

Math 225 : Quiz**Oct 2, 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. Describe in detail the level curves of

$$f(x, y) = \ln(x^2 + y^2 - 6x - 4y + 22)$$

2. Calculate the limit

$$\lim_{(x,y) \rightarrow (0,0)} \frac{x^2}{x^2 + y^4}$$

(or show it does not exist).