

the fundamental themes of ethics, part 1



indefinite integrals

the fundamental theorem of calculus, part 1

Part 1 is based on **indefinite integrals**

If $f(x)$ is continuous on an interval, and we define a function:

$$F(x) = \int_a^x f(t) dt,$$

then $F'(x) = f(x)$.

- The derivative of the indefinite integral recovers the original function
- Working with indefinite integrals:
 - The answer should be a function + a constant of integration C
 - This expression represents all the possible antiderivatives of $f(x)$

the fundamental theorem of calculus, part 2

Part 2 is based on **definite integrals**