Date: May 14, 2025   NAME:...
Time: 10:30–11:00
                                    STUDENT ID:..

Problem 1 (50 points) Find all critical points of the function $f(x,y) = \cos x + \cos y + \cos(x+y)$, where $0 < x < \pi/2, 0 < y < \pi/2$. Indicate whether each such point gives a local maximum or a local minimum, or whether it is a saddle point.

Problem 2 (50 points) Find the minimum of $f(x,y,z) = 4x - 2y + 3z$ subject to the constraint $2x^2 + y^2 - 3z = 0$.

good luck ♡