Central Limit Theorem Examples

Uniform Distribution

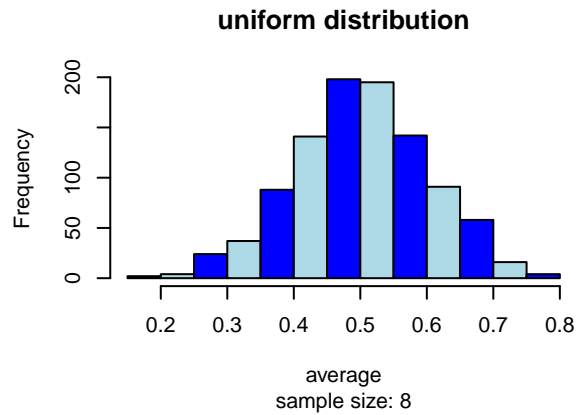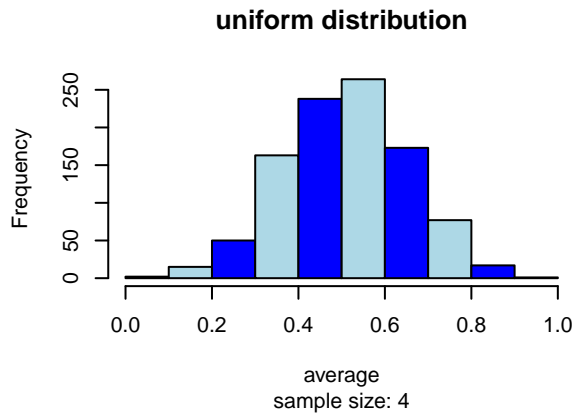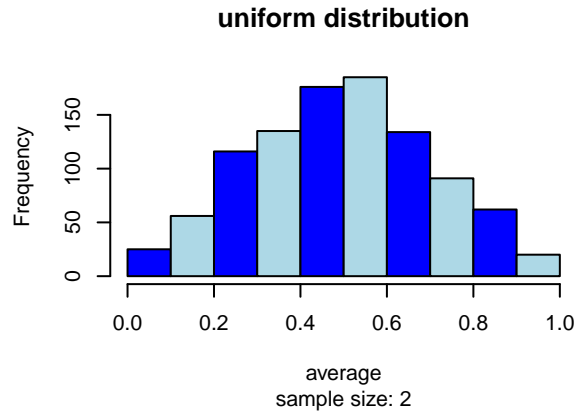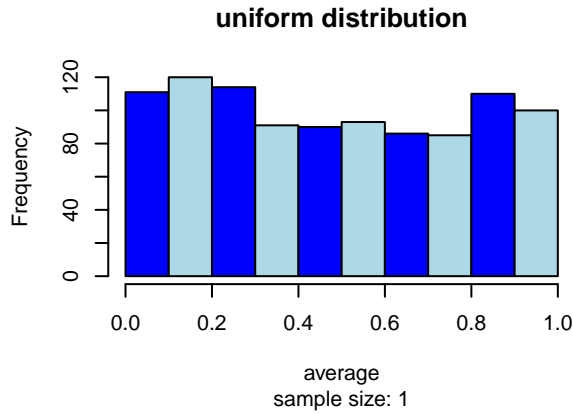probability of result if all results equally likely; minimum individual result is 0 and maximum individual result is 1; outcomes are average results for 1000 trials each consisting of n samples

uniform distribution

average
sample size: 1

uniform distribution

average
sample size: 2

uniform distribution

average
sample size: 4

uniform distribution

average
sample size: 8

uniform distribution

average
sample size: 16

uniform distribution

average
sample size: 32
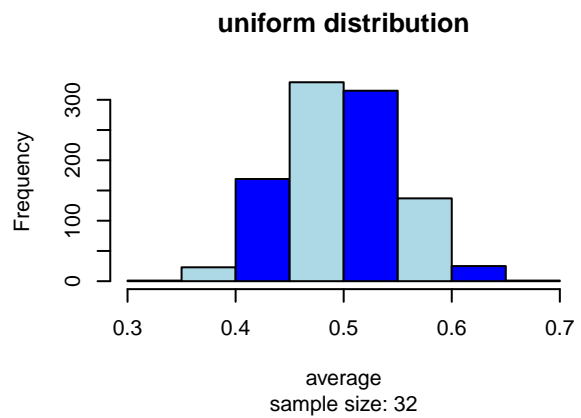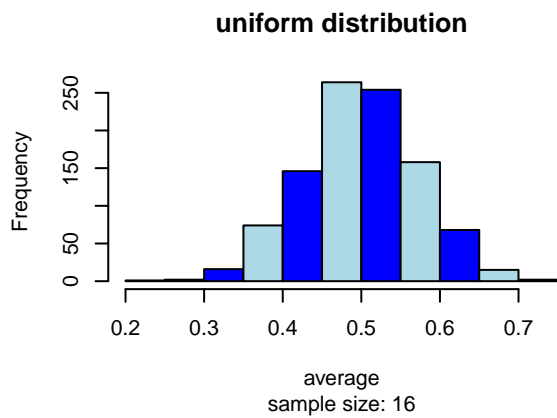
Binomial Distribution

