MAT226, Fall 2019 **Renato Ghini Bettiol**

Homework Set 6

DUE: OCT 16, 2019 (AT THE BEGINNING OF CLASS)

To be handed in:

Please write your solution to Problem 1 on a single sheet of paper!

1. Find the equation of the tangent plane to the graph of $f(x,y) = x^4 - x^2y^2 + 3y + 8$ at the point $\big(x_0, y_0, f(x_0,y_0)\big)$ for the following points:

   a) $(x_0, y_0) = (1, 1)$

   b) $(x_0, y_0) = (0, 2)$

   c) $(x_0, y_0) = (1, -2)$

NOT to be handed in (but recommended for you to practice with):

2. Textbook (5th edition) Section 13.7, Exercises 5-9, 17-23, 51-54