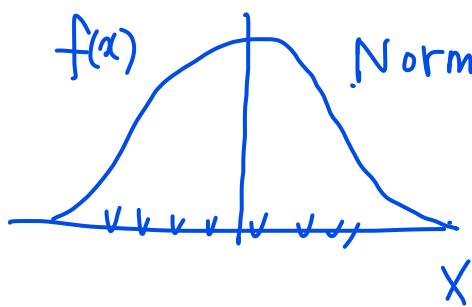
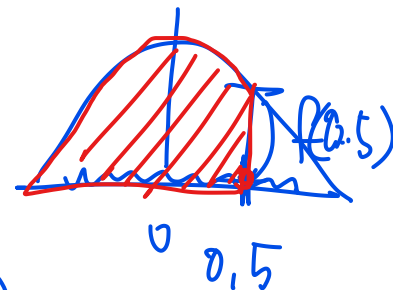


Normal

norm



Normal [ 0, 1 ]  
mean sd



rnorm ( 100, mean = 0, sd = 1 )

# of random  
number

dnorm ( x0, mean = 0, sd = 1 )

f(x)

f(x0)

rnorm ( 100, 0, 1 )

dnorm ( 0.5, 0, 1 )

f(0.5)

pnorm ( 0.5, 0, 1 )

$P[X \leq 0.5]$

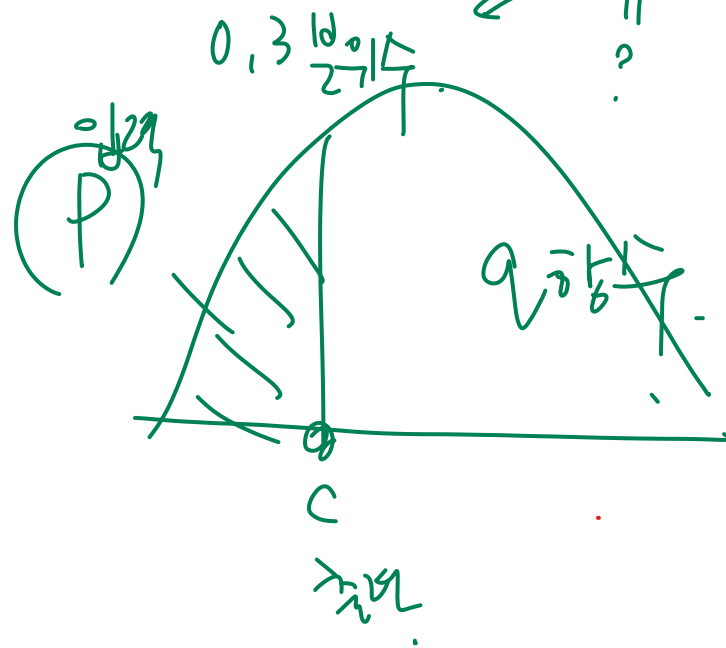
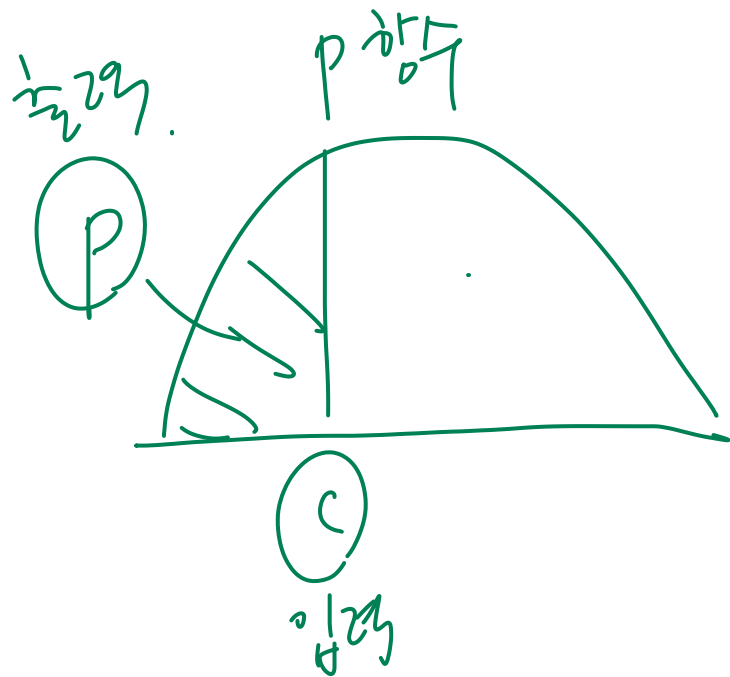
pnorm ( x0, mean = 0, sd = 1 )

