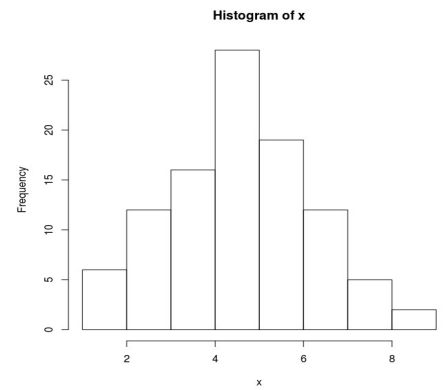
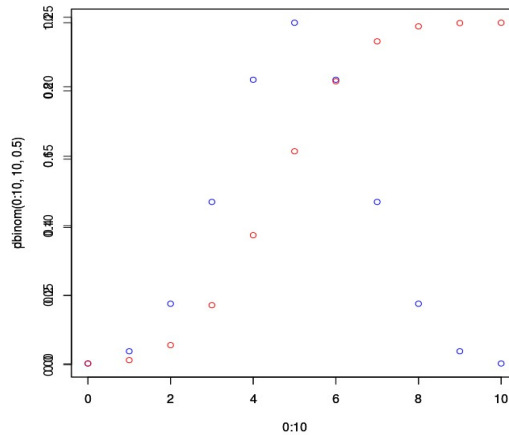


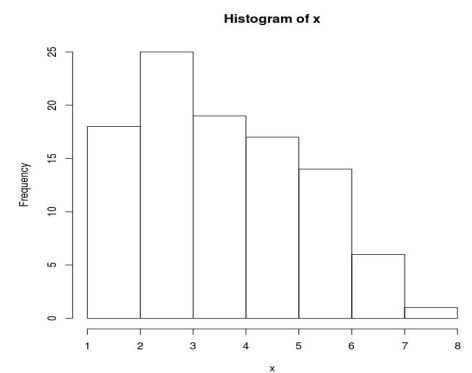
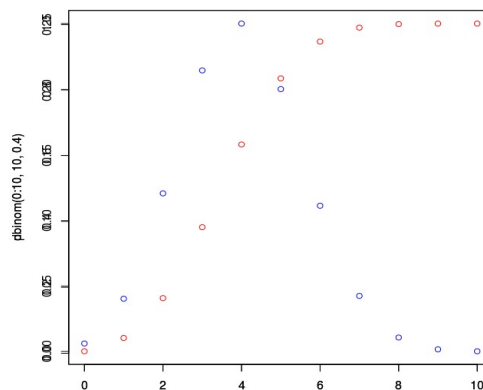
Binomial( $n = 10, p = .5$ )

mean = 5.07  
standard deviation = 1.65  
N = 100



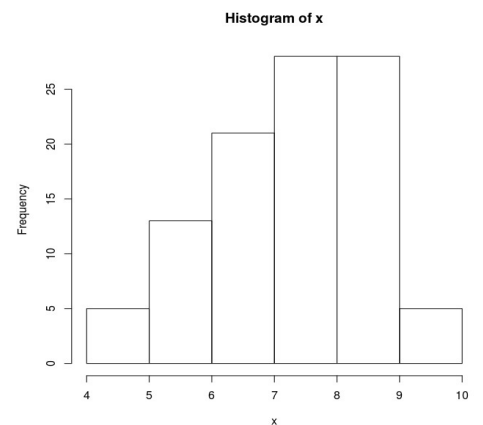
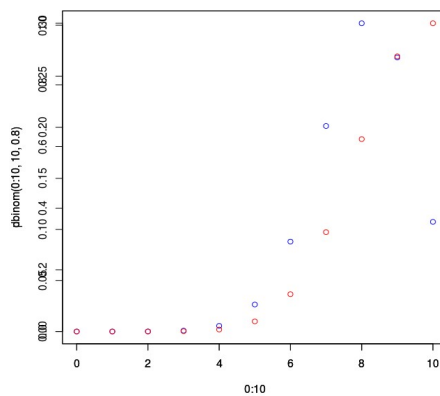
binomial( $n=10, p=.4$ )

