

Quiz 5

NAME: _____

Question 1

Let the path C consist of two line segments: the first segment from $(0, 0, 0)$ to $(1, 2, -1)$ and the second segment from $(1, 2, -1)$ to $(3, 2, 0)$.

Compute $\int_C xy^2 dx + xdy + z dz$.

Question 2

Let S be the upper half of the circle $x^2 + y^2 = 25$ (i.e., the part of the circle with $y \geq 0$).

Compute $\int_S y ds$.