Calculus and Analytic Geometry III   **Name:** _____

> The majority of the credit you receive will be based on the completeness and the clarity of your responses. **Show all of your work and justify your solutions as much as possible.**
> This is a 15 minute quiz and has 2 questions, for a total of 10 points

(5 points)   1. Evaluate the following iterated integral

$$\int_0^1 \int_y^{\sqrt{4-y^2}} (x+y)\, dx\, dy.$$

(5 points)   2. Set up **but do not evaluate** the triple integral that gives the volume of the tetrahedron enclosed by the coordinate planes and the plane $2x + y + z = 4$.