Math 301   Quiz #3b

Name:... ID:..................................

Exercise # 1: Use the divergence theorem to evaluate $\int\int_S F \bullet n ds$ where $F = xi + zj + yk$ and S is the boundary of the solid defined by $\{(x, y, z) : 0 \leq z \leq x, 0 \leq x \leq 1, 0 \leq y \leq 1\}$.