

Name:

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MAC 2313.9722

Cyr

Quiz 7

You must show all work to receive full credit!!

Problem 1. (3 points) Find the maximum rate of change of the function

$f(x, y, z) = \frac{x}{y+z}$ at the point $(8, 1, 3)$.

Problem 2. (7 points) Find and classify the critical points of the function $f(x, y) = x - x^2y - y + xy^2$. (Hint: Consider $f_x + f_y$.)