

Math 406-History of Calculus- Homework 5

Due Date October 7

- (1) This first part is due by Monday: Read till page 93. Then answer the following questions
 - a) Why did greek mathematics disappear?
 - b) What crucial new elements were added by arab mathematicians?
 - c) In which sense are the medieval summation calculations different from the greek ones?
- (2) Let $f(x) = \sqrt{x}$. Use calculus to calculate the area between the graph of $y = f(x)$ and the line through $P = (1, f(1))$ and $Q = (2, f(2))$. Compare your result with Archimedes result.
- (3) page 67 Ex 19. (If you want a challenge you may try Ex 20 instead).
- (4) page 73 Ex 24