MATH 2242-090 — Spring 2016 — Dr. Clontz — Quiz 11

Name: _____

- Each quiz question is labeled with its worth toward your total quiz grade for the semester.
- On multiple choice problems, you do not need to show your work. No partial credit will be given.
- On full response problems, show all of your work and give a complete solution. When in doubt, don't skip any steps. Partial credit will be given at the discretion of the professor.
- This quiz is open notes and open book.
- This quiz is due at the end of class. Quizzes submitted over one minute late will be penalized by 50%.

1. (10 points) Evaluate $\int_C 3xy^2dx+xydy$ where C is the counter-clockwise oriented boundary of the rectangle $[0,2]\times[1,3]$. (Hint: Partial credit will not be given if you attempt to evaluate this directly; try to use a technique from Chapter 8.)

2. (10 points) Evaluate $\int_C (3+y, 4y+x)\cdot d\mathbf{s}$ where C is parameterized by $\mathbf{r}(t) = (2^t, \sin(\pi t))$ for $0 \leq t \leq 1$. (Hint: Partial credit will not be given if you attempt to evaluate this directly; try to use a technique from Chapter 8.)