

## MAT 109 Essay Assignment

The key question that you should answer in your essay is : *What is mathematics ?* The answer should be formulated through the use of your own experience and with the aid (and reference to) the two textbooks for this course.

To give you some ideas about directions to pursue, I suggest the following for elaboration.

I How would you identify a thing (a process, a piece of writing, a collection of ideas) as mathematics ? What things have you encountered that you consider to be mathematical ? Most people are familiar with consumer and real life mathematics (sales and income tax, interests rates, depreciation). This would seem to limit mathematics to *arithmetic*. Is that all there is ?

II Who are mathematicians ? In relation to (I), are all accountants mathematicians and are all mathematicians accountants ? What kind of people choose to be mathematicians, and what are their reasons ?

III What is the goal of mathematics and what motivates mathematicians ?

IV Is all of mathematics quantitative (having to do with quantities/numbers/values) or is some of mathematics qualitative ?

V Is mathematics creative, or is all of mathematics a routine, something, like the quadratic formula, to be done by rote ?

The essay should be typed (word processed), double spaced and without extraordinarily large margins. It should be approximately four pages in length, well written and properly proofread.

Please make use of the information in the text, as well as information from other resources (other books, friends and neighbors, the Internet, etc.) but correctly give credit for any ideas not your own.

Included with the assignment are some quotes, by mathematicians as well as non-mathematicians, to generate ideas from which one might build an essay.

The due date for this essay is indicated in the course syllabus.