probability of positive result in five attempts if proability of success is 0.167 for an individual attempt; outcomes are average results for 1000 trials each consisting of n samples

binomial distribution

average
sample size: 1

binomial distribution

average
sample size: 2

binomial distribution

average
sample size: 4

binomial distribution

average
sample size: 8

binomial distribution

average
sample size: 16

binomial distribution

average
sample size: 32
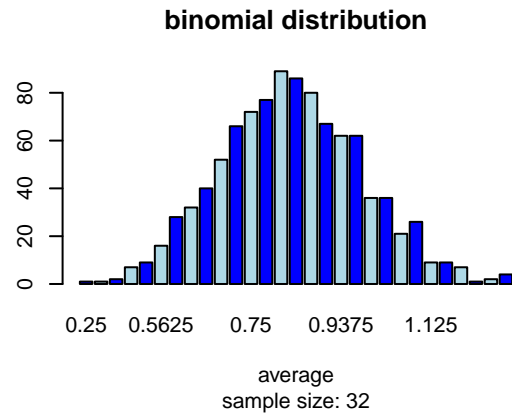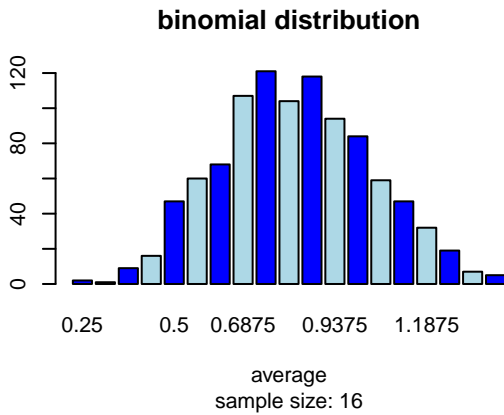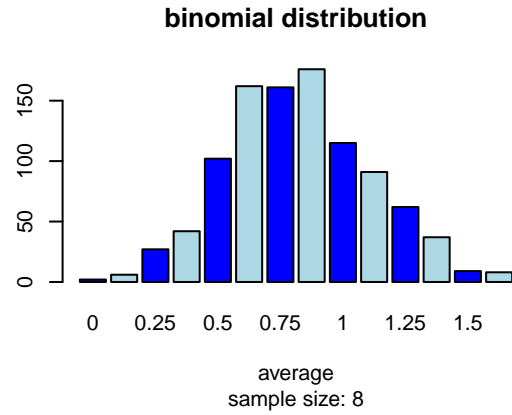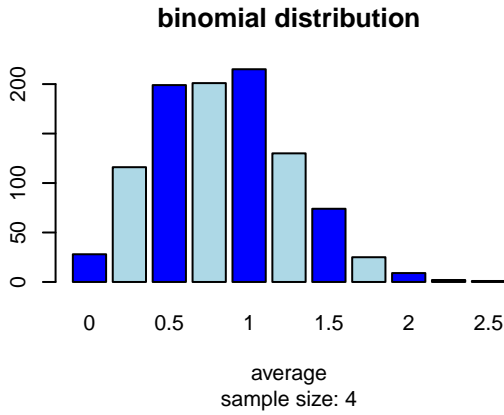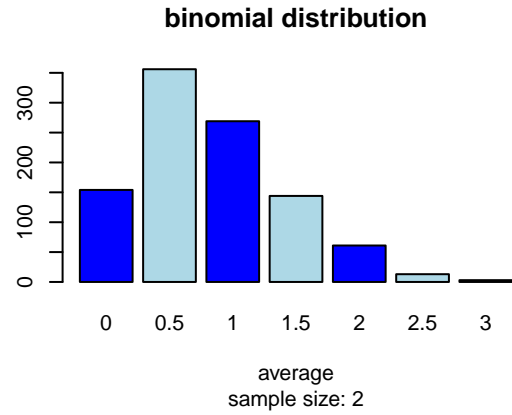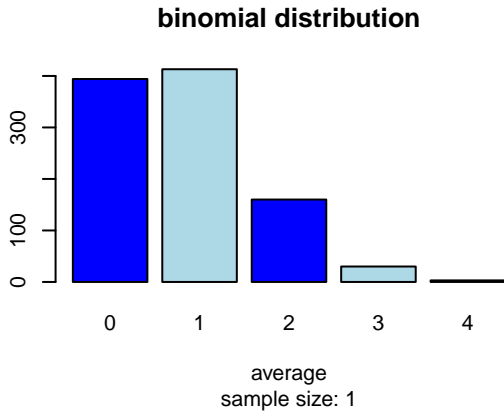
Poisson Distribution

proability of possible outcomes if the average result is 4; outcomes are average results for 1000 trials each consisting of n samples

poisson distribution

average
sample size: 1

poisson distribution

average
sample size: 2

poisson distribution

average
sample size: 4

poisson distribution

average
sample size: 8

poisson distribution

average
sample size: 16

poisson distribution

average
sample size: 32