MATH 261 Quiz 6 Name:
Student number:

Show all work. 5 points each.

1. Find the absolute max and min of $f(x, y) = 3 + xy - x - 2y$ on the set $D = \{(x, y)|x^2 + y^2 = 4\}$

2. Use Lagrange multipliers to find the max and min of $f(x, y, z) = 8x - 4z$ given the constraint $x^2 + 10y^2 + z^2 = 5$