

For part (a) of your reading assignment, please include answers to the following questions from Kline Chapters 12 and 13 (it's long, but Chapter 13 is not as technical as many others, so I *think* it will be faster to read). Please read the questions before you read the text. 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. What is the question with consistency?
2. What's the question with completeness?
3. What were Gödel's results? What did they mean for mathematics?
4. What is the decision problem?
5. What does the Löwenheim–Skolem theorem tell us?
6. What was going on with non-standard analysis and hyperreal numbers?
7. What factors contributed to the divide between pure and applied mathematics?
8. What are some of the things pure mathematicians pursued?
9. What were some of the objections to pure mathematics (and by whom)?
10. What do you think about the pure vs. applied mathematics divide?
11. Who's your favorite grumpy mathematician from this reading and why?