

Lecture on Jul. 25th, 2017: Taylor Series

1 Warm-up Practice

- Find the n th-degree Taylor polynomial for $f(x) = \ln(1 - x)$ at 0.

2 Basic Concepts

- Definitions of arithmetic and geometric sequence.
- General term of arithmetic and geometric sequence.
- Sum of arithmetic and geometric sequence.

3 Taylor Series

- Definitions of Taylor series at a and interval of convergence.
- Examples of convergence of Taylor series.
- Theorem on interval of convergence of Taylor series.