Homework 1 Writing Assignment

Why should we (high school students, college students, and mathematicians) study geometry? (Or why not?)

Please write your solution up and submit it electronically (email preferred; let me know if you need some other method) in Microsoft Word (or Pages or plain text, or LaTeX if you know it). Make it about 500–600 words. Here are some more details.

Grading:

• 33% for basic requirements: 500–600 words, an introduction and conclusion, a clear statement of what audience you are applying the argument to (e.g. Why elementary age kids should study geometry, or why college students should take geometry, etc.), at least one reference to a book, article, essay by a professional mathematician, professional teacher, etc.

• 33% for mathematical content and/or philosophical rigor. Mathematical content means explaining what you’re talking about mathematically: e.g. if you say that bridges have a lot of geometry, explain more specifically what you mean. Philosophical rigor means making a rigorous, non-shallow argument: e.g. if you say that we need geometry to understand the world, please think clearly about what you mean by that, and explain it rigorously.

• 33% for quality of writing:

  – I will take off points for bad sentences. These are ones that are (in roughly increasing order of badness): weak, bland, vague, pointless, unclear, grammatically problematic, contradictory, incomplete, logically false.

  – I will add points for good sentences. These are ones that: have a clear purpose, make a clear point, make an interesting claim, are succinct, stand out for their style, are entertaining or exciting.

Rewrites will be allowed. These offer the possibility of raising your grade, but it is not guaranteed. You might want to look online at two sample B essays that I’ve posted on my webpage (with the author’s name removed) from the last time I assigned this.