

Math 233 - Quiz 10

April 23, 2026

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (5 points) Find and classify the critical points of $g(x, y) = x^2 + x - 3xy + y^3 - 5$. Identify all relative extreme values.

2. (5 points) Sketch the region of integration and evaluate the iterated integral.

$$\int_0^2 \int_{x^2-x}^x x \, dy \, dx$$