Math 251   **Quiz 04 (WeBWorK 5)**

Name:

This quiz is *open-note*, but no books or calculators may be used. In calculation, you can show work at your discretion, but remember that I can't give partial credit for calculations I can't see. Explain anything that seems to need explaining.

1. (4 points) Suppose that the plane tangent to the surface $z = f(x, y)$ at $(6, 4, 20)$ has equation $z - 3x + 2y = 10$. Estimate $f(5.9, 4.2)$. Do not simplify your answer.

2. (8 points) Find the equation of the tangent plane to $z = e^y + x + x^2 + 8$ at the point $(2, 0, 15)$.