HW4-Output from Console

> #1.If X is Binomial (n = 100, p = 0.3)

> #P(X = 39)

> dbinom(39,100,0.3)

[1] 0.01299042

> #P(X >= 25) = 1 - P(X <= 24)

> 1 - pbinom(24,100,0.3)

[1] 0.8864298

> #2.If X is Beta (a = 5, b = 3)

> #P(0.4 <= X <= 0.5)

> pbeta(0.5,5,3) - pbeta(0.4,5,3)

[1] 0.1303065

> #The value of k such that P(X <= k) = 0.7

> qbeta(0.7,5,3)

[1] 0.7236603

> #3.

> #histogram of 100 random numbers taken from a gamma distribution with a = 2 and b = 5

> hist(rgamma(100,shape=2,scale=5), main='100 random values from Gamma(2,5)', xlab = 'x', ylab = 'y')

