

For part (a) of your reading assignment, please include answers to the following questions from Kline Chapter 5. 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. Now that mathematicians were willing to see flaws in Euclid's *Elements*, what flaws did they discover?
2. What was the problem with irrational numbers for the Greeks?
3. What was the deal with geometry versus numbers?
4. Briefly describe the contributions of Hindu mathematicians. Include names as appropriate.
5. Briefly describe the contributions of Arab mathematicians. Include names as appropriate.
6. What issues did the European mathematicians have with irrational numbers? (Include mathematicians contributing to the study of these.)
7. What issues did the European mathematicians have with negative numbers? (Include mathematicians contributing to the study of these.)
8. What happened with complex numbers? (Include mathematicians contributing to the study of these.)
9. How did symbolic notation contribute to the development of algebra, and who were the players involved?
10. What was the most surprising thing to you in this chapter?
11. Write down a quotation (either Kline or something Kline quoted) that particularly stuck out to you.