

Velocity and Acceleration: object moving on a line — how to test for when it is stopped; moving to left or right; speeding up or slowing down.

Curve Sketching: intervals where $f(x)$.

increasing or decreasing, local max/min, intervals where concave up or down, inflection points.

Definite Integral: Riemann sums (upper, lower, right, left)

Properties of Def. integral: relation to area, odd or even fctn over symmetric interval,

Fund. Thm. of Calc — Part 1 and Part 2.

$$\frac{d}{dx} \int_a^{u(x)} f(t) dt = f(u(x)) \cdot \frac{du}{dx}$$

Area Between Curves