## Quiz 3a Calculus $3 \quad 9 / 26 / 2006$

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Find the first partial derivatives of $z=y e^{3 x y}$.
2. Find an equation for the plane tangent to $z=x^{2}+3 x y-y^{3}-5$ at the point $(2,-1)$.
