Math 173 - Quiz 9 Name

April 9, 2015

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (5 points) Find the absolute extreme values of $f(x, y) = xy^2 - 4x$ subject to $x^2 + y^2 = 4$.

2. (5 points) Find the absolute minimum value of $f(x, y, z) = x^2 + y^2 + z^2$ subject to x + y - z = 3. Explain why there is no maximum value.