mean = 4.03  
standard deviation = 1.61  
N = 100



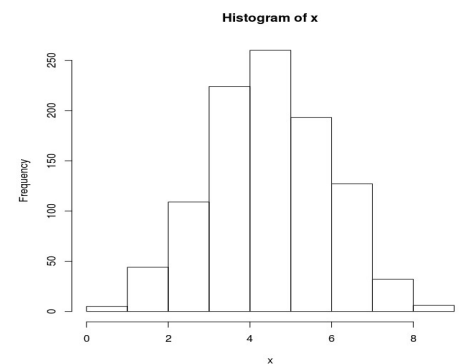
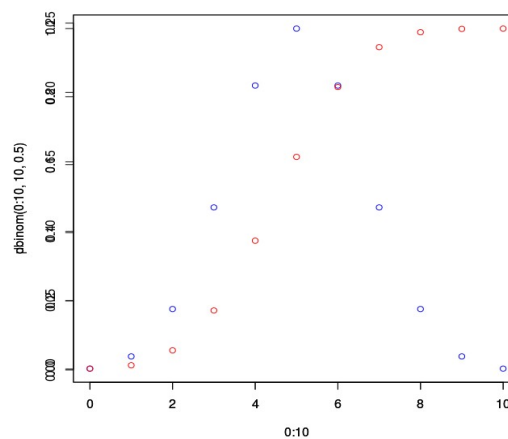
Binomial ( $n = 10, p = .8$ )

mean = 7.75  
standard deviation = 1.30  
N = 100



Binomial( $n = 10, p = .5$ )

mean = 4.972  
standard deviation = 1.49  
N = 1000

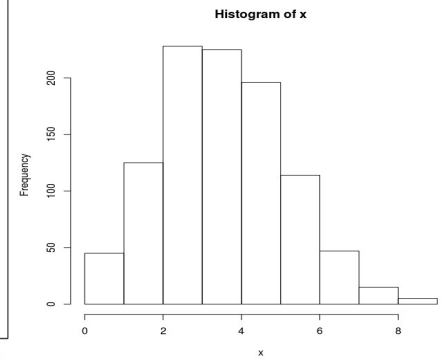
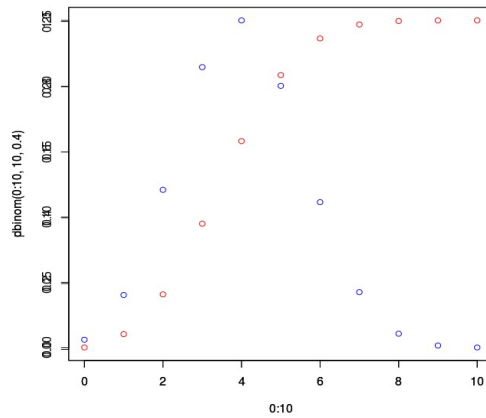


$\text{binomial}(n=10, p=.4)$

mean = 4.03

standard deviation = 1.62

N = 1000

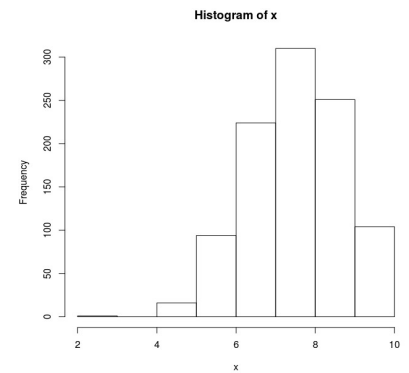
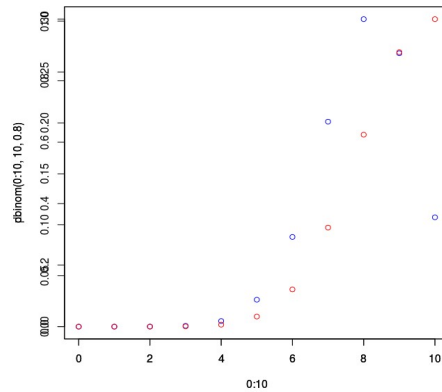


Binomial ( $n = 10$ ,  $p = .8$ )

mean = 7.99

standard deviation = 1.20

N = 1000



Looking at the graphs and histograms you can see that the probability has a much greater effect on the shape of the graph. Even after changing N you can see that graphs shapes do not change very much when their probabilities remain the same. The lower the probability the more positively skewed the graph is. The greater the probability causes the opposite and for the graph to be negatively skewed. When you look at the CDF you can see that the graph reaches the center of the distribution at the given probability. You can also see that the mean and standard deviation are pretty similar when  $N = 100$  and  $N = 1000$ .