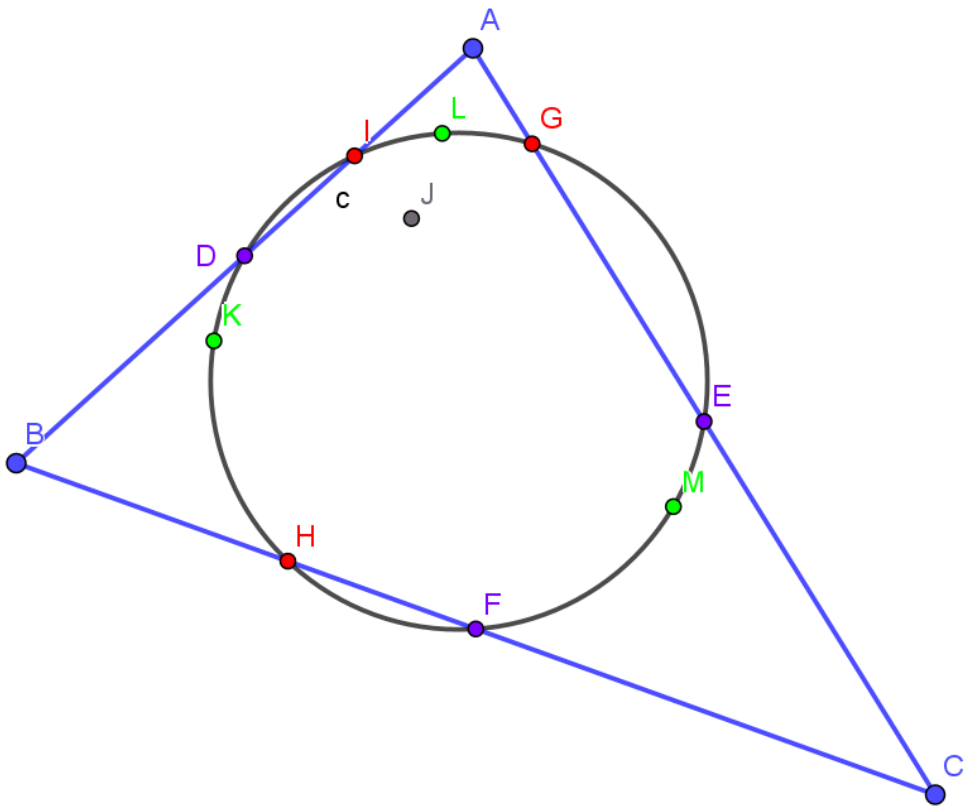
Nine-point Circle Theorem - Given a triangle, the midpoints of the sides, the feet of the altitudes, and the midpoints connecting the orthocenter with the vertices of the triangle all lie on a single circle, known as the nine-point circle.

Red points are from altitudes.

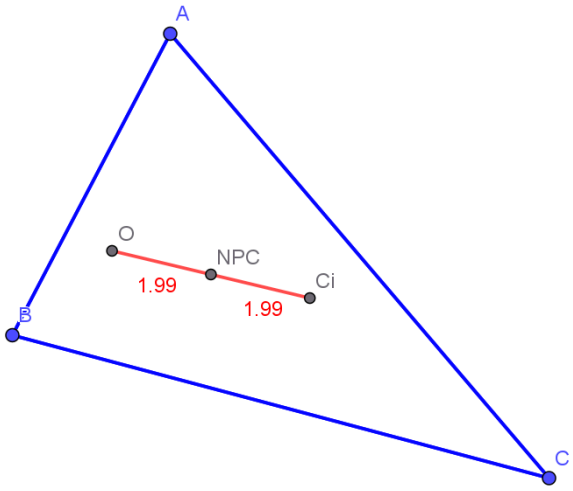
Purple points are midpoints.

Green points are the midpoints from the vertices to the orthocenter (J)



Nine-point center - the center of a nine-point circle.

Nine-point Center Theorem - the nine-point center is the midpoint of the segment from the circumcenter to the orthocenter.



Feuerbach's Theorem - the nine-point circle is tangent to each of the four equicircles: the incircle and three excircles.