# Exercise for Week 12

This is a preview of the published version of the quiz

Started: 4 Nov at 15:53

# Quiz instructions

Quiz time is from 9:15am to 10:30am of November 01

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## Question 1 — 1 pts

In the construction of confidence interval for $\mu$, if all other quantities are unchanged, an increase in the sample size will lead to a confidence interval whose length is

- (●) narrower
- ( ) wider
- ( ) remained the same
- ( ) unable to tell

## Question 2 — 1 pts

Let $X_1, X_2, \ldots, X_n$ be a random sample. Based on their observed values, a 95% confidence interval for the population mean $\mu$ is computed as $(-1.23, 2.11)$. Which of the following statement is **CORRECT**?

- ( ) $P(-1.23 < \mu < 2.11) \geq 95\%$
- ( ) Since the confidence interval contains 0, with 95% probability $\mu$ is equal to 0.
- ( ) $P(-1.23 < \mu < 2.11) = 95\%$
- (●) None of the given options

## Question 3

1 pts

When performing a test regarding the population mean $\mu$, we decide not to reject $H_0$ when $\overline{X} > 3$. It is known that $n = 50$. If the true value for $\mu$ is $\mu = 3$, what is (approx) the probability of type II error?

- 0.3
- 0.5
- 0.6
- not sufficient information to compute

Saved at 15:53 Submit quiz