Math 302 Quiz #1 Summer 2014
Name:..... ID:.....

Exercise # 1: Find the directional derivative of

$$f(x,y) = \mathbf{e}^{-xy}\sin(2y)$$

at $(4, \frac{\pi}{8})$ in the direction of the vector $u = i - 3j$.

Exercise #2: Find the divergence of the vector field

$$F(x,y,z) = 2x^2yi - 3yzj + \mathbf{e}^z xk$$