
MATH 107H Quiz 6

Name: _____

Score: _____

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

1(2pts) Use the n -th term test to show the series $\sum_{n=1}^{\infty} (-1)^n \frac{n+2}{2n+\sqrt{n}-1}$ diverges.

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

3(2pts) Use the Comparison Test (Basic or Limit kind) to determine if the series $\sum_{n=0}^{\infty} \frac{\sqrt{n} + \arctan n}{n^2 + n + 1}$ converges.

4(3pts) Use the Ratio Test to determine if $\sum_{n=0}^{\infty} \frac{2^n (n!)^2}{(2n)!}$ converges.

(... The End)