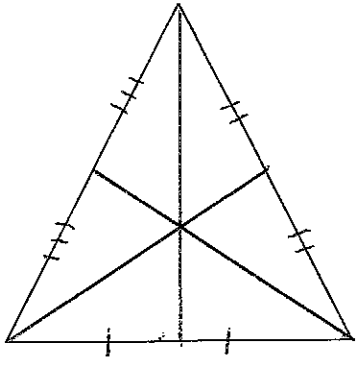
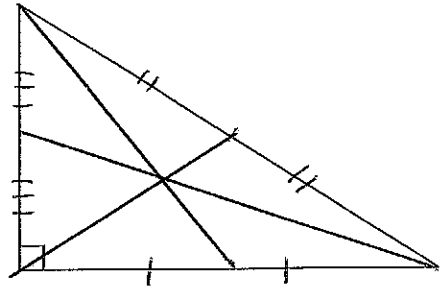
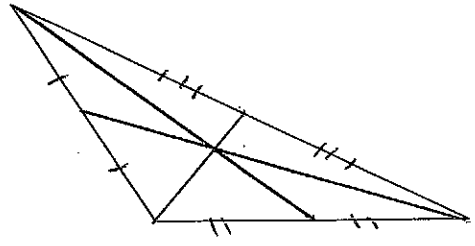
Vocabulary Sheet for Lesson 4-7

Median: a segment from a vertex to the midpoint of the opposite side.

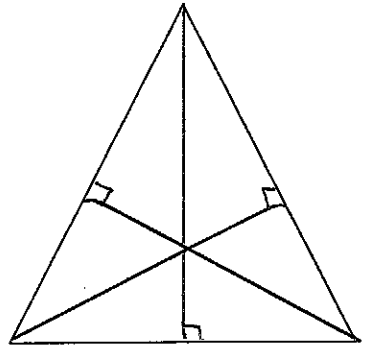
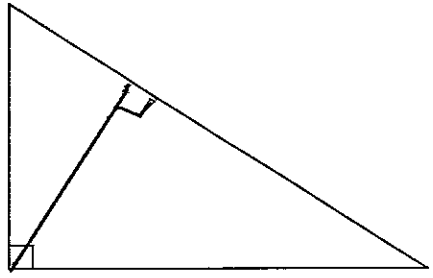
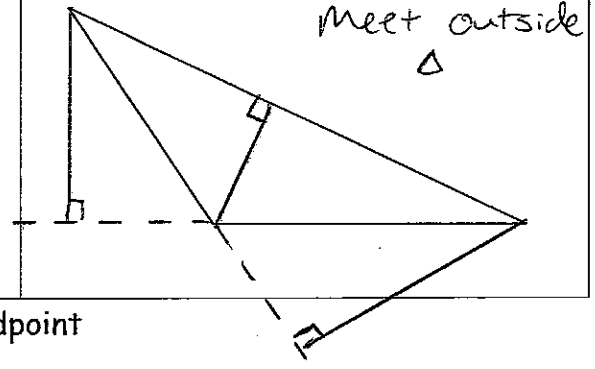
Find the midpoint of each side of the following triangles then draw in the three medians for each.

Acute triangle	Right triangle	Obtuse triangle
		

all meet inside Δ's

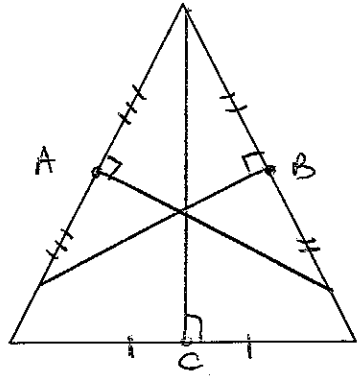
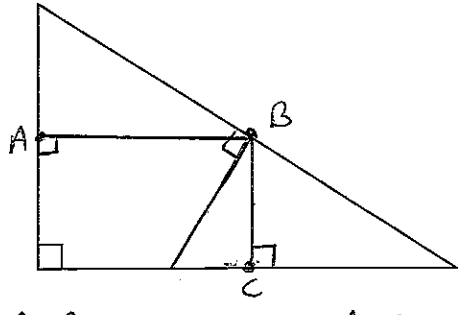
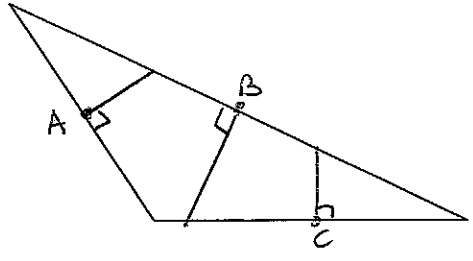
Altitude: the perpendicular segment from a vertex to the line that contains the opposite side

Draw in the altitudes for the following triangles.

