

Feedback — Unit 3 Lab 3B - Foundations for inference: Confidence levels

[Help](#)

You submitted this homework on **Sun 16 Mar 2014 11:55 AM PDT**. You got a score of **6.00** out of **6.00**.

INSTRUCTIONS: Read these first before you get started.

Lab instructions can be found in [this document](#).

(You may also find the document at this address:

https://d396qusza40orc.cloudfront.net/statistics%2FDocuments%2FLabs%2FLab_Unit3_Lab3B.pdf.)

As you go through the contents of the lab instructions document you will encounter multiple choice questions, make sure to submit your answers to those questions here to get credit.

You may attempt this lab as many times as you like (well, Coursera limits number of attempts at 100, but chances are you won't need that many!).

Notes:

- To complete the lab in RStudio, you will first need to make sure that you have **both** R and RStudio installed. You can download R at <http://cran.r-project.org>, and RStudio at <http://www.rstudio.com/>. See [this video](#) for step-by-step installation instructions if needed).
- If you prefer to complete the exercises in the interactive web-based DataCamp environment, [click here](#).

Question 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.

Your Answer	Score	Explanation
<input checked="" type="radio"/> True	✓ 1.00	
<input type="radio"/> False		
Total	1.00 / 1.00	

Question 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?

Your Answer	Score	Explanation
<input type="radio"/> The sample is random.		
<input type="radio"/> The sample size, 60, is less than 10% of all houses.		
<input checked="" type="radio"/> The sample distribution must be nearly normal.	✓ 1.00	
Total	1.00 / 1.00	

Question 3

What does “95% confidence” mean?

Your Answer	Score	Explanation
<input type="radio"/> 95% of the time the true average area of houses in Ames, Iowa, will be in this interval.		
<input checked="" type="radio"/> 95% of random samples of size 60 will yield confidence intervals that contain the true average area of houses in Ames, Iowa.	✓ 1.00	
<input type="radio"/> 95% of the houses in Ames have an area in this interval.		
<input type="radio"/> 95% confident that the sample mean is in this interval.		
Total	1.00 / 1.00	

Question 4

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

Your Answer	Score	Explanation
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<input type="radio"/> 1%		
<input type="radio"/> 5%		
<input type="radio"/> 90%		
<input checked="" type="radio"/> 95%	✓	1.00
Total		1.00 / 1.00

Question 5

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

Your Answer	Score	Explanation
<input type="radio"/> 0.01		
<input type="radio"/> 0.99		
<input type="radio"/> 1.96		
<input type="radio"/> 2.33		
<input checked="" type="radio"/> 2.58	✓	1.00
Total		1.00 / 1.00

Question 6

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

Your Answer	Score	Explanation
<input checked="" type="radio"/> True	✓	1.00
<input type="radio"/> False		
Total		1.00 / 1.00

Question 7

The following questions are not graded, but your feedback is very much appreciated and immensely useful for the development of the course.

This lab covered material that is covered in the class.

Your Answer	Score	Explanation
<input type="radio"/> Strongly Disagree		
<input type="radio"/> Disagree		
<input type="radio"/> Neutral		
<input type="radio"/> Agree		
<input type="radio"/> Strongly Agree		
Total	0.00 / 0.00	

Question 8

The lab improved my understanding of these topics.

Your Answer	Score	Explanation
<input type="radio"/> Strongly Disagree		
<input type="radio"/> Disagree		
<input type="radio"/> Neutral		
<input type="radio"/> Agree		
<input type="radio"/> Strongly Agree		
Total	0.00 / 0.00	

Question 9

The instructions were clear and it was easy to understand what was wanted.

Your Answer**Score****Explanation**☐ Strongly Disagree☐ Disagree☐ Neutral☐ Agree☐ Strongly Agree

Total

0.00 / 0.00

Question 10

The data were relevant and interesting to me.

Your Answer**Score****Explanation**☐ Strongly Disagree☐ Disagree☐ Neutral☐ Agree☐ Strongly Agree

Total

0.00 / 0.00

Question 11

The length of time took to complete lab.

Your Answer**Score****Explanation**☐ Less than 30 minutes☐ More than 2 hours☐ Between 30 minutes and 1 hour

☐ Between 1 hour and 2 hours

Total

0.00 / 0.00