

Chapter 01.07

Taylor Theorem Revisited

OBJECTIVES

1. understand the basics of Taylor's theorem,
2. write transcendental and trigonometric functions as Taylor's polynomial,
3. use Taylor's theorem to find the values of a function at any point, given the values of the function and all its derivatives at a particular point,
4. calculate errors and error bounds of approximating a function by Taylor series, and
5. revisit the chapter whenever Taylor's theorem is used to derive or explain numerical methods for various mathematical procedures.