

ECO240 Statistics II Quiz 1. [March 13, 2020] – This became Homework! (No need to submit)

ID \_\_\_\_\_

Name \_\_\_\_\_

Suppose the exam scores of 4 students are {40, 50, 50, 80}. (Consider this as a population  $N=4$ ).

1. Take a sample size 2 ( $n=2$ ) from the population of 4 and construct the probability distribution table of the sample means.
2. Calculate the expected value of the sample means for  $n = 2$ .
3. Calculate standard error of sample means using direct derivation.
4. Calculate population standard deviation.
5. Use appropriate formula to calculate the standard error of the sample means.
6. What is the probability that the sample mean of exam is between 50 and 60?