

Name _____ **Euclidean Geometry**

Let's look at a few constructions that are possible based on Euclid's Postulates. This is precisely what Euclid did in his Elements. These constructions can be done with just a straight edge and a (collapsible) compass. Here are two examples from Euclid's Elements. Watch and record how I do them in class, then reproduce the constructions neatly on your homework paper with a compass and straight edge. Clearly describe how your construction is produced by detailing each step.

1. **Proposition I.1.** On a given (finite) straight line, we can construct an equilateral triangle.
[See p. 110.]

Proposition I.9. Given an angle produced by two intersecting straight lines, we can construct the bisector of that angle.