Section 7.1 Written Quiz
Math 1342 Fall 2020

Name: _____

Problem 1: Suppose that students enrolled at TSC take an average of 18 credit hours per year with a standard deviation of 4 credit hours. A random sample of 75 students is selected from a list of Fall 2020 enrolled students.

a. Find $\mu_{\bar{x}}$.[1 point]

b. Find $\sigma_{\bar{x}.}$ to the nearest hundredth. [3 points]

c. Find the probability that the sample mean is less than 17 credit hours per year. Round to three decimal places. [4 points]

d. Draw the graph that represents the problem in Part C. You only need to include the mean and the sample mean, $\bar{x}$, in question. Make sure to shade the appropriate area. [1 point]

e. Find the probability that the sample mean is between 17.5 and 18.6 credit hours per year. Round to three decimal places. [5 points]

f. Draw the graph that represents the problem in Part E. You only need to include the mean and the sample mean, $\bar{x}$, in question. Make sure to shade the appropriate area. [1 point]

g. Find the probability that the sample mean is more than 18.7 credit hours per year. Round to three decimal places. [4 points]

h. Draw the graph that represents the problem in Part G. You only need to include the mean and the sample mean, $\bar{x}$, in question. Make sure to shade the appropriate area. [1 point]