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Analysis of Environmental Data

Frequentist Concepts

1. dbinom(3, size= 4, prob= 0.75)
   [1] 0.421875

2. pbinom(3, size= 4, prob= 0.75)
   [1] 0.6835937

3. 1-pbinom(3, size= 5, prob= 0.75)
   [1] 0.6328125

4. pnorm(1.2, mean= 2, sd= 2)
   [1] 0.3445783

5. 1-pnorm(1.2, mean=2, sd=2)
   [1] 0.6554217

6. oneorless<-pnorm(1.2, mean = 2, sd = 2)
   threeorless<-pnorm(3.2, mean = 2, sd = 2)
   answer<-threeorless-oneorless
   answer
   [1] 0.3811686

7. The histogram becomes smoother as you continue to sample. The bins fill in and start to stabilize around a certain percentage.

8. The bins on the skewed side of the data filled in and stabilized, but with less spread than before.

9. The data forms a really tight distribution on the skewed side of the data.

10. As the sample size increases, the spread of the data gets tighter because you have a better representation of the true population with increasing samples.

11. The sample size and the relationship between α and β

12. 25^3= 15,625 possible 3 letter combos

13. B= $25^{1,328,400}$