Feedback — Unit 3 Lab 3A - Foundations for inference: Sampling distributions

Help

You submitted this homework on **Sun 16 Mar 2014 11:34 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_Lab3A.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

Which of the following is *false*?

Your Answer		Score	Explanation
The distribution of areas of houses in Ames is unimodal and right-skewed.			
50% of houses in Ames are smaller than 1,500 square feet.	✔	1.00	
The middle 50% of the houses range between approximately 1,130 square feet and 1,740 square feet.			
The IQR is approximately 610 square feet.			
The smallest house is 334 square feet and the largest is 5,642 square feet.			

Total	1.00 / 1.00

Question 2

Suppose we took two more samples, one of size 100 and one of size 1000. Which would you think would provide a more accurate estimate of the population mean?

Your Answer		Score	Explanation
Sample size of 50			
Sample size of 100			
Sample size of 1000	✔	1.00	
Total		1.00 / 1.00	

Question 3

How many elements are there in this object called sample_means_small?

Your Answer		Score	Explanation
0			
30			
50			
100	✔	1.00	
5,000			
Total		1.00 / 1.00	

Question 4

Which of the following is *true* about the elements in the sampling distributions you created?

Your Answer		Score	Explanation
Each element represents a mean square footage from a simple random sample of 50 houses.	✔	1.00	
Each element represents the square footage of a house.			
Each element represents the true population mean of square footage of houses.			
Total		1.00 / 1.00	

Question 5

It makes intuitive sense that as the sample size increases, the center of the sampling distribution becomes a more reliable estimate for the true population mean. Also as the sample size increases, the variability of the sampling distribution _____.

Your Answer		Score	Explanation
decreases	✔	1.00	
increases			
stays the same			
Total		1.00 / 1.00	

Question 6

Which of the following is false?

Your Answer		Score	Explanation
The variability of the sampling distribution with the smaller sample size (sample_means50) is smaller than the variability of the sampling distribution with the larger sample size (sample_means150).	✔	1.00	
The means for the two sampling distributions are roughly similar.			

○ Both sampling distributions are symmetric.		
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
○ Strongly Disagree		
○ Disagree		
○ Neutral		
○ Agree		
○ Strongly Agree		
Total	0.00 / 0.00	

Question 8

The lab improved my understanding of these topics.

Your Answer	Score	Explanation
○ Strongly Disagree		
○ Disagree		
○ Neutral		
○ Agree		
○ 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
- ○ Between 30 minutes and 1 hour
- ○ Between 1 hour and 2 hours
- ○ More than 2 hours

Total	0.00 / 0.00