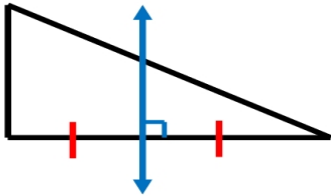


GEOMETRY
Lesson 4.1: PROPERTIES OF TRIANGLES – PERPENDICULAR BISECTORS AND ANGLE BISECTORS IN TRIANGLES
NOTES

Objective: To identify and use perpendicular bisectors and angle bisectors in triangles

PERPENDICULAR BISECTOR

A **perpendicular bisector** of a side of a triangle is a line, segment, or ray that passes through the midpoint of the side and is perpendicular to that side.



Since a triangle has three sides, there are three perpendicular bisectors in a triangle. The perpendicular bisectors of a triangle intersect at a common point. When three or more lines intersect at a common point, the lines are called **concurrent lines**, and their point of intersection is called the **point of concurrency**. The point of concurrency of the perpendicular bisectors of a triangle is called the **circumcenter**.

