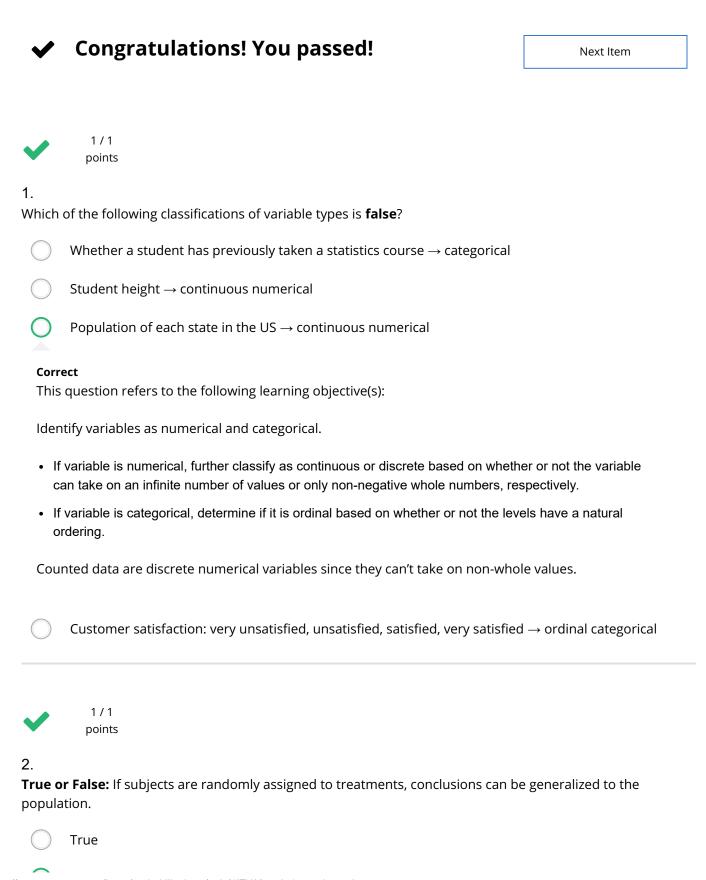
## Week 1 Practice Quiz

5/5 points (100.00%)

Practice Quiz, 5 questions





## Week 1 Practice Quiz

5/5 points (100.00%)

Practice Quitis squestions refers to the following learning objective(s):

Classify a study as observational or experimental, and determine whether the study's results can be generalized to the population and whether they suggest correlation or causation.

- If random sampling has been employed in data collection, the results should be generalizable to the target population.
- · If random assignment has been employed in study design, the results suggest causality.

Random assignment allows us to make causal conclusions. For generalizability, we need random sampling.



1/1 points

3.

As part of a statistics project, Andrea would like to collect data on household size in her city. To do so, she asks each person in her statistics class for the size of their household, and reports that her sample is a simple random sample. However, this is not a simple random sample. Which of the following is the **best** reasoning for why this is not a random sample that is appropriate for this research question?

Andrea did not block for any variables that might influence the response.



Andrea did not use any randomization; she took a convenience sample.

## Correct

This question refers to the following learning objective(s):

Distinguish between simple random, stratified, and cluster sampling, and recognize the benefits and drawbacks of choosing one sampling scheme over another.

Andrea did not use a stratified sample.



1/1 points

4

Which of the following is not one of the four principles of experimental design?



## Correct

Week 1 Practice Ouiz design and recognize their purposes: control any possible confounders, randomize into treat he wints (100.00%)
Practice ထုတ်ရုံး <b>rolegica ups</b> , replicate by using a sufficiently large sample or repeating the experiment, and block
any variables that might influence the response.
O wan damira
randomize
replicate
1/1 points
5.
True or False: Stratified sampling allows for controlling for possible confounders in the sampling stage, while blocking allows for controlling for such variables during random assignment.
True
Correct  Stratifying and blocking both allow for controlling for potential confounders, but at different stages of the study design. We stratify when we sample (divide population into strata and sample from within
each stratum), and block in the process of random assignment (divide sample into blocks and randomly assign from within each block to treatment groups).
False
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