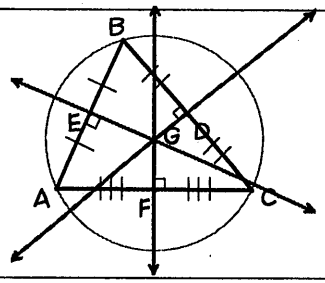
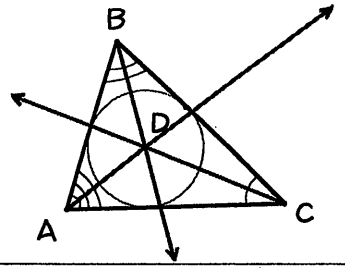
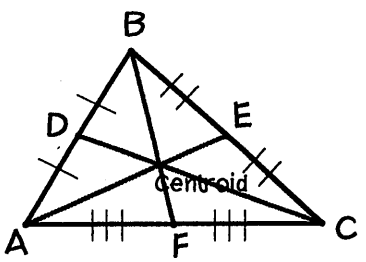
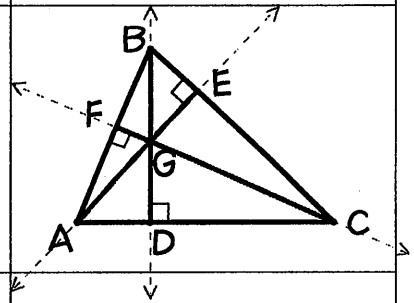
GPS Geometry
Points of Concurrency Organizer

Name Key Date _____ Period_____

Special Segments in Triangles

	Perpendicular Bisectors	Angle Bisectors	Medians	Altitudes
Sketch Segments **Mark Known Information** (Congruences and Right Angles)				
Name of the Point of Concurrency (POC)	CIRCUMCENTER	INCENTER	CENTROID	ORTHOCENTER
Location of POC* Acute Triangle	INSIDE THE TRIANGLE	INSIDE THE TRIANGLE	INSIDE THE TRIANGLE	INSIDE THE TRIANGLE
Obtuse Triangle	OUTSIDE THE TRIANGLE	INSIDE THE TRIANGLE	INSIDE THE TRIANGLE	OUTSIDE THE TRIANGLE
Right Triangle	THE MIDPOINT OF THE HYPOTENUSE	INSIDE THE TRIANGLE	INSIDE THE TRIANGLE	THE VERTEX OF THE RIGHT ANGLE
Significance of POC	THE POINT IS EQUIDISTANT TO THE VERTICES OF THE TRIANGLE. (The point is the center of the circumcircle.)	THE POINT IS EQUIDISTANT TO THE SIDES OF THE TRIANGLE. (The point is the center of the incircle.)	THE POINT DIVIDES EACH MEDIAN SO THAT ONE PIECE IS HALF THE LENGTH OF THE LONGER PIECE. (2/3 and 1/3 pieces)	NO SIGNIFICANCE GIVEN (The point is the center of the circumcircle of the triangle formed by creating lines passing through vertices parallel to the opposite side of this triangle.)

*Does the POC appear *inside*, *outside*, or *somewhere special on* the indicated triangle?