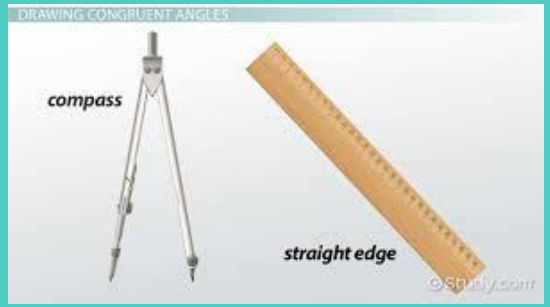
Lesson 1: Build It

Lesson Summary

Constructing Geometric Figures:

- The tools to use are a straightedge and a compass.



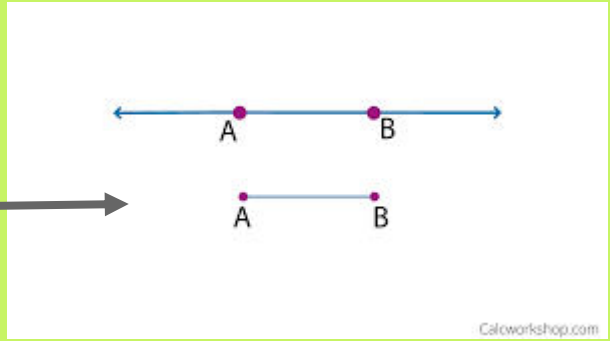
- These tools allow us to create precise drawings that someone else could copy exactly.

We use the straightedge to draw a **line segment.**

line segment: is a set of points on a line with 2 endpoints.

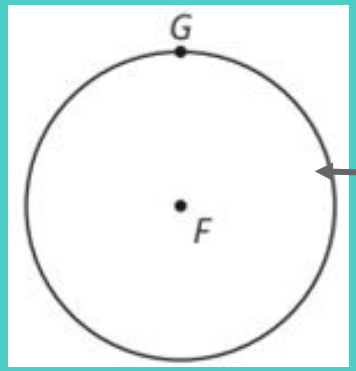
We name a segment by its endpoints.

Here is segment *AB*, with endpoints *A* and *B*.



We use the compass to draw a **circle**.

Circle: is the set of all points the same distance from the *center*.



We describe a circle by naming its center and radius.

Here is the circle centered at *F* with radius *FG*.

Early mathematicians noticed that certain properties of shapes were true regardless of how large or small they were.

Constructions were used as a way to investigate what has to be true in geometry without referring to numbers or direct measurements.