## MATH 223 Fall 2022

## Assignment 10

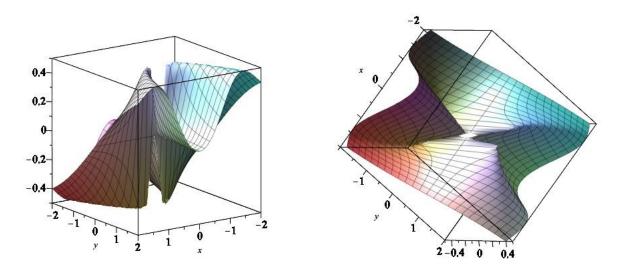
Due: Friday, October 7

## **Reading**

Read carefully Sections 4.2 "Differentiability" in our text *Multivariable Calculus: A Linear Algebra Based Approach*.

## Writing

Write out careful and complete solutions of Exercises 3, 7, 10, 15 and 16 in Chapter 4.



Two views of the graph of 
$$f(x,y) = \begin{cases} \frac{x^2y}{x^4+y^2} & (x,y) \neq (0,0) \\ 0 & (x,y) = (0,0) \end{cases}$$