## MATH 107 Quiz 8

Instructions: You must show supporting work to receive full and partial credits. No text book, notes, formula sheets allowed.

(a)(3pts) Use Integral Test to determine if the series  $\sum_{k=2}^{\infty} \frac{1}{k \ln k}$  converges.

(b)(4pts) Use Comparison Test to determine if the series  $\sum_{k=1}^{\infty} \frac{2k + k \sin k + 1}{k^2}$  converges.

(c)(3pts) Use Limit Comparison Test to determine if the series  $\sum_{k=1}^{\infty} \frac{k^2 + 2k + 2}{3k^3 + 2k^2 + 4}$  converges.