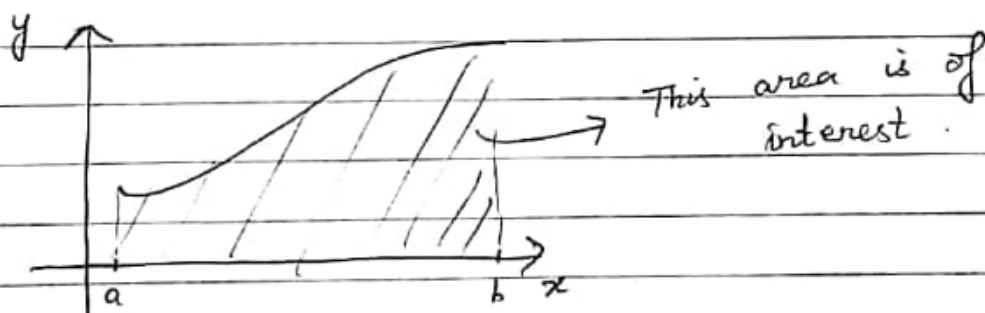


6.3

Definite Integral.

Given a continuous function $f(x)$ on an interval $[a, b]$, one is often interested in determining the area bounded by the graph of $f(x)$, the x -axis, and the lines $x=a$ and $x=b$.

One can begin to approximate this area using the so-called Riemann Sums.



The idea is to break down the ~~area~~ interval $[a, b]$ into subintervals ^{of equal length} h , choosing some point from the subinterval and forming ~~the~~ rectangles whose areas we add up to approximate the above area under $f(x)$.