Quiz 10 **Name:** _____
Week 13: 04/14/2020
Math 285: Spring 2020
Instructor: Garrett Hartshaw

Instructions:
Please answer the questions below. Show all your work. You may use a TI-84/85 (or equivalent) calculator.

Problem 1. (5 points) Find f_x and f_y for $f(x,y) = x^2 + 3xy + 4y^2 + 7$.

Problem 2. (5 points) Find f_x and f_y for $f(x,y) = \sin(xy)$.

Problem 3. (10 points) Find all first and second partial derivatives of the function $f(x,y) = x^3 + 3x^2y + 2xy^2 + 7y^3$. (That is, find f_x, f_y, f_{xx}, f_{xy}, f_{yx}, and f_{yy})