Math 225 : Quiz **Oct 7, 1991**

Show your work on a blank sheet of paper with your name and date at the top (no torn edges). Circle your final answer. You may use a calculator.

1. A rectangular sheet of metal is expanding. When the width is 2 inches and the length is 3 inches, the width is increasing at the rate of 0.25 in/hr and the length at 0.5 in/hr. At what rate is the area of the rectangle increasing?

2. Let $f(x, y) = e^{xy^2} \cos(x)$. Compute f_{xy}.