Alex Fink & Desireé Smith

October 14, 2021

Dr. Mike Nelson

Week 7 Reading Questions

Q1: The effect of the population mean on the width of the confidence interval that is normally-distributed is nothing. The mean is the average therefore it is normally distributed there will be no effect.

Q2: The effect of the population standard deviation on the width of the confidence interval that is normally distributed is that it would be wider. As the standard deviation increases, so does the width of the confidence interval.

Q3: The larger the population size the smaller the confidence interval, so you will get closer to the true results, and it will decrease standard error.

Q4: The effect of the population size on the width of the confidence interval is with a larger population the CI becomes narrower and it is the opposite with a decreased population size. This would make results more precise.

Q5: I could use a large infinite population of two species of shark such as Great Whites and Bull sharks to measure caudal length. If I calculate my values and ran my test several times, 95% of the time my answers should contain my true values.