Calculus II, Spring 2022 (http://www.math.nthu.edu.tw/~wangwc/) Thomas' Calculus Early Transcendentals 13ed

Study guide for quiz 03

Quiz problems include both the lecture contents and homework problems.

- 1. Section 10.5: In order of priority:
 - (a) The statements of the Absolute Convergence Test, the Ratio Test and the Root Test.
 - (b) Practice each of these tests with some examples.
 - (c) Study the proof of the Ratio Test and the Root Test.
- 2. Section 10.6: Study the statements of the Alternating Series Test and the Alternating Series Estimation Theorem. Practice with some examples. Memorize some examples of absolutely (conditionally) convergent series.
- 3. Section 10.5-10.6: For each of the tests mentioned above, find an example of a series that can be found convergent/divergent using the test.
- 4. Section 10.7: Study the Convergence Theorem for Power Series. Review the meaning of "radius of convergence" for a power series. Study how to test a power series for convergence and how to find the radius on convergence. Study multiplication and division of two power series.