**Activity 2.6.1 Euclidean Construction Tools**

A Euclidean Construction is one that can be made with only two tools, the straightedge and the compass.

A straightedge is an unmarked ruler. Geogebra has three tools that serve as a straightedge. They are found in the Line menu.

1. Locate two points, *A* and *B*. Use the Line tool to draw a line passing through *A* and *B*.



1. Locate another point *C* not on $\overleftrightarrow{AB}$. Use the Ray tool
to draw the ray from endpoint *A* passing through *C*.



1. Locate another point *D* not on $\overleftrightarrow{AB}$ or on $\vec{AC.}$ Use the Segment tool
to join points *B* and *D*.

Geogebra has three tools to draw circles. They are found in the circle menu.



1. Use the Circle-with-center-through-point tool to draw a circle with center at *D* passing through point *D.*



1. Use the Compass tool to draw a circle with radius = *BD* and center at *C.*



1. Use the Circle-with-center-and radius tool to draw a circle with center at *D* and radius = 2 units.
2. Which two circles have the same radius? Move point *D* and observes what happens.
3. Which two circles are *concentric*? Move a point to make them coincide.