

History of Integrals and Integration

By Ben Whitehead

Mat 3010

May 6, 2003

Goals:

Provide a brief history of integral calculus to either a senior high school math class or to a first year college calculus class. Give a few problems to show the advances in integral calculus throughout the ages.

Reflections:

Pouring over my old calculus books and through my research, I rediscovered what it felt like to be learning something new again. I remember being asked to try to “guesstimate” the area under a curve using different shapes and designs. It is nice to be reminded of the things once thought difficult to comprehend.

I was really impressed with the method of exhaustion from my research. A concept so simple, yet tiring enough to eventually stop all who try to go to far, the method of exhaustion proves to be an invaluable tool, even today. The method of exhaustion is used by most programs to estimate the area of something.