Graphical user interface, text, application

Description automatically generated

Chart, radar chart

Description automatically generated

The centroid is always inside the triangle. However, when all points are parallel

Chart

Description automatically generatedThe intersection of any two medians inside a triangle is inside the triangle.

Chart, radar chart

Description automatically generated

Chart

Description automatically generated with medium confidence

Chart, radar chart

Description automatically generated

As I move the vertices of the triangle it seems that one of the perpendicular bisectors remains fixed while the other two bisectors and the point o move along this fixed line.

The circumcenter is inside a triangle when its angels are acute, outside when the triangle is obtuse and lies on midpoint of hypotenuse for a right triangle.

Chart

Description automatically generated

Text

Description automatically generated with low confidence

Chart, radar chart

Description automatically generated

As I move the vertices the incenter always stays inside the triangle.

Shape, radar chart, polygon

Description automatically generated

Text

Description automatically generated

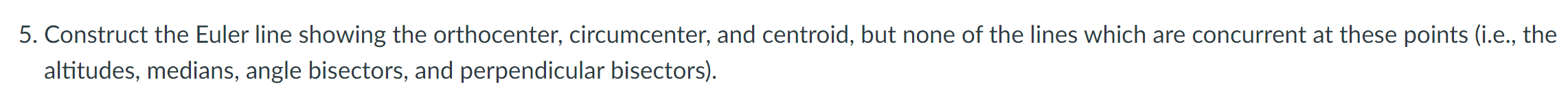
A picture containing radar chart

Description automatically generated

The orthocenter can be outside the triangle. The orthocenter is inside the triangle when the triangle is acute and outside when the triangle is obtuse.

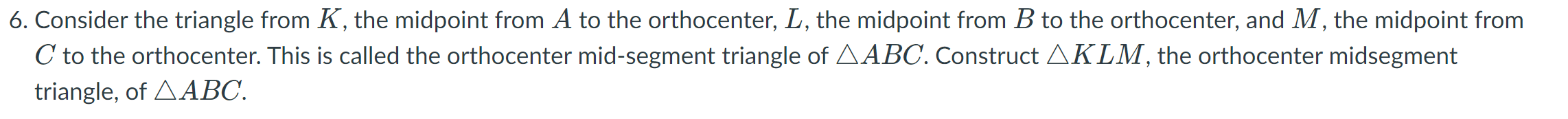
A picture containing boat

Description automatically generated



Chart, diagram, radar chart

Description automatically generated with medium confidence



Diagram

Description automatically generated

A picture containing application

Description automatically generated

Diagram, engineering drawing

Description automatically generated

No, it is not possible to have the circle be contained in the triangle.

Diagram

Description automatically generated

We can see that the center of the nine-point circle is on Euerlers line. We can determine that N is on Euerlers line.

A piece of paper with writing on it

Description automatically generated with medium confidence