$P[X \leq x_0] = p_0$

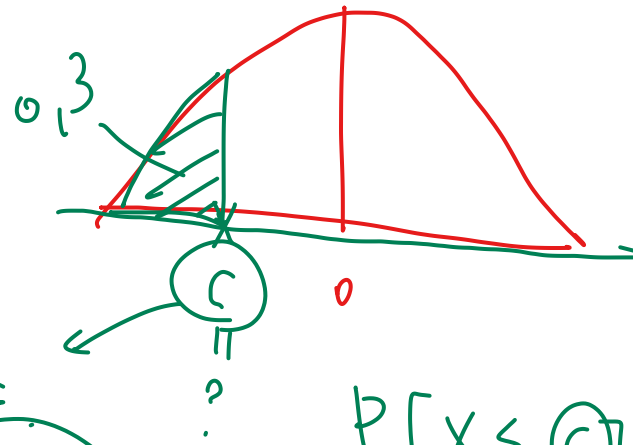
(p0)

↓  $q_{\text{norm}}(\textcircled{p_0}, \text{mean}=0, \text{sd}=1)$   $\Rightarrow 0 \sim 1$  누적확률.

$$P[X \leq \textcircled{C}] = p_0 \text{ 인 } C_{\text{.}}$$

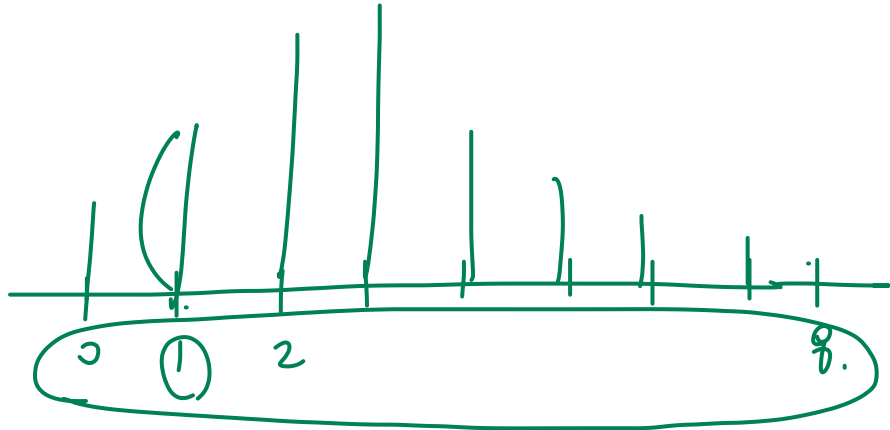


$$q_{\text{norm}}(\textcircled{0.3}, 0, 1)$$



$$P[X \leq \textcircled{C}] = 0.3$$

$$X \sim \text{Bin}(\textcircled{8}, \textcircled{0.3})$$



$$P[X=1] \textcircled{8C_1} \textcircled{0.3^1 0.7^7}$$

$$\text{rbinom}(\textcircled{5}, \text{size}=8, \text{prob}=0.3)$$

2 3 1 4 2

★  $\textcircled{\text{dbinom}}(\textcircled{1}, \text{size}=8, \text{prob}=0.3)$

$\textcircled{f(x)}$   
pmf

$$f(1) = P[X=1]$$

$\textcircled{\text{pbinom}}(\textcircled{1}, 8, 0.3)$

lowe — F

$$P[X \leq \textcircled{1}] = \textcircled{f(0) + f(1)}$$

$$\boxed{P[X > 1]}$$

qbinom (0.4, 8, 0.3)

$$P[X \leq \textcircled{C}] \geq \textcircled{0.4}$$

$\downarrow$   
min.

