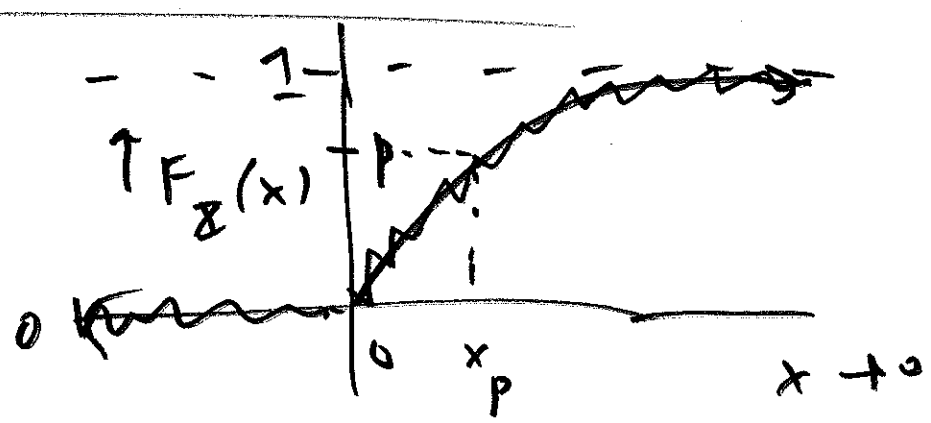
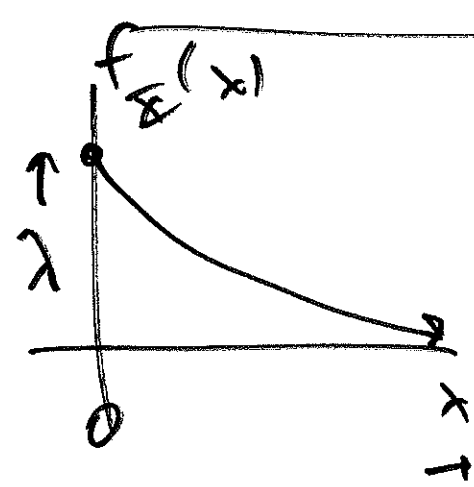
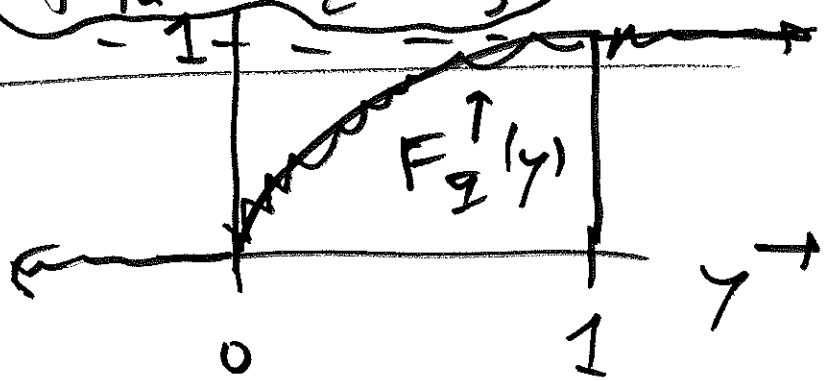


This time: transformations
 next time: expected value
 time: value

read: Dr
 ch. 4
 AMS131
 13 Jul 18

extra JD off:
 Fri: 11.30 am - 12.30
 Sat: 4:00 - 1
 Sun: 2 - 3

$$F_Y(y) = \begin{cases} 0 & y < 0 \\ \sqrt{y} & 0 \leq y \leq 1 \\ 1 & y \geq 1 \end{cases}$$



$$1 - e^{-\lambda x} = p$$

(9.46)

$$1 - p = e^{-\lambda x}$$

$$\log(1 - p) = -\lambda x$$

$$-\frac{\log(1 - p)}{\lambda} = x = F_X^{-1}(p)$$

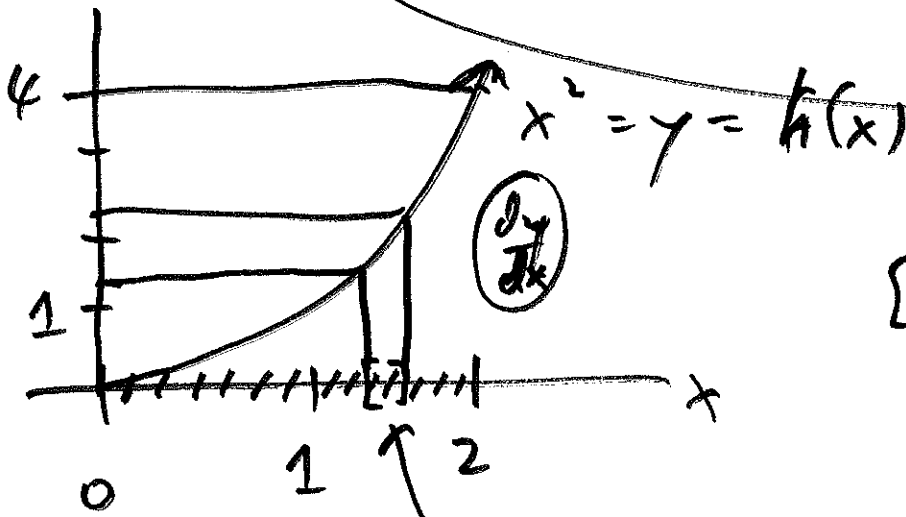
$$y = h(x)$$

$$x = h^{-1}(y)$$

$$f_{\mathbb{R}}(y) = f_{\mathbb{R}}(x) \left| \frac{dx}{dy} \right|$$

(y, y+ε) (x, x+δ)

$$f_{\mathbb{R}}(y) |dy| = f_{\mathbb{R}}(x) |dx|$$



~~image~~
 $[0, 2) \xrightarrow{h} [0, 4]$
 image of ~~(0,2)~~
 $[0, 2)$
 under h

prob given
 to this int.
 by \mathbb{R}

algae

algal bloom

(0.34)

