

BONUS Quiz 4

DUE: WED. APR. 9

Name: _____

Prof. Ron Buckmire

Date: _____

Friday March 7

Time Begun: _____

Time Ended: _____

Topic covered: Infinite Series

The **student learning outcome** of this quiz is to give you even more practice in applying convergence tests to infinite series.

Reality Check:

EXPECTED SCORE : _____/10

ACTUAL SCORE : _____/10

Instructions:

1. Once you open the quiz, you have 30 minutes to complete it.
2. You **may not** use the book or any of your class notes, but you may use a calculator. You must work alone.
3. If you use extra paper, please staple it to the quiz before coming to class. **UNSTAPLED SHEETS WILL NOT BE GRADED.**
4. After completing the quiz, sign the pledge below stating on your honor that you have adhered to these rules. Complete the reality check to give yourself a sense of how well you think you did on the quiz.
5. Relax and enjoy....
6. **This quiz is due on Wednesday, April 9, at the beginning of class. NO LATE QUIZZES WILL BE ACCEPTED.**

Pledge: I, _____, pledge my honor as a human being and Occidental student, that I have followed all the rules above to the letter and in spirit.

SHOW ALL YOUR WORK!**Math 120 Spring 1996 Final Exam, Question #2.**

Use the N^{th} Term test, the Basic Comparison Test or the Limit Comparison Test to determine whether or not the following infinite series converge or not.

(i) $\sum_{k=1}^{\infty} \left(\frac{2^k}{3^k}\right) \frac{1}{k^4}$

(ii) $\sum_{k=1}^{\infty} \cos(2\pi k)$

(iii) $\sum_{k=1}^{\infty} \left(\frac{k^2 + 3}{k^2}\right) \frac{1}{k^2}$