

MONT 106Q – Mathematical Thinking
Fourth Writing Assignment

The last of the larger paper assignments this semester will be devoted to one of the two topics sketched below – your choice. (Note: If you pick topic 1, you will need to return to the gallery on your own to select and study the specific textiles you want to discuss. The show is open until December 14 and the gallery is open M-F 10am - 5pm, and Saturdays 12noon-5pm. It will be closed over the Thanksgiving break.) Your essay should be at least 3 pages in length (double-spaced, single-sided). Please submit via Google Docs or as a MS Word .doc or .docx file to jlittle@holycross.edu by 5:00pm on Monday, December 5.

Paper topic 1

Pick two of textiles in the *Woven Power* exhibit that we visited in the Cantor Art Gallery and discuss in detail how they do and/or do not make use of the symmetry transformations that we discussed in the unit of the course based on Chapter 4 in Ascher's *Ethnomathematics*. (Be sure to consider both vertical and horizontal orientations of the translation axis as you are thinking about your selected pieces.) Compare and contrast your two chosen pieces. Recall that Prof. Rodgers said something to the effect that “strict symmetry would be too boring” at one point in her presentation, so the women who created these textiles often “broke symmetry” by introducing variations in the patterns, colorings, etc. Sometimes they even abandoned symmetry entirely. Also consider the question: Does the interest of these textiles really depend on the use or non-use of symmetries? Are there other things that are more important for understanding their cultural and artistic meanings?

Paper topic 2

The portrayal of the women in *Flatland* is the aspect of this book that probably has the most potential to infuriate readers in 2016. Did you react that way? If you were infuriated, what was the most aggravating aspect for you? How does the Square describe women? Look at these passages in detail and try to put together a general description of the way the women and their place in Flatland society are depicted in the book. Then consider these questions: Do you think Edwin Abbott had a purpose in his statements about the Flatland women, or was he just a man with the prejudices of his time (late 19th century Britain)? What is *satire* as a literary genre? Is Flatland (as a whole, or maybe in part) a satire? Why or why not? If so, who or what is being satirized?

Guidelines for this assignment

Follow these specifications:

1. It is OK to discuss preliminary ideas for what you want to say with your classmates or with me if you want. I will also have time to read preliminary drafts and get feedback to you again on this paper.

2. As usual, start by clearly stating the main idea you want to get across in your paper – its *thesis*.
3. In the following paragraphs, by drawing on our class discussions, and your experience of the *Woven Power* show or your reading of *Flatland* as appropriate, present your evidence for your conclusions.
4. You may present evidence consisting of quotations of passages from *Flatland* or the brochure and catalog for the *Woven Power* show if you want, together with interpretations of those passages that come from your own thinking about them. Your evidence should be as specific, detailed, correct, and as varied as possible (focus on small details and mention the little things that support your point of view). If you do use quotations, identify them sufficiently carefully that I can easily track them down. (For quotations from *Flatland*, a page number in the Dover edition is sufficient.)
5. Your essay should be well-organized as a whole and “flow” from one point to the next. Following an overall outline laid out in advance, subdivide your paper into paragraphs that each have one main point. Do not repeat pieces of evidence unless there is a very good reason for doing so. Do not get ahead of yourself. Say one thing at a time. If you decide you want to add something, do not just tack it on somewhere. Instead, figure out where it fits in the overall scheme of your argument and put it where it belongs.
6. As always, your sentences should be clear, readable, and not overly wordy. Aim for a reasonably formal but lively style. For this assignment, use of the first person is more or less *expected* while you are presenting your opinion about the effectiveness of the pairing of *Othello* with *Othello in the Seraglio*. Generally, colloquial ways of saying things that are acceptable in casual conversation are not as appropriate in this kind of writing, but if you have a really good reason for using a colloquial expression and it fits well, that’s OK. Also, *please do not use a thesaurus to find impressive-sounding words* when simpler alternatives are available. An important lesson to learn for writing in college is that thesauri do not capture the *nuances in meanings* that underlie good writing. If you must use a thesaurus, also look up any words you select in a dictionary to make sure they mean exactly what you think they do!
7. And as on previous assignments, errors in mechanics and usage should not annoy the reader. (As a warning, I tend to be *easily annoyed by this sort of thing!*) Try as much as possible to avoid mistakes in grammar, spelling, punctuation, and word choice.