Probability and Frequentist Concepts

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#Q1 0.421875  
dbinom(3, size = 4, p = 0.75)

## [1] 0.421875

#Q2 0.6835937  
pbinom(3, size = 4, p = 0.75)

## [1] 0.6835937

#Q3 0.6328125  
1 - pbinom(3, size = 5, p = 0.75)

## [1] 0.6328125

#Q4 0.3445783  
pnorm(1.2, mean = 2, sd = 2)

## [1] 0.3445783

#Q5 0.6554217  
1 - pnorm(1.2, mean = 2, sd = 2)

## [1] 0.6554217

#Q6 0.3811686  
pnorm(3.2, mean = 2, sd = 2) - pnorm(1.2, mean = 2, sd = 2)

## [1] 0.3811686

#Q7 The shape of the histogram becomes more skewed.  
#Q8 The shape of the histogram resembles more of a normal distribution.  
#Q9 The shape of the histogram resembles more of a normal distribution. It is narrower than what I got in Q7.  
#Q10 When the sample size is one, the sample mean is that one number. When the sample size is two, we can calculate a mean and have a better approximation.  
#Q11 Parameters and sample size  
#Q12 15625  
25\*25\*25

## [1] 15625

#Q13 25B