

For part (a) of your reading assignment, please include answers to the following questions from Kline Chapters 7 and 8 (longer reading, but fewer questions to accommodate this). Please read the questions before you read the chapter. You do not need full complete detail (or even complete sentences unless that's easier) for your answers to these.

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

1. Regarding the opposition to negative numbers and complex numbers: can you imagine this amount of passion directed toward anything in mathematics today? What might inspire it/what do you think has changed in our view of mathematics that would lead or not lead to such passion being inspired?
2. Interpret what DeMorgan is saying in his father/son age example on page 155.
3. Summarize the problem(s) with/view of algebra circa 1800.
4. Give an example of "a formula true for one interpretation of the symbols" that is not true for another (as described on page 160) without resorting to quaternions (and try to avoid commutativity as your example). Give both a situation for which the formula holds and one for which it does not.
5. Summarize the view of rigor in mathematics circa 1800.
6. List several of the contributors of rigorization and what led them to decide mathematics was on shaky ground.
7. What was the most surprising thing to you in these chapters?
8. Write down a quotation (either Kline or something Kline quoted) that particularly stuck out to you.