

## Study Guide for Chap 05

1. Skip section 5.1.
2. Read and understand the meaning of a partition  $P$  and its norm  $\|P\|$ .
3. Read and understand the meaning of a Riemann sum. Practice how to express a definite integral as the limit of Riemann sum and conversely, practice how to identify a limit of Riemann sum as a definite integral.
4. Study the statement and proof of Fundamental Theorem of Calculus in both Part 1 and Part 2. Try to apply them by making up some examples to both by yourself.
5. Practice definite and indefinite integrals using substitution method. Try to make up some examples. Understand the true meaning of ' $\frac{dy}{dx}dx = dy$ ' and how to actually use it.