## Synthesis Essay # 2

Due Friday, November 16 (Week 8), by 2:00

The synthesis task:

Use our program texts to create a rich exploration of the nature and scope of Mathematics.

## What do we mean by "program texts"?

You must make significant use of each text from weeks 5, 6, 7, 8 as well as the Mathematical Excursions textbook.

Week 5: Hofstadter Week 6: Hardy; Davis & Hersh Week 7: Borges Week 8: Lightman; Einstein



#### Technicalities

Your Synthesis should be 5-6 pages in length.

In your Synthesis, use proper grammar, an academic style, and formally consistent citations.

Your Synthesis should have a clear, guiding thesis statement.

Your Synthesis should reflect careful reading and analysis of program texts.

Your Synthesis should not be divided into isolated discussions of individual works; rather, it should function to show connections and correspondences between different works, all in support of your thesis.

You should feel obliged to do some independent research to clarify and enrich your discussion.

You should consult your faculty, program assistants, and writing tutors for guidance on subject matter, argument, and style.

You should plan to meet with a tutor at least once, and, ideally, several times during your writing process.

You should use your Synthesis as an opportunity to demonstrate the depth of your understanding of mathematical and literary ideas.

You should discuss your Synthesis with your Project Group.

Your Synthesis should exhibit some formal and technical growth from your first Synthesis. You should work hard to not repeat any surface errors or general problems that your faculty noted on your first Synthesis.

## What do we mean by "rich exploration"?

It's not enough to simply draw statements about the definition of mathematics from the texts.

Our texts both explicitly and implicitly offer suggestions about what Mathematics consists of and how it relates to knowledge (and art) more generally. You should seek both to characterize the essential nature of mathematical thought and to flesh out that characterization by using it to explore and describe the boundaries between mathematics and other realms of human knowledge.

Your paper should have a strong, well-supported thesis and should, in the defense of your thesis, exhibit your deep understanding of the texts. In all cases, we believe that the deeper your understanding of each text, the deeper your synthesis will be.

# What do we mean by "the nature and scope of mathematics"?

There is more than one definition of mathematics, so your essay must not take the nature of mathematics to be static or easily defined.

Wondering about the "nature of mathematics" is a philosophical activity that involves not just the existential status of mathematical objects and ideas but a concern with the ways that mathematics as a discipline exists in relation to other human activities and ways of knowing.