

“QUIZ” for Nov. 12, 2009

NAME: (print!) _____ **Section:** _____

E-MAIL ADDRESS: (print!) _____

1. Compute the line-integral of the scalar function $f(x, y, z) = z^2$ over the curve $\mathbf{c}(t) = (2t, 3t, 4t)$ for $0 \leq t \leq 2$.

2. Compute the Jacobian of

$$\Phi(u, v) = (3u + 4v, u - 2v) \quad .$$