

Worksheet #12

(1) Find the Mclaurin series for $f(x) = e^{-2x}$.

(2) Find the Mclaurin series for $f(x) = \sqrt{1-x}$.

(3) Find the 4th degree Taylor polynomial of $f(x) = \frac{1}{x}$ centered at $a = -3$. Give a bound for the error.

(4) Find the Taylor series of $f(x) = x - x^3$ centered at $a = 2$ and the radius of convergence.