

## Quiz 3

DUE: MON. FEB. 10

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

Prof. Ron Buckmire

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

Friday February 7

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

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

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**Topic covered:** Integration by Parts and Integration by Substitution

The **student learning outcome** of this quiz is for you to illustrate your understanding of the techniques of integration called integration by substitution and integration by parts.

**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 Monday, February 10, 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.

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**SHOW ALL YOUR WORK AND EXPLAIN EVERY ANSWER**

(a) [5 points] Evaluate  $I = \int_1^2 x \ln(x^2) dx$ .

(b) [5 points] Evaluate  $J = \int_1^2 x^2 \ln(x) dx$ .