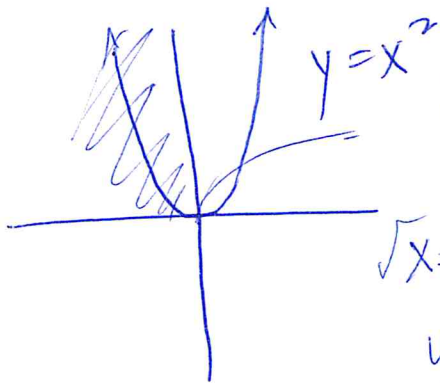
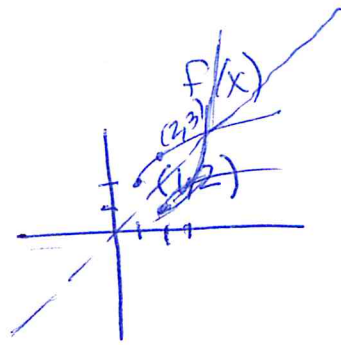


Some notes

$$f(x) = 2 + \sqrt{x-1}$$

$$f'(x)$$

$$x = 2 + \sqrt{y-1}$$



fails horizontal line test,
so change domain to positive #'s

$$\sqrt{x} = \sqrt{x^2}$$

$$y = \pm\sqrt{x}$$

$$y = \sqrt{x}$$

inverse means switch input, output

Sine function

$$y = \sin x$$

$x =$ radians

$y =$ y-coordinate on unit circle

inverse

$$y = \sin^{-1}(x)$$

radians

y-coordinate on unit circle

arc ~~measure~~
length
on unit

$$y = \arcsin(x)$$

mean the same
inverse of sine

$x =$ y-coord on unit circle

$y =$ radians
(arc length on unit circle)

read p. 318 of textbook (4.7 first page)
for good explanation of how & why we
limit the domain of sine to invert it
(which will be the range of $\sin^{-1}(x)$
 $\arcsin(x)$)