

Math 231 DLI

Exam I

White and Gold Exams.

I.(a) (5 points) Define the term "antiderivative".

An antiderivative of a function f is a function F such that $F' = f$.

(b) (5 points) What is a definite integral?

A definite integral is a limit of approximating (Riemann) sums.

(c) (5 points) Carefully state the Fundamental Theorem of Calculus.

Let f be continuous on $[a, b]$.

$$\text{Then } \int_a^b f(x) dx = F(b) - F(a)$$

where F is any antiderivative of f .