Thomas' Calculus Early Transcendentals 12ed

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. In particular, how to find a definite integral from antiderivative of the integrand?
- 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.