Quiz 7   Calculus 3   11/14/2006

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Compute $\int_C \mathbf{F} \cdot d\mathbf{r}$ where $\mathbf{F}(x,y) = \langle 3x^2y + 2, x^3 - 2y \rangle$ and C is the arc of a unit circle centered at the origin traversing counterclockwise from $(1, 0)$ to $(0, -1)$.

2. Compute $\int_C \mathbf{G} \cdot d\mathbf{r}$ where $\mathbf{G}(x,y) = \langle 6xy, 2y^2 \rangle$ and C is the arc of a unit circle centered at the origin traversing counterclockwise from $(1, 0)$ to $(0, -1)$.