

For part (a) of your reading assignment, please include answers to the following questions from Kline Chapter 2 page 35 through the end of Chapter 3. 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. Discuss how alternative views of Ptolemaic astronomy arose beginning in the 16th century.
2. What were the objections of the Church to Copernicus' and Kepler's astronomical models? What do you think of those objections?
3. What support was offered for their models?
4. What did Descartes use as his basis for knowing truth?
5. What did Pascal value?
6. What was Galileo's view of mathematics?
7. Compare and contrast ways of arriving at first principles discussed in Chapter 2. Identify the individuals espousing the ways. Which do you prefer?
8. Briefly describe Newton's contributions.
9. Name Newton's detractors and describe their objections.
10. How did Newtonian mechanics differ from previous understanding of mechanics?
11. How did Newton view the relationship between his scientific work and his faith in God?
12. Briefly describe Leibniz's contributions.
13. Name the other contributors to math and science in this era and briefly describe their contributions.