Functional Analysis

We define the cdf :

phi <- function(x, mu, sigma) {  
 a = exp(-(((x-mu)^2)/(2\*sigma^2)))  
 b = 1/(sqrt(2\*pi\*sigma^2))  
 b\*a  
   
}

# We define a simulation strategy for the random walk of a bijective homomorphism

: R R is a ring homomorphism iff

1/ (a+b) =(a) + (b)  
2/ (ab) = (a)(b)  
3/ (1)=1

a, b R

foo <- function(x) {  
 phi = 9\*x^2  
 phi  
}

x <- c(0, 1, 2, 3, 4, 5, 6, 7, 8, 9)  
2\*x

## [1] 0 2 4 6 8 10 12 14 16 18