Quiz **7**

DUE: MON. MAR. 31

Name: _____

Date: _____ **Friday March 28**
Time Begun: _____ Ron Buckmire
Time Ended: _____

Topic covered: Solving IVPs by Separation of Variables

The point of this quiz is for you to demonstrate your facility with using the technique of separation of variables to find the solution of an initial value problem and how to check your answer.

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.oxy.edu 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, March 31**, 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

(a) *(8 points)* Use separation of variables to find the solution of the initial value problem

$$y' = e^{-y}, y(0) = 1$$

(b) *(2 points)* Check that the solution $y(x)$ found in part (a) is the exact solution to the given IVP.