Week 1 Lab

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6/6 points earned
(100%)

Quiz passed!

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1 / 1
points

1.
Which of the following is *false*?

- The distribution of areas of houses in Ames is unimodal and right-skewed.
- 50% of houses in Ames are smaller than 1,499.69 square feet.

Correct Response

- The middle 50% of the houses range between approximately 1,126 square feet and 1,742.7 square feet.
- The IQR is approximately 616.7 square feet.
- The smallest house is 334 square feet and the largest is 5,642 square feet.

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1 / 1
points

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?

- Sample size of 50
- Sample size of 100
- Sample size of 1000

Correct Response

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1 / 1 points

3.

How many elements are there in this object called sample_means_small?

- 0
- 3
- 25

Correct Response

- 100
- 5,000

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1 / 1 points

4.

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

- Each element represents a mean square footage from a simple random sample of 10 houses.

Correct Response

- Each element represents the square footage of a house.
- Each element represents the true population mean of square footage of houses.

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1 / 1 points

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 _____.

- decreases

Correct Response

- increases
- stays the same

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1 / 1 points

6.

Which of the following is false?

- 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).

Correct Response

- The means for the two sampling distributions are roughly similar.

- Both sampling distributions are symmetric.