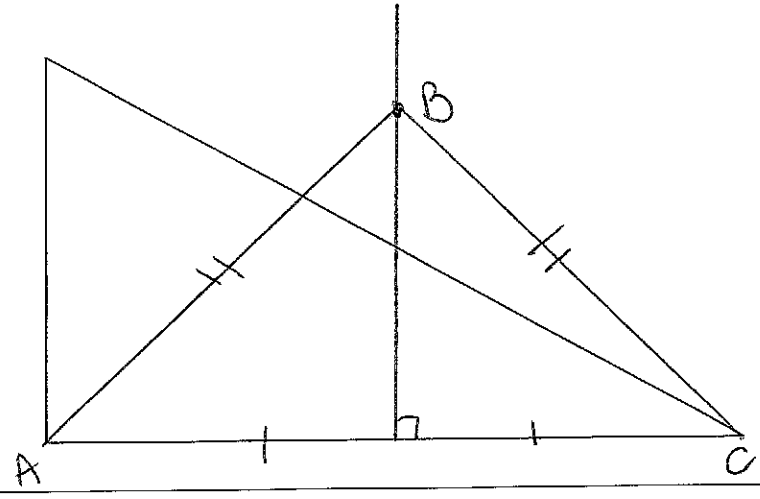
Acute triangle	Right triangle	Obtuse triangle
		
Meet inside	Meet on △	

Perpendicular bisector: a line that is perpendicular to each side at its midpoint

Draw in the perpendicular bisectors for the following triangles

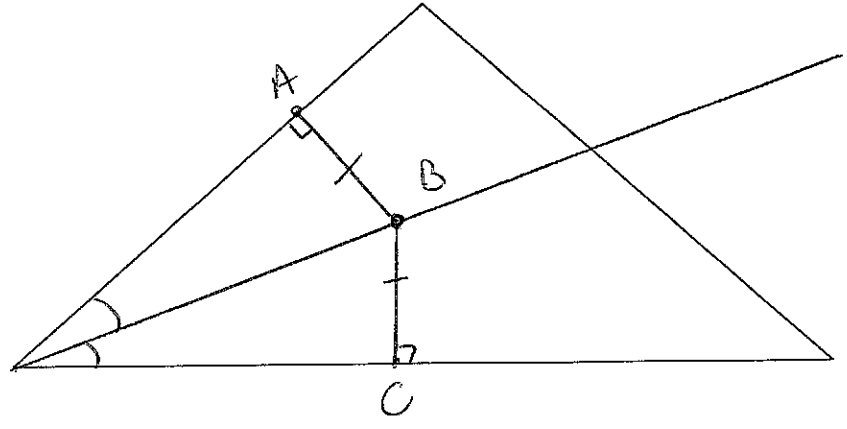
Acute triangle	Right triangle	Obtuse triangle
		
A, B + C are midpoints	A, B, + C are midpoints	A, B + C are midpoints
Meet inside	Meet on △	Meet outside △

Theorem 4-5: If a point lies on the perpendicular bisector of a segment, then the point is equidistant from the endpoints of the segment.

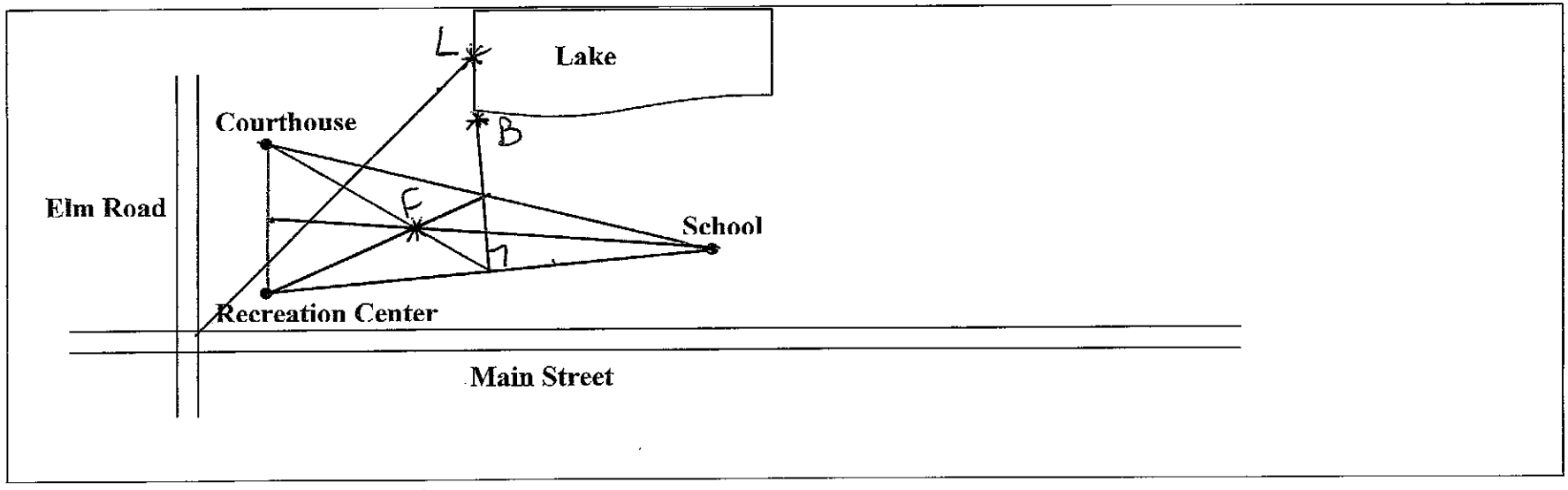


AB = BC

Theorem 4-7: If a point lies on the bisector of an angle, then the point is equidistant from the sides of the angle



AB = BC



1) A town wants to build a beach house on the lake front equidistant from the recreation center and the school. Show the point B where the beach house should be located. (use perpendicular bisector of segment connecting the school to the rec center)

2) The town also wants to build a boat-launching site that is equidistant from Elm road and Main street. Find the point L where it should be built. (use angle bisector of 2 roads)

3) On your diagram, locate the spot F for the flagpole that is to be the same distance from the recreation center, the school, and the courthouse. (use the centroid where medians of the triangle meet)