Name: _____

Course & Section:_____

Electronic copies of this homework are located in D2L.

CLT for Means

Part 1

Watch the Video: CLT Part 1 (https://www.youtube.com/watch?v=wqiETAco9bA)

1. If you continue this process of drawing samples of size 20 over and over again, lets say 1000 times, what do you expect the resulting graph of those 1000 samples means to look like?
    a. Uniform
    b. Skewed right
    c. Skewed Left
    d. Normal (mound shaped and symmetrical).

2. Where is the mean of the sample means located?
    a. At the original population mean.
    b. At the original population median.
    c. At the population standard deviation.

Part 2

Watch the Video: CLT Part 2 (https://www.youtube.com/watch?v=opxBadPL-hY)

1. P(IQ > 130) = _____.
    a. 2.3%
    b. 0.0227
    c. 0
    d. 5%

Part 3

Watch the video: CLT Part 3 (https://www.youtube.com/watch?v=U6Vecz043xA)

($\bar{x} \geq 130$) is approximately ____.

a. 0
b. 1
c. .5
d. I don't know.

Part 4

Watch the Video: CLT Part 4 (https://www.youtube.com/watch?v=DqZT2GX6Fek)

1. Can you use the normalcdf to find the probability that a randomly selected student scores greater than 75?
    a. Yes
    b. No

Part 5

Watch the Video: CLT Part 5 (https://www.youtube.com/watch?v=jRjPq4UYuvs)

1. What is the probability that for a class of 100 students the average score on the final is greater than 75? (Round to 3 decimals.)
    a. 0.000
    b. 0.309
    c. 0.159
    d. 2.97

2. And then what about less than 60? (Round to 3 decimals.)
    a. 0.000
    b. 0.309
    c. 0.159
    d. 2.97

Part 6

Watch the video: CLT Part 6 (https://www.youtube.com/watch?v=rarTHRA9Dh4)