

“QUIZ” for Oct. 29, 2009

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

E-MAIL ADDRESS: (print!) _____

- 1.** Compute the Jacobian of the transformation

$$\Phi(r, s) = (rs, r + s)$$

- 2.** Let $\mathcal{D} = \Phi(\mathcal{R})$ where $\Phi(u, v) = (u + v, v^2)$ and $R = [0, 6] \times [1, 2]$. Calculate

$$\int \int_{\mathcal{D}} y \, dA \quad .$$

(Note: it is not necessary to compute D).