

Math 160, Spring 2024.
Homework 2, due February 3rd.

Prob 1. Describe how to complete Luca Pacioli's construction of a regular icosahedron started in Figure 2.2.

Prob 2. Given a line segment of length ℓ and a segment of unit length, explain how to construct a line segment of length $\sqrt{\ell}$ using a compass and straightedge.

Prob 3. Use the shortest-path property of reflection to prove that the two lines from any point P on the ellipse to its foci make equal angles with the tangent (to the ellipse) at P .