

✔ Congratulations! You passed!

Grade
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To pass 80% or
higher

Go to next item

1. Fill in the blank: The chi-squared _____ of fit test determines whether an observed categorical variable follows an expected distribution.

1 / 1 point

- ☐ variance
☒ goodness
☐ bias
☐ independence

✔ Correct

2. Fill in the blank: Analysis of variance examines the relationship between _____.

1 / 1 point

- ☐ dependent and independent variables
☐ initial and second hypothesis variables
☐ null and alternative variables
☒ categorical and continuous variables

✔ Correct

3. A data professional at an online retailer wants to understand the expected outcome of an upcoming sale. They perform a test that compares the means of one continuous dependent variable based on five groups of two categorical variables. What type of test does this scenario describe?

1 / 1 point

- ☐ One-way analysis of variance
☐ T-test
☒ Two-way analysis of variance
☐ Post hoc test

✔ Correct

4. The post hoc test performs a pairwise comparison between all available groups while controlling for what?

1 / 1 point

- ☐ bias
☐ median
☐ mean
☒ error rate

✔ Correct

5. A data professional needs to answer a question about company financials. They study the relationship between categorical and continuous variables to control for the effect of variables that are unrelated to the financial question. What type of statistical technique do they use?

0 / 1 point

- ☐ Analysis of regression
☐ Analysis of covariance
☒ Analysis of variance
☐ Analysis of independence

✘ Incorrect
Review [the video about statistical techniques](#).

6. Fill in the blank: When using _____, the independent variables must be categorical and the outcome variables must be continuous.

1 / 1 point

- ☐ analysis of variance

- ☐ multiple analysis of variables
- ☐ analysis of variables
- ☒ multivariate analysis of variance

✓ Correct

7. A data analytics team is tasked with studying the relationship between one categorical variable and two or more continuous dependent variables, while controlling for covariates. What statistical technique should they use?

1 / 1 point

- ☒ MANCOVA
- ☐ MANOVA
- ☐ Two-way ANOVA
- ☐ ANCOVA

✓ Correct