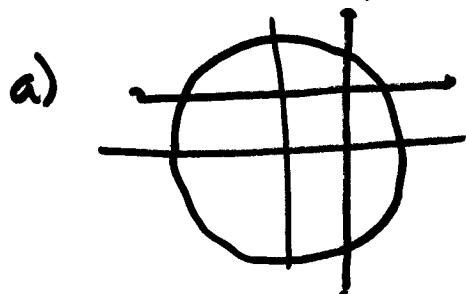
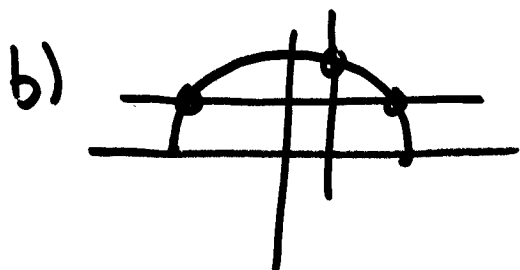


Quiz solutions. (Quiz #1, 4/3/09)

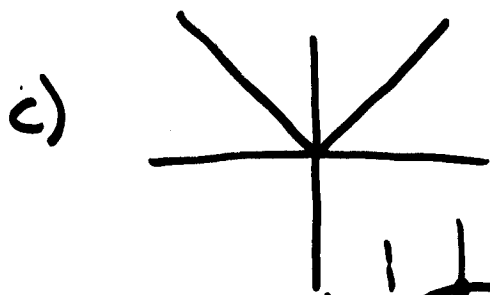
1. Which is a function? Is there an inverse? Why?



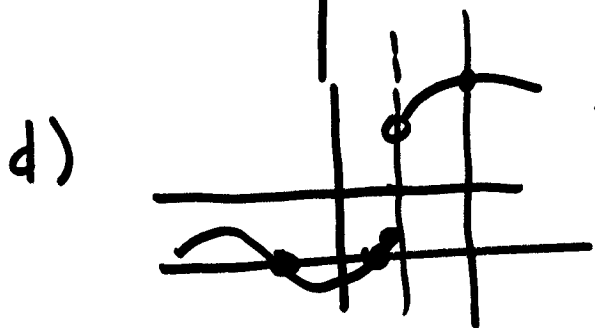
Not a function. fails vertical line test
No inverse: fails horizontal line test.



Is a function: vertical line test.
No inverse: fails horiz. line test.



Is a function; no inverse
(vert/horiz. line tests)



Is a function, no inverse.
(note: the open circle means that point is not part of graph).

2. Which is function? If it is, write $y = f(x)$.

(a) Yes; $x^2 + 2y = 4$

$$2y = 4 - x^2$$

$$y = \frac{4 - x^2}{2}$$

(b) Yes; $\frac{2x}{y} = 1$

$$2x = y$$

(c) No; because

$x - 1 = y^2$ has
2 y-values for
each x-value.