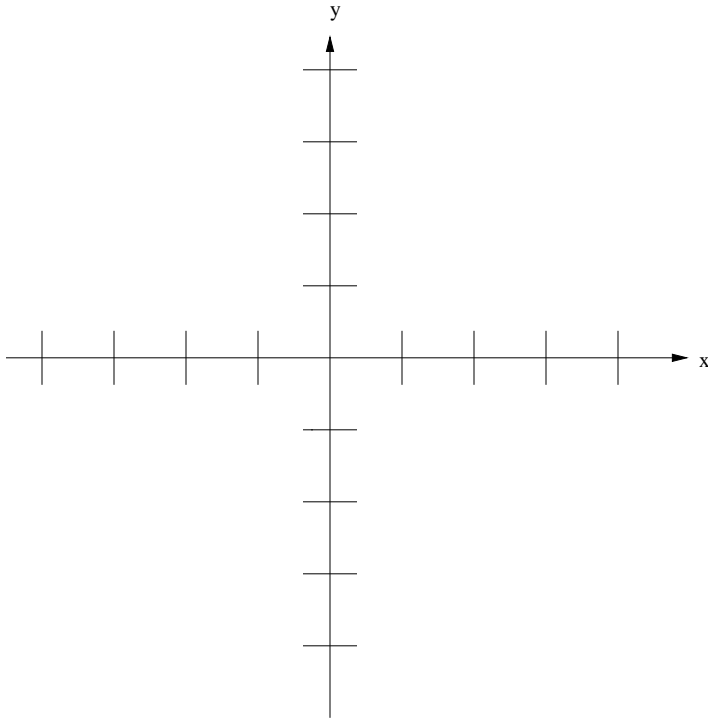


MATH 241, Section 2101
Quiz 9
October 3, 2002

Name: _____

Sketch the level curve $f(x, y) = c$ on the axis below for $f(x, y) = 3x - y$ and $c = -3, 0, 3$. Be sure to label each level curve with the corresponding c value.



In which of the following four directions do the values for the function $f(x, y)$ increase the fastest? (There is only one direction in which this increase is the fastest)

- 1.) the negative y direction
- 2.) the negative x direction
- 3.) the positive y direction
- 4.) the positive x direction