

## Math 4060 (Cherry) Assignments #2–3

### Reading and Individual Study

Continue to study Book I of Euclid until you are comfortable with it.

Look at Exercise 1.3 on page 14 of Hartshorne. Try to understand what he's getting at. Reading the "Some Euclidean Terminology" section of Euclid (pages xxiii–xxix) may help here.

Work problems 1.4–1.10 on page 16 of Hartshorne. Each of you will be asked to write up and turn two of these in (see below).

Notice the directions for the problems at the bottom of page 14 of Hartshorne:

Present proofs in the style of Euclid, using any results you like from Book I, propositions 1–34 (excluding the theory of area which starts with Proposition 35. Be sure to refer to Euclid's definitions, postulates, common notions, and propositions by number whenever you use them.

**VERY IMPORTANT!** Different problems may be graded by different graders. Be sure that EACH PROBLEM is on a page by itself. Be sure your name is on each problem. If you use more than one page for a single problem, please staple all the pages for that ONE problem together. But, DO NOT staple different problems together.

### Written assignment #2 due at the beginning of class Friday, January 27

Write-up and turn-in a solution to the following problem from Hartshorne page 16 according to **the last digit of your UNT ID#**

Last Digit of UNT ID	Problems
0	1.5
1	1.6
2	1.4
3	1.5
4	1.6
5	1.4
6	1.5
7	1.4
8	1.4
9	1.6

### Written assignment #3 due at the beginning of class Monday, January 30

Write-up and turn-in solutions to the following two problems from Hartshorne page 16 according to **the SECOND TO LAST digit of your UNT ID#**

Last Digit of UNT ID	Problems
0	1.9,1.10
1	1.8,1.10
2	1.9,1.10
3	1.8,1.10
4	1.9,1.10
5	1.8,1.10
6	1.9,1.10
7	1.8,1.10
8	1.9,1.10
9	1.8,1.10

In addition to Propositions 1–34 in Book I of Euclid, you may also use Exercise 1.7 from Hartshorne (RASS) in your solutions.