Quiz 3

1. (5 points) Find $\frac{\partial f}{\partial x}$ and $\frac{\partial f}{\partial y}$ for $f(x, y) = x \ln(x^2 + y^2)$.

2. (5 points) Find an equation of the plane tangent to the surface $z = x^2 + x + 2y^2$ at the point $(3, -1, 14)$. 