

Read Chapters 7–8 in *How to Bake Pi* by Eugenia Cheng.

For part (a) of your reading assignment, please include answers to the following questions.

Don't forget to include parts (b) and (c) (as described in the syllabus) on what you turn in.

1. Describe a time you've found yourself to be assuming something to be "basic" when in fact it wasn't.
2. Throughout the chapters, Cheng talks about math as a space to be creative (e.g., inventing imaginary numbers) but also a space that is "unyielding" (page 123). What do you think of these two characterizations of mathematics and of how they interact with each other?
3. What do you think is a good way to encourage others to reevaluate their assumptions (be it a student, a child, a friend, a parent, etc.)?
4. On page 132, Cheng gives 2 reasons why category theory might seem challenging to non-category-theorists. How do you think these relate to why people hesitate to engage in mathematics as a whole? Can you think of other reasons?
5. How do you think the purposes and assets of mathematics discussed on pages 143 and 144 relate to the approaches we read about in Kline?
6. In light of the ending of Chapter 8 (starting with page 152), what role do you think logic should play in making decisions? When (if ever) should we not use logic?
7. What do you think of Cheng's conclusion about math and life?
8. What things stood out to you as done well for a general audience?
9. What things would you do differently for a general audience?
10. In what ways do you think things would be discussed differently for a mathematical audience?