

Geometer's Sketchpad
Applied Geometry
For use in Section 2.1
In Cord Geometry

Name: _____

Date: _____

IGO's addressed

G.18 construct a triangle's perpendicular bisectors and make conjectures about their relationships

G.23 use appropriate software to practice and master Applied Geometry instructional objectives.

Activity

With your **line segment tool**, form a triangle.

Label its vertices **A, B, & C**.

Highlight on side of the triangle

Go to **Construct** and down to **midpoint**.

With the new point still highlighted, **hold down the shift key** and use your **arrow tool** to click on that side of the triangle so that **the side and the midpoint are highlighted**.

Go to **Construct** and down to **perpendicular**.

Repeat the same process with the other two sides of the triangle.

Form a **Conjecture**:

Complete this sentence

The perpendicular bisectors of the sides of a triangle _____

_____.

With your 'arrow' tool, pull on Point A so that the triangle changes shapes. Does your conjecture appear to hold true? _____

Did you use inductive reasoning or deductive reasoning to form this conjecture? _____

Web addresses I found interesting:

<http://mathforum.org/ces95/napolean.html>

<http://mathforum.org/dynamic/classroom.html>

<http://www.ti.com/calc/flash/92p.htm>