Math 2110Q - Multivariable Calculus **Section 14.7 Worksheet**
Name:

1. Find the local maximum and minimum values and saddle points for

$$f(x, y) = xy - 2x - 2y - x^2 - y^2.$$

2. Find three positive number whose sum is 100 and whose product is maximum.

3. Find the dimensions of the box with volume 1000 cm^3 that has minimal surface area.