

MA 330 ASSIGNMENT
ESSAY #2
DUE FRIDAY, OCTOBER 3

Each of the following essays should be typed, 2-2.5 pages long, double spaced, 12 point Times New Roman font. The short essays will be graded using the grading rubric for writing found on the course website.

Essay A: Write a reflection on the assignments so far in the course. You might consider some of the following questions as prompts to start your reflection (though you aren't required to answer all of these). Which problems were easiest for you? Which were hardest? Why? What did you learn as a result of doing these problems, mathematically or personally? Which problems were the most interesting to you? Are there any aspects of the problems so far that you feel you really don't "get"? Why?

Essay B: Consider the following theorems and their proofs that we have encountered in the course.

- (1) Hippocrates quadrature of the lune
- (2) The Pythagorean theorem
- (3) The infinitude of primes
- (4) Archimedes' determination of circular area

Rank these theorems in order from most to least important, based on the opinion you have developed from the readings and discussion so far in this course (no ties allowed on this — your decision is not binding). In this ranking, you may consider the theorem statement, its implications, its context, and proofs.

Provide an explanation of why you have chosen your ranking. While it is perfectly fine to have some favorites "because you liked it more," the goal of this essay is for you to identify what it is mathematically, culturally, socially, and/or historically that motivated your choices. Thus, make sure you are specific about the details that explain and defend your ranking.