

## Quiz 1

DUE: MON. FEB. 3

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

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

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

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

Friday January 31

Ron Buckmire

---

**Topic covered:** Evaluating Definite Integral Using Riemann Sums

The point of this quiz is for you to illustrate your ability to use Riemann Sums to evaluate definite integrals as well as your understanding of the physical quantity definite integrals represent.

**Reality Check:**

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

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

**Instructions:**

1. Once you open the quiz, you have 30 minutes to complete it. Before you open the quiz you should check Blackboard for any hints.
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. 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. 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 Monday, February 3**, 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**

- 1 (a) (*8 points*) Give an estimate for the value of  $\int_{-1}^1 x^3 dx$  using a RIGHT HAND Riemann Sum with four rectangles of equal width.

- 1 (b) (*2 points*) Given the information that  $f(x) = x^3$  is an **odd** function, can you give the *exact* value of the integral in part (a)? EXPLAIN YOUR ANSWER.