

Each problem is worth 2 points. Clear and complete justification is required for full credit. You are welcome to discuss these problems with anyone and everyone, but must write up your own final submission without reference to any sources other than the textbook and instructor.

1. Do the “Geometry Quickstart” tutorial in GeoGebra (circle, parallelogram, square, circumcircle).
2. Construct a segment in GeoGebra and then find its midpoint.
3. Construct an angle in GeoGebra (a dynamic one, that can be resized by dragging one of the points), and then trisect it.
4. Construct three mutually tangent circles, along with a circumcircle.
5. We know that for a convex quadrilateral the sum of the internal angles is less than or equal to 360° . Explore what happens with quadrilaterals that are not convex, with the understanding that we’ll use the external angle for the corner where the internal “angle” is greater than 180° .

