

MATH 153

Today

1. WeBWorK/Questions
2. 8.8 Applications of Taylor Series

Goals:

1. 8.8 Applications of Taylor Series (Understand how to use series representations of functions to approximate those functions and how to use Taylor's Formula to estimate the error in so doing)

Where is today's material used?

1. Power series are frequently used to approximate more complicated functions in physics and chemistry.
2. Power series techniques are used to solve certain differential equations.

8.8 Applications of Taylor Series

1. Examples: Rule of 72, binomial series, root-finding
2. Examples: 8.8, p. 495: 9-16, 23, 25, 28

Next Time

1. Fourier series (not in book)
2. **Turn in** 8.7 WeBWorK Set 14: 2, 4, 7