11.3: Taylor Series

Learning Objectives. Upon successful completion of Section 11.3, you will be able to...

- Answer conceptual questions involving Taylor series.

- Find the Taylor series and interval of convergence for functions centered at a.

- Find the Taylor series for a given function centered at a.

- Manipulate a given Taylor series to find the Taylor series for a function centered at 0.

- Find remainders for Taylor series and show the remainder for certain Taylor series goes to 0 as n goes to infinity for all x in the interval of convergence.

Part 1: The Divergence Test and P-Series Test
Part 2: The Integral Test and Estimation Theorem