# Math 2513 – Summer 2024

# Quiz 5

Name: Student ID:

1 – (3) Evaluate the triple integral

Where the domain is {(x,y,z) | 0 ≤ y ≤ 1, y ≤ x ≤ 1, 0 ≤ z ≤ xy}.

2 – (2) What is the volume of ¼ of a sphere, calculated by using a triple integral?

3 – (2) Verify that Clairault’s Theorem holds for all three possibilities for the following equations:

1. xyexz
2. sin(xy) + cos(xz)