

Math 225: Calculus III
Quiz 9 *April 11/13, 1995*

Name: _____
Section: _____

1. Let \mathbf{F} be the vector field $z^3y\mathbf{i} + z^2y^2\mathbf{j} + y^3z\mathbf{k}$. Compute $\int_C \mathbf{F} \cdot d\mathbf{r}$.

2. Let C be the curve parameterized by $\mathbf{r}(t) = t\mathbf{i} + t^2\mathbf{j} + t^3\mathbf{k}$, $0 \leq t \leq 1$.
Compute the line integral $\int_C x + 9z \, ds$.