Directions: You should prepare an essay for each of the following questions. Each should be between 3-5 pages of length. Be sure to bring a blue book with your name on it into class on Monday April 21st to be turned in. They will be checked and handed back in class on Wednesday.

A generic tip is that geography and dates are useful to help explain the timeline and understanding the history of a particular subject. They are not necessary but successful use of them will be looked at in a favorable light.

1. Compare and contrast the Egyptian and Babylonian civilizations with respect to the development of arithmetic and mathematics. Be sure to explain the methods, tools, and high points of each. Explain how we came to understand what we know.

2. Explain the development of mathematics during the renaissance era. Stress the importance of Italy’s rise and dominance. (Explain possible reasons for this: culture, geography, plague.) Make sure to highlight the big mathematical names and developments from the time period. Elaborate on the phrase: “the battle of the scholars.”

3. Explain the term “the Alexandrian School”. Be sure to give geographical and cultural information. Make sure to highlight the big mathematical names and developments from the time period. In particular stress and explain Euclid’s role in the development of mathematics during the time period and its current impact.

4. Explain Diophantus’ role in the history and development of mathematics. Give accurate dates, geographical locations, and manuscripts. Be sure to mention and describe Diophantine equations and their solutions. Examples are welcomed. Explain the role of Chinese mathematics in the solving of simultaneous equations.

5. Give an accurate timeline of the development and history of mathematics. Be sure to start at the beginning and work up through the 18th century. Be explicit and as detailed as possible with respect to names, manuscripts, geographical locations, the reasons for why particular topics where stressed over others, and religious ramifications. Use geometry, algebra, and calculus and conceptual markers.