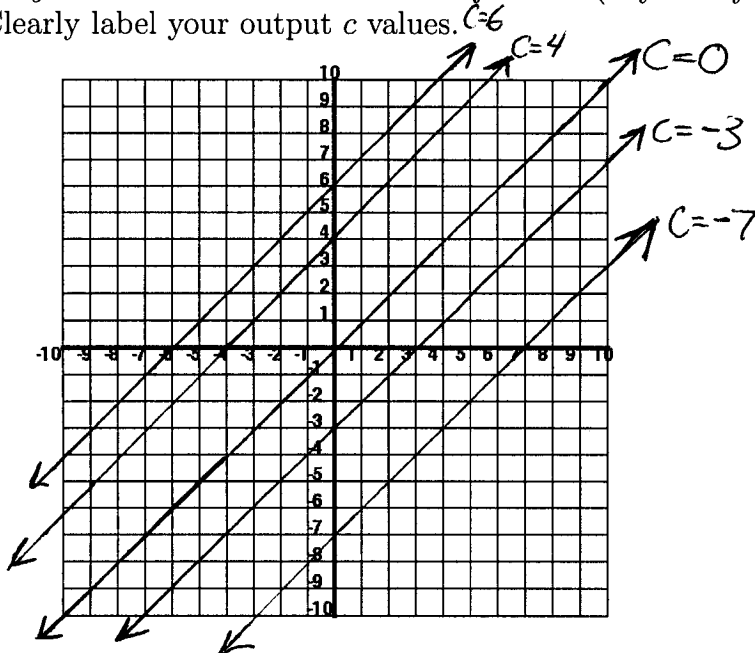


Name: _____

Math 21C - Quiz 4
Thursday, July 27, 2006

1. [15 pts.] Consider the function $f(x, y) = y - x$, whose domain is all x and y . Draw at least 5 level sets of f below (any 5 of your choice). Clearly label your output c values.



2. Consider the function:

$$g(x, y, z) = e^{yz} + \sin(x) + z^2$$

(a) [5 pts.] What is $\frac{\partial g}{\partial x}$? $\cos x$

(b) [5 pts.] What is $\frac{\partial g}{\partial y}$? $e^{yz} \cdot z$

(c) [5 pts.] What is $\frac{\partial g}{\partial z}$? $e^{yz} \cdot y + 2z$