Chapter5: Examples

• An electrical firm manufactures light bulbs that have a length of life that is approximately Normal distributed with mean as 800 hours and standard deviation as 40 hours. Find the probability that a random sample of 16 bulbs will have an average life less than 775 hours.

• Give the discrete Uniform population f(x) = 1/4, when x = 0, 1, 2, 3 and 0 otherwise. Find the probability that a random sample of size 36 selected with replacement will yield a sample mean larger than 1.4 but less than 1.8.