

Quiz 8

DUE: WED. OCT. 30

Name: _____

Date: _____

Monday October 28

Time Begun: _____

Ron Buckmire

Time Ended: _____

Topic covered: Techniques of Integration

The idea behind the quiz is for you to illustrate your proficiency with techniques of integration to evaluate definite integrals using the fundamental theorem of calculus.

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 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 Wednesday, October 30, 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

(20 points) Given the following information about an unknown function $g(x)$

$$\int_1^2 \frac{g(u)}{u^2} du = 3, \quad \int_{\frac{1}{2}}^2 \frac{g(u)}{u^2} du = 5, \quad g(1/2) = 2, \quad g(1) = -2, \quad g(2) = 1, \quad g(4) = 4$$

(a) Evaluate $I = \int_1^2 g\left(\frac{1}{x}\right) dx$

(b) Evaluate $J = \int_{1/2}^2 \frac{g'(x)}{x} dx$