

## Quiz 10

DUE: MON. NOV. 24

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Friday November 21

Time Begun: \_\_\_\_\_

Ron Buckmire

Time Ended: \_\_\_\_\_

---

**Topic covered:** Taylor Approximations

The idea behind the quiz is for you to illustrate your understanding of Taylor Approximations

**Reality Check:**

EXPECTED SCORE : \_\_\_\_\_/10

ACTUAL SCORE : \_\_\_\_\_/10

**Instructions:**

0. Look for a hint about this quiz online, at <http://blackboard.oxy.edu>.
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 your own paper, please staple it to the quiz before coming to class. If you don't have a stapler, buy one.
4. After completing the quiz, sign the pledge below stating on your honor that you have adhered to these rules.
5. Relax and enjoy....
6. **This quiz is due on Monday, November 24**, 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**

Determine whether the following infinite series converge or diverge. (State clearly what test(s) you are using and how your result indicates either convergence or divergence). It's always a good idea to write out the first 3 or 4 terms of the series to see if you can see any helpful patterns.

(a) (5 points)  $\sum_{k=1}^{\infty} k^{-k}$

(b) (5 points)  $\sum_{k=0}^{\infty} \frac{2k}{3^k}$