Math 23B
Multivariable Calculus
Fall 1999, UCSC

Nov 1, 1999

QUIZ 6

Time: 15min

1. (i) Let $c(t) := (\sin t, \cos t, 0)$ where $0 \leq t \leq \pi$ and let $F(x, y, z) := (yz, xz, xy)$; evaluate $\int_c F \cdot d\mathbf{s}$. (ii) Let $\overline{c}$ be any other curve with the same end points as c; what is $\int_{\overline{c}} F \cdot d\mathbf{s}$? Why?

Part (i) is worth 7 points and part (ii) is worth 3 points.

LaTeX ..... MG