

Quiz 5 Calculus 3 11/14/11

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

1. Compute $\int_C \langle 9x^2y^4 + 2 - y, 12x^3y^3 - x \rangle \cdot d\vec{r}$, where C is the top half of a circle with radius 3, traversed counterclockwise.

2. Compute $\int_C \langle 4x + 1, x - y \rangle \cdot d\vec{r}$ for a line segment beginning at $(3, 0)$ and ending at $(1, 2)$.