

#1

A population containing the elements 1, 5, 10

1. Compute the population mean
2. Compute the population standard deviation
3. Create a list of all 9 of the possible two-element samples that can be created with replacement : 1,1 , 1,5 etc
4. For each of the 9 , compute the sample mean
5. Find the mean of the sample means
6. How does the mean of the sample means compare with the population mean
7. Compute the standard deviation of the sample means
8. How does it compare with the population standard deviation

#2

I want to study CCSU students study habits. “how many hours per week do CCSU students spend outside the classroom on school work” I selected 30 full time CCSU students and asked them that question The following are the data I collected

12, 15, 9, 11, 8, 6, 15, 9, 11, 8, 10, 19, 5, 13, 11, 8, 14, 9, 15, 18, 6,

12, 11, 9, 17, 14, 12, 9, 18, 7

- a. Construct a 95% confidence interval of the sample mean
- b. Interpret what the 95% confidence interval means in this problem

