Class Worksheet 2/1 - 2/3

Example 1: Which of the tables of values below could represent a linear function? For those which could, find a formula for the function.

(A)

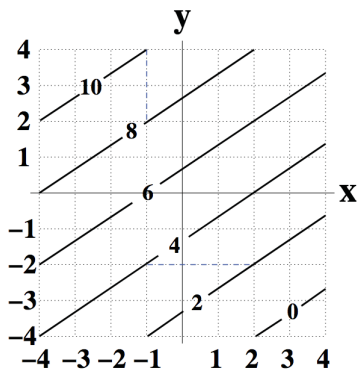
$x \setminus y$	0	3	6
0	1	-4	-9
2	4	-1	-6
4	7	2	-3
6	10	5	0

(B)

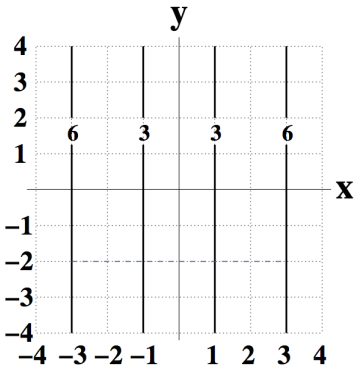
$x \setminus y$	0	5	10
1	2	4	6
5	4	8	12
9	8	16	32

Example 2: Which of the following contour plots could represent a linear function? For those that could be linear, find a formula for the function.

(A)



(B)



Example 3: Sketch a contour diagram of $z = \sqrt{x^2 + y^2}$. (Draw at least four marked contours.) How does the diagram differ from the contour diagram of the paraboloid $z = x^2 + y^2$?