1. Construct  $\triangle ABC$  using only a compass and straightedge.





3. Construct the incenter of  $\triangle SQR$ . Use this point to construct the inscribed circle.



4. Construct the circumcenter of  $\Delta LMN$  . Use this point to construct the circumscribed circle.



- 5. Construct the orthocenter of  $\Delta POQ$  . You may need to extend the lines of the triangle.
- 6. What properties does an Orthocenter have?



7. Construct the centroid of  $\triangle RST$ .



8. List the two properties of the centroid:

9. Construct the tangent line  $\overleftarrow{XT}$  from point X to  $\bigcirc Z$ .





10. Construct a regular hexagon.

11. Write down two questions you still have about constructions: