

Week 2 Lab

Quiz, 6 questions

6/6 points (100%)

**Congratulations! You passed!**[Next Item](#)1 / 1
point

1.

My distribution should be similar to others' distributions who also collect random samples from this population, but it is likely not exactly the same since it's a random sample.



True

**Correct**

False

1 / 1
point

2.

For the confidence interval to be valid, the sample mean must be normally distributed and have standard error $\frac{s}{\sqrt{n}}$. Which of the following is **not** a condition needed for this to be true?



The sample is random.



The sample size, 60, is less than 10% of all houses.



The sample distribution must be nearly normal.

**Correct**1 / 1
point

3. Week 2 Lab

What does "95% confidence" mean?

6/6 points (100%)

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- ☐ 95% of the time the true average area of houses in Ames, Iowa, will be in this interval.
- ☒ 95% of random samples of size 60 will yield confidence intervals that contain the true average area of houses in Ames, Iowa.

Correct

- ☐ 95% of the houses in Ames have an area in this interval.
- ☐ 95% confident that the sample mean is in this interval.



1 / 1
point

4.

What proportion of 95% confidence intervals would you expect to capture the true population mean?

- ☐ 1%
- ☐ 5%
- ☒ 95%

Correct

- ☐ 99%



1 / 1
point

5.

What is the appropriate critical value for a 99% confidence level?

- ☐ 0.01
- ☐ 0.99
- ☐ 1.96

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2.33

2.58

6/6 points (100%)**Correct**

1 / 1
point

6.

We would expect 99% of the intervals to contain the true population mean.



True

**Correct**

False

