

### Calculus III Quiz 3

Don't forget to write down clearly your **Name**:

and **Net Id**:

**1. Mixed partial derivative (5 points)** Compute the mixed partial derivative  $f_{xy}$  for the function  $f(x, y) = \ln(2x + y)$ .

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