

**Math 225 : Quiz**

**Nov. 6, 1991**

Show your work and circle your final answer.

1. Find the centroid of the region bounded by the graphs  $y = 1 - x^2$  and  $y = x^4 - 1$ .

2. Evaluate the integral

$$\int_0^1 \int_{\sqrt{y}}^1 \cos(x^3) dx dy$$

by reversing the order of integration.