Name:

Section:

## Quiz 9

- Suppose that C has length 5. What is the value of ∫<sub>C</sub> **F** · ds if (1 pt.)
  (a) **F**(P) is normal to C at all points P on the curve?
  - (b)  $\mathbf{F}(P)$  is a unit vector in th negative direction along the curve?
- 2. Compute the integral of  $\mathbf{F}(x, y) = \langle 4, y \rangle$  along the quarter of a circle  $x^2 + y^2 = 1$  with  $x \leq 0$ ,  $y \leq 0$  oriented counterclockwise (9 pt.)