

MTH241 Fall 2024: Quiz 04

Name:

UID:

Closed book, no calculator, show your work clearly.

1. (7pt) Determine a function f of two variables and a function g of one variable such that $F = g \circ f$ where $F(x, y) = \ln(\ln(x + y))$. What are the domains of f, g, F ? (Grading: **2pt**: working; **2pt**: f and g ; **3pt**: domains)

2. (3pt) Use set notation to express the level curve of $f(x, y) = xy - \sin(xy)$ with respect to $c = 0$. (Grading: **1pt**: working; **2pt**: correct set notation)

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