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Question 4

You are studying a population of peregrine falcons and want to estimate their average wingspan. So you collect a random sample of 12 adult male birds and measure a mean wingspan of 42.6 cm, with a standard deviation of 5.3 cm.

Assume that the distribution of measurements was approximately normal.

1 of 4 02/27/2015 07:02 PM (1 point possible)

4a. What is **t-critical** for a **90%** confidence interval? (*Report as a positive value to 3 decimal places.*)

Answer: 1.796

Hide Answer

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(1 point possible)

4b. Calculate a **90% confidence interval** for the mean wingspan for the population of male peregrine falcons. (*Round to 2 decimal places.*)

Lower-bound

Answer: 39.85

Hide Answer

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(1 point possible)

Upper-bound (Round to 2 decimal places.)

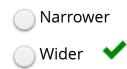
Answer: 45.35

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(1 point possible)

4c. If you calculated a **95% confidence interval** for the population mean from the same data, would your confidence interval be narrower or wider than your interval above?



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