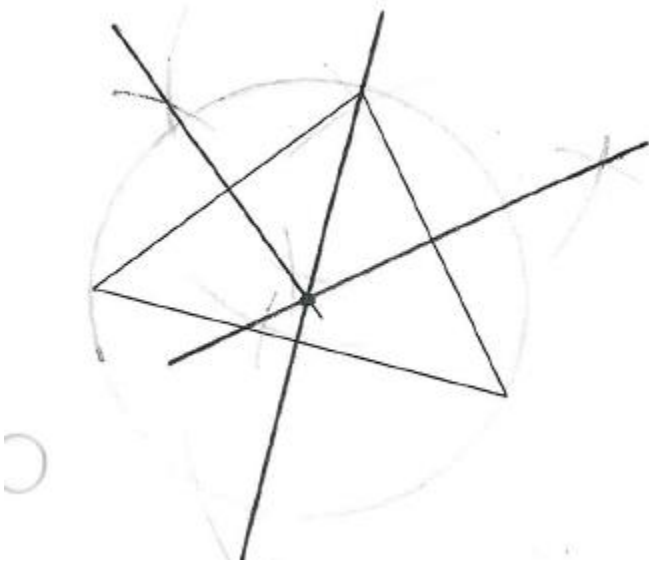


NOTE: For every construction that you do, you **MUST** leave the work, arcs, marks, etc. that you make along the way to earn full credit. Do **NOT** erase anything at the end of the problem to make your construction "look better."

Goal: Construct a circumscribed circle.

Circumscribed - a circle that passes through all triangle vertices.

Occurs when perpendicular bisectors intersect to form circle's center.



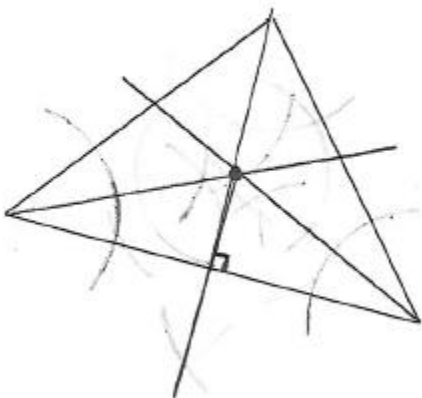
Helpful steps

- 1) Construct perpendicular bisector of each side of triangle.
 - 2) Mark the intersection of the perpendicular bisectors.
 - 3) Place compass at this point, measure to a triangle vertex and draw circle.
- * Circle should touch all corners if done accurately.

Goal: Construct an inscribed circle.

Inscribed - a circle inside a triangle and tangent to each side.

Occurs when angle bisectors intersect to form circle's center.

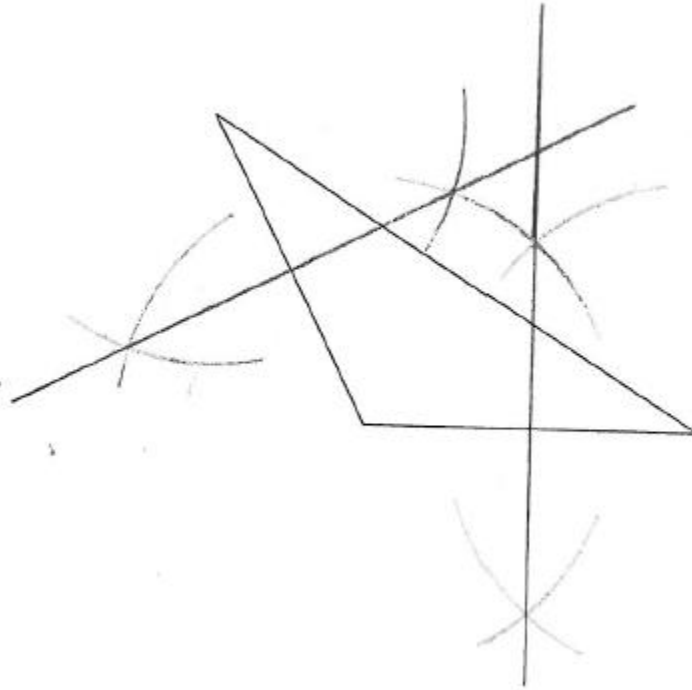


Helpful steps

- 1) Construct the angle bisectors for the angles.
- 2) Mark the intersection and construct a perpendicular from there to one side of triangle.
- 3) Construct a circle with center at intersection of angle bisectors passing through the side of the triangle where the perpendicular intersects it.

Practice: Using the obtuse triangles below:

Construct a circumscribed circle.



Construct an inscribed circle.

