12.3 Constructions

(with compass and straight edge)

1. Copy a segment

2. Bisect a segment



3. Bisect an angle



4. Draw a perpendicular from a point to a segment



5. Create the incenter of a triangle.



There are four types of centers for triangles:

Incenter Located at intersection of the angle bisectors. See Triangle incenter definition and How to Construct the Incenter of a Triangle
Circumcenter Located at intersection of the perpendicular bisectors of the sides See Triangle circumcenter definition and How to Construct the Circumcenter of a Triangle
Centroid Located at intersection of the medians See Triangle centroid definition and Constructing the Centroid of a Triangle.
Orthocenter Located at intersection of the altitudes See Triangle orthocenter definition and Constructing the Orthocenter of a Triangle.

Table taken from http://www.mathopenref.com/trianglecenters.html