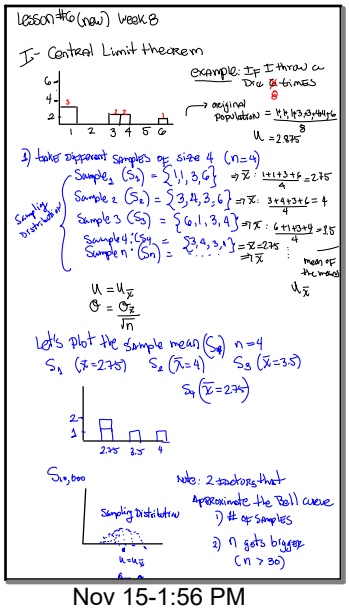


Nov 15-1:56 PM

Which of the following statements about the sampling distribution of the sample mean, x-bar, is not true?

A) The distribution is normal regardless of the shape of the population distribution.
B) The distribution is normal regardless of the sample size, as long as the population distribution is normal.
C) The distribution's mean is the same as the population mean.
D) The distribution's standard deviation is smaller than the population standard deviation.
E) All of the above statements are correct.

- Choice A
- Choice B
- Choice C
- Choice D
- Choice E

Nov 15-2:47 PM

True statements

I. The sampling distribution of $\bar{x}$ has standard deviation $\frac{\sigma}{\sqrt{n}}$ even if the population is not normally distributed.

II. The sampling distribution of $\bar{x}$ is normal if the population has a normal distribution.

III. When n is large, the sampling distribution of $\bar{x}$ is approximately normal even if the the population is not normally distributed.

- I and II
- I and III
- II and III
- I, II, and III
- None of the above gives the complete set of true responses.

$\mu = \mu_{\bar{x}}$
$\sigma = \frac{\sigma}{\sqrt{n}}$ } true

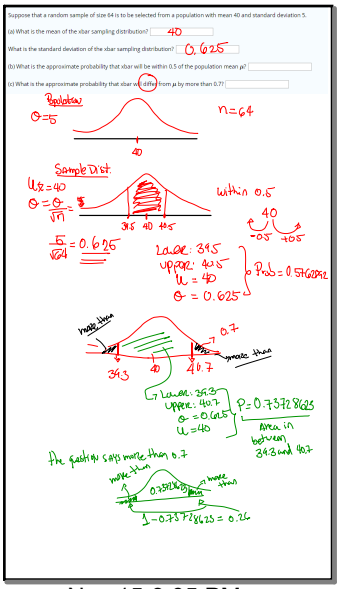
Nov 15-2:54 PM

Due Mon 12/10/2018 12:00 am

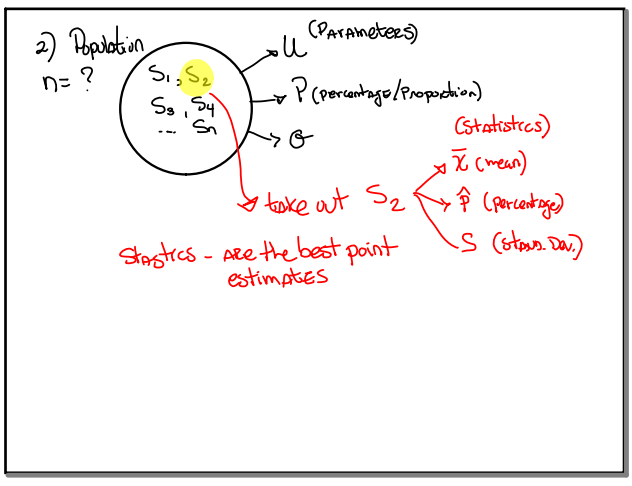
Which of the following is true about the sampling distribution of means?

- ✗ Shape of the sampling distribution of means is always the same shape as the population distribution, no matter what the sample size is.
- ○ Sampling distributions of means get closer to normality as the sample size increases.
- ✗ Sampling distributions of means are always nearly normal.
- ✗ Sampling distribution of the mean is always right skewed since means cannot be smaller than 0.

Nov 15-2:58 PM



Nov 15-3:05 PM



Nov 15-2:26 PM