MATH 2242-090 — Spring 2016 — Dr. Clontz — Quiz 7

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) Which of these is equal to $\int_0^1 \int_0^x \int_0^y (y + xz)\ dz\ dy\ dx$?

- ◯ $-\frac{6}{11}$
- ◯ $\frac{2}{25}$
- ◯ $\frac{7}{60}$
- ◯ $\frac{1}{3}$
- ◯ None of these

2. (10 points) Which of these integrals represents the volume of the solid bounded by $x = y$, $z = 0$, $y = 0$, $x = 1$, and $x + y + z = 0$?

- ◯ $\int_1^z \int_0^{1-x} \int_0^{1-y} 1\ dz\ dy\ dx$
- ◯ $\int_0^1 \int_0^x \int_{-x-y}^0 1\ dz\ dy\ dx$
- ◯ $\int_0^1 \int_0^{1-z} \int_0^{x+y+z} 1\ dx\ dy\ dz$
- ◯ $\int_0^2 \int_0^z \int_0^{1-x-y} 1\ dx\ dy\ dz$