

Math 203: HW 12

Due on Friday, June 28

Summer '12

John "Curlee" Robertson

Problem 1

Find all points (x, y) where $f(x, y)$ has a possible relative maximum or minimum. Then, use the second derivative test to determine the nature of $f(x, y)$ at each of these points.

$$f(x, y) = x^2 - 2xy + 4y^2$$

$$f(x, y) = 2x^2 + 3xy + 5y^2$$

$$f(x, y) = 2x^2 + y^3 - x - 12y + 7$$