

Name: _____

- No electronic devices are allowed. You must show your work to obtain credit.
- You may use the back if necessary. Please indicate clearly if you do so.

1. (5 points) Find an equation of the tangent plane to the given surface at the special point:

$$z = ye^{xy}, \text{ at point } (0, 1, 1).$$

2. (5 points) If $z = x^2 - xy + 3y^2$ and (x, y) changes from $(0, -1)$ to $(0.1, -0.9)$, compute the values of Δz and dz .