

Quiz 7 Calculus 3 11/10/2004

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

1. Compute $\int_C \langle 2xe^y + 3x^2 + 2y, x^2e^y + 2x \rangle \cdot d\vec{r}$ for a path consisting of the first-quadrant portion of a circle (centered at the origin) of radius 5, traversed counterclockwise.

2. Compute $\int_C \langle xy, 2y \rangle \cdot d\vec{r}$, where C is the line segment from $(0, 2)$ to the origin.