

Monday

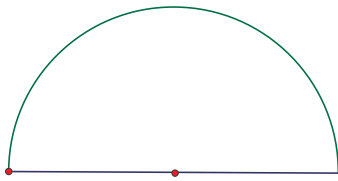
**Non Euclidian Geometry---using GSP

-Poincare's half plane model (on website—download)

-HW to do some of the constructions; therefore, we will go over the construct menu and tools.

-3 rules to construction 1. Circle by center point 2. Line given two points 3. Intersection

-Half plane (hyperbolic)



-Circle is perpendicular to the boundary line (blue)

-Center of circle (mp of line) on the boundary

- Radius of boundary is infinite

-Center in hyperbolic Geometry does not equal center in Euclidian geometry because of scaling.

-Intersection is the same.

-Eric: When drawing a circle, second segments show up. Why?

-McCrary: You can hide the segments. It is a flaw in the program used because it is a homemade program.

-Constructing a mp when already have a line:

-Click the mp under the hyperbolic tools, select one of the points, and then drag the segment that appears across the original segment so that they match up.

-Construct mp in hyperbolic geometry:

-Same as Euclidian, two circles then the perpendicular line through the intersection of the circles.

-Construct line and then the intersection in Hyperbolic geometry:

-Measurement: measure distance then click one of the points at the end of the line, and match up the segments again, and then the measurement will appear just like in Euclidian Geometry.

-Circle def: $d(A,B) = \text{all}$