

**Quiz 2      Calculus 3      9/21/2007**

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

1. Let  $f(x, y) = \sqrt{x^2 + y^2}$ . Find  $f_x$  and  $f_y$ .

2. Let  $z = y \ln x$ . Find an equation for the plane tangent to this surface at the point  $(1, 3, 0)$ .