



Bookmarks



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▶ Week 0: Introduction to Data (Optional Review)

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#### Readings

Reading Check due May 03, 2016 at 17:00 UTC

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#### Pre-Lab

Pre-Lab due May 03, 2016 at 17:00 UTC

#### Lab

Week 2: Hypothesis Testing (One Group Means) &gt; Problem Set &gt; Question 4

## 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.

(1/1 point)

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



Answer: 1.796

*You have used 1 of 1 submissions*

(1/1 point)

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

*You have used 1 of 1 submissions*

Lab due May 03, 2016  
at 17:00 UTC

**Problem Set**

Problem Set due May  
03, 2016 at 17:00 UTC

(1/1 point)

**Upper-bound** (Round to 2 decimal places.)

45.35

✓ Answer: 45.35

45.35

You have used 1 of 1 submissions

(1/1 point)

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?

☐ Narrower

☒ Wider ✓

You have used 1 of 1 submissions

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