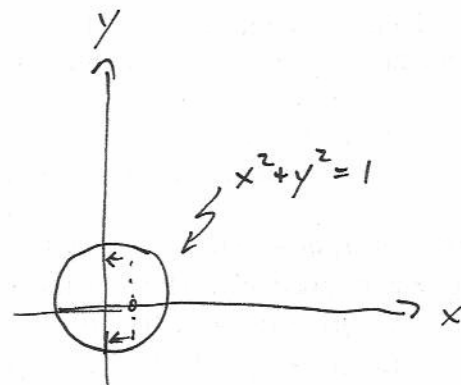
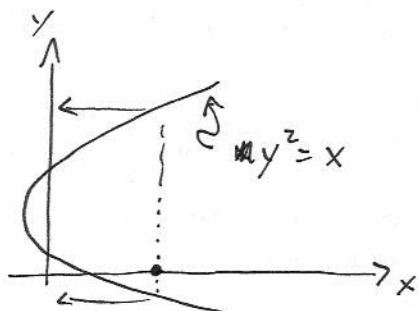
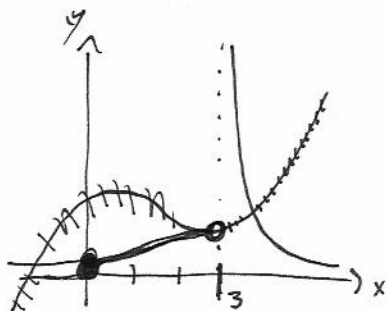


Graphs:

A graph defines y as a function of x ($y = f(x)$) when ~~it satisfies the vertical line test.~~
every vertical line intersects it at most once.



↑ Vertical line test.

Domain: $[0, 3) \cup (3, \infty)$

Range: $[0, \infty)$

Increasing vs. Decreasing

f is increasing provided $f(x)$ increases as x increases
 $a > b \Rightarrow f(a) > f(b)$

f is decreasing provided $f(x)$ decreases as x increases
 $a > b \Rightarrow f(a) < f(b)$

f is monotonic provided if it is always increasing or always decreasing

