

“QUIZ” for Nov. 30, 2006

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

E-MAIL ADDRESS: (print!) _____

1. Evaluate the surface integral

$$\iint_S xyz dS \quad ,$$

where S is the surface $z = 2x + 2y$ above the rectangle whose vertices are $(0, 0), (2, 0), (2, 2), (0, 2)$.

2. 1. Evaluate the surface integral

$$\iint_S \mathbf{F} \cdot d\mathbf{S} \quad ,$$

where S is the surface $z = 2x + 2y$ above the rectangle whose vertices are $(0, 0), (2, 0), (2, 2), (0, 2)$,
and \mathbf{F} is the vector field

$$\mathbf{F} = \langle x, y, z \rangle$$