Name: _____ (PRINT IN BLOCK LETTERS)

Date: Nov 6, 2015

No calculators will be allowed on any quiz, midterm exam or on the final exam. Using or <u>having available</u> any calculator or other electronic device during a quiz, midterm exam or the final exam is a violation of the Academic Integrity Policy.

Show all the steps in your solutions.

1. Determine whether the series $\sum\limits_{n=1}^{\infty} \dfrac{2^{n+1}}{3^n}$ is convergent or divergent, and justify your answer. If convergent, find the value.

2. Determine whether the series $\sum\limits_{n=1}^{\infty} \dfrac{n+1}{6n+100}$ is convergent or divergent, and justify your answer.

2. Determine whether the series $\sum_{n=2}^{\infty} \dfrac{1}{n(\ln n)^3}$ is convergent or divergent, and justify your answer.