

Prisms are named for their bases.

square prism (cube)

triangular prism

trapezoidal prism

Bases

hexagonal prism

What is a Pyramid?

A **PYRAMID** is a 3D shape with **1 Base**.

Pyramids

Pyramids rest on a face called a base. All other faces of pyramids are triangles. Pyramids are named for their bases.

pentagonal pyramid

rectangular pyramid

hexagonal pyramid

Bases (how pyramids are named)