

Quiz 8

Five points each.

1. Find the MacLaurin series for $f(x) = \ln(\frac{1}{3} + x)$. Your answer must be in \sum form.
2. What is the coefficient of $(x - \frac{\pi}{6})^3$ in the Taylor series of $f(x) = \sin(2x)$ centered at $x = \frac{\pi}{6}$?