

Math 4060 (Cherry) Assignments #4–6

Reading and Individual Study

Read Propositions 1–34 of Book III of Euclid.

Note the directions at the top of page 17 of Hartshorne: “For the following exercises, present proofs in the style of Euclid, using any results you like from I.1–I.34 and III.1–III.34.” As before, you may also use RASS (Exercise 1.7) as if it were part of Euclid’s book I.

Written Assignments

Assignment #4 (due Wednesday 2/1): Hartshorne Exercise 1.3, parts (b) and (c), AND Exercise 1.14. For 1.3 (b), be sure to have a look at the next page of Hartshorne. For Problem 1.3 (c), you do not have to keep Euclid’s order of propositions. That is, you are asked to give an alternate proof of Proposition I.6. You may use other Euclid propositions after I.6 in your proof as long as they do not depend on I.6 (or on propositions that depend on I.6).

Assignment #5 (due Friday 2/3): Hartshorne Exercises 1.12 & 1.13.