

#1

a = qnorm(0.99, mean = 0, sd = 1)

b = qnorm(0.975, mean = 0, sd = 1)

c = qnorm(0.95, mean = 0, sd = 1)

#2

#a

p = pnorm(-0.1, mean = 0, sd = (1/50)^(1/2), lower.tail = TRUE)

p = 2\*p

p

#b

p = pnorm(-0.1, mean = 0, sd = (1/200)^(1/2), lower.tail = TRUE)

p = 2\*p

p

#c

p = pnorm(-0.1, mean = 0, sd = (1/1000)^(1/2), lower.tail = TRUE)

p = 2\*p

p

#d 趨近於 0