

Read Steven Strogatz's article *It Slices, It Dices*. Write a response to the article.

Note: the example of finding the volume of the solid created by intersecting two cylinders is covered in Calculus II.

Writing a response means that you should use ideas in the articles as your starting point and add your own personal reflections in a way that builds a cohesive statement of your stance about some aspect(s) of the articles and compares and contrasts ideas from both articles. This may include comparing perspectives from other sources and supporting your stance with your own experiences or additional research.

Use a standard font such as Times New Roman or Arial at a maximum size of 12pt and do not add fluff to get to this length. This assignment will be graded holistically and thus should be written with proper grammar and punctuation. It's due at the beginning of class on Wednesday, December 17.

Some questions you should address in your cohesive response:

- How did this article help you understand the difficulty of finding integrals?
- How did this article help you understand the importance of the Fundamental Theorem of Calculus?
- What are some examples from your own life/discipline that involving changing rates of change? Explain. **Note:** a good answer to this question requires some research—don't use that as an excuse to skip it, and if you did the last integration assignment, use this as an opportunity to find more examples instead of recycling the ones you gave there—so you will need to cite your sources.
- What do you think of Archimedes' view of problem solving as stated in footnote 5?
- How might you use this article and your learning about integrals so far to explain the concept of an integral to someone who has never taken calculus?

Note: As always, I will consider giving extra credit for creative responses (i.e., other than a single-page paper). If you choose a more creative approach, just make sure that it still contains a sufficient amount of information.