Quiz 6; Wednesday, March 2 MATH 53 with Professor Stankova Section 116; 3-4 GSI: Eric Hallman

Student name:

You have 10 minutes to complete the quiz. Calculators are not permitted, and remember to show your calculations and explain your reasoning in order to receive full credit.

1. Consider the function $f(x,y) = \frac{x^2y}{x^2 + y^4}$. Find $\lim_{(x,y)\to(2,1)} f(x,y)$.

2. Make a conjecture about $\lim_{(x,y)\to(0,0)} f(x,y)$ by finding the limit along at least one line and at least one non-linear curve.