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| 1. The most used multivariate data analysis technique in applied marketing research is   |  |  |  | | --- | --- | --- | |  | a. | regression analysis. | |  | b. | frequency analysis. | |  | c. | paired sample t-test. | |  | d. | cross tabulation. | |  | e. | Cramer's V. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | The most used multivariate data analysis technique is cross tabulation. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.01 - Discuss why a researcher might conduct a multivariate analysis. | | *DATE CREATED:* | 7/31/2017 4:48 AM | | *DATE MODIFIED:* | 7/31/2017 4:49 AM | |

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| 2. Which of the following is a technique that measures the closeness of the relationship between two or more variables by considering their joint variation?   |  |  |  | | --- | --- | --- | |  | a. | Correlation analysis | |  | b. | Analysis of variance (ANOVA) | |  | c. | Multiple regression analysis | |  | d. | z-test | |  | e. | F-test |  |  |  | | --- | --- | | *ANSWER:* | a | | *RATIONALE:* | This describes correlation analysis. See 18-4: Pearson Product-Moment Correlation Coefficient. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.05 - Discuss the Pearson product-moment correlation coefficient. | | *DATE CREATED:* | 7/31/2017 4:56 AM | | *DATE MODIFIED:* | 7/31/2017 4:58 AM | |

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| 3. Which of the following is a technique that measures the association between a criterion variable and one or more independent variables?   |  |  |  | | --- | --- | --- | |  | a. | Correlation analysis | |  | b. | Analysis of variance | |  | c. | Regression analysis | |  | d. | z-test | |  | e. | F-test |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | This describes regression analysis. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 4:59 AM | | *DATE MODIFIED:* | 7/31/2017 5:02 AM | |

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| 4. To determine the degree to which the variables in a cross-tabulation analysis are independent of one another, a researcher should use   |  |  |  | | --- | --- | --- | |  | a. | a cross tabulation variable independence test. | |  | b. | the Pearson chi-square test of independence. | |  | c. | regression analysis. | |  | d. | Cramer's V. | |  | e. | Kendall's coefficient of concordance. |  |  |  | | --- | --- | | *ANSWER:* | b | | *RATIONALE:* | The Pearson chi-square test of independence is used to determine the degree to which the variables in a cross-tabulation analysis are independent of one another. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 5:03 AM | | *DATE MODIFIED:* | 7/31/2017 5:05 AM | |

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| 5. Which of the following statements about regression/correlation analysis is FALSE?   |  |  |  | | --- | --- | --- | |  | a. | Correlation analysis involves the measurement of the closeness of the relationship between two or more variables. | |  | b. | Regression analysis involves the derivation of an equation that relates the criterion variable to one or more predictor variables. | |  | c. | Regression analysis can establish the causal relationship between two or more variables. | |  | d. | The regression line minimizes the sum of the squared deviations about the line. | |  | e. | It is much more common to conduct regression analyses using a computer. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | All of these statements are true except that regression analysis can establish the causal relationship between two or more variables. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 5:06 AM | | *DATE MODIFIED:* | 7/31/2017 5:08 AM | |

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| 6. Which of the following emphasizes the division of the sample into subgroups so as to learn how the dependent variable varies from subgroup to subgroup?   |  |  |  | | --- | --- | --- | |  | a. | Longitudinal analysis | |  | b. | Coding | |  | c. | Cross-sectional analysis | |  | d. | Cross tabulation | |  | e. | One-way tabulation |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | This describes cross tabulation. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 5:09 AM | | *DATE MODIFIED:* | 7/31/2017 5:11 AM | |

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| 7. Which of the following statements about the Pearson chi-square test of independence is NOT true?   |  |  |  | | --- | --- | --- | |  | a. | It assesses the degree to which variables in a cross-tabulation are independent of one another. | |  | b. | The value can range from zero to some upper value limited by sample size and distribution of cases across the cells. | |  | c. | It doesn't measure the strength of association when variables are dependent. | |  | d. | It is only useful for univariate analysis. | |  | e. | All of these statements are true. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | All of these statements are true except that it is only useful for univariate analysis. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 5:12 AM | | *DATE MODIFIED:* | 7/31/2017 5:15 AM | |

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| 8. A series of cross-tabulations between an outcome variable and several possible causal variables presented in a single table on a single page is known as a(n)   |  |  |  | | --- | --- | --- | |  | a. | tabulation template. | |  | b. | tabulation matrix. | |  | c. | banner table. | |  | d. | causal digest. | |  | e. | analysis legend. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | A banner table is a series of cross-tabulations between an outcome variable and several possible causal variables presented in a single table on a single page. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 5:16 AM | | *DATE MODIFIED:* | 7/31/2017 5:18 AM | |

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| 9. Given a cross tabulation between years of education and income, we would compute percentages in the direction of years of education because   |  |  |  | | --- | --- | --- | |  | a. | the probability that given X income you will have Y years of education makes sense. | |  | b. | the probability that given X years of education you will have Y income makes sense. | |  | c. | It doesn't matter which way you do it. | |  | d. | All of these are correct. | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | b | | *RATIONALE:* | Percentages would be calculated in the direction of years of education because the probability that given X years of education you will have Y income makes sense. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 5:18 AM | | *DATE MODIFIED:* | 9/21/2017 11:21 AM | |

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| 10. A researcher is interested in comparing the usage of bank debit cards by consumers in rural (r) and urban (u) areas. Each year for the past five years, she has surveyed 500 individuals (one-half urban, one-half rural) randomly selected from across the United States. She is specifically interested in any differences that may exist between the two groups with regard to usage. The results of the current study indicate that people in urban areas use bank debit cards 12 times per month on average, while those in rural areas use bank cards 10 times per month on average. Assuming that the standard error of estimate for the difference in means is 1.5, calculate the value of the test statistic that would be used in the comparison of the two means.   |  |  |  | | --- | --- | --- | |  | a. | 0.75 | |  | b. | 1.33 | |  | c. | 1.88 | |  | d. | 1.96 | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | b | | *RATIONALE:* | The value of the test statistic would be 1.33. See 18-2: Independent Samples T-Test for Means. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.04 - Explain the difference between an independent sample t-test for means and a paired sample t-test for means. | | *DATE CREATED:* | 7/31/2017 5:25 AM | | *DATE MODIFIED:* | 7/31/2017 5:28 AM | |

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| 11. A researcher is interested in comparing the usage of bank debit cards by consumers in rural (r) and urban (u) areas. Each year for the past five years, she has surveyed 500 individuals (one-half urban, one-half rural) randomly selected from across the United States. She is specifically interested in any differences that may exist between the two groups with regard to usage. The results of the current study indicate that people in urban areas use bank debit cards 12 times per month on average, while those in rural areas use bank cards 10 times per month on average. Given that the critical value that the test statistic is to be compared with is equal to 1.645 at a 90% significance level, which of the following statements are true?   |  |  |  | | --- | --- | --- | |  | a. | The researcher should reject the null hypothesis at the 90% significance level. | |  | b. | The researcher might be able to reject the null hypothesis at the 95% level of significance. | |  | c. | The researcher cannot reject the null hypothesis at this significance level. | |  | d. | The researcher has provided evidence that people in urban areas use bank debit cards more than people in rural areas. | |  | e. | More information is needed before a decision about the null hypothesis can be made. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | The researcher cannot reject the null hypothesis at this significance level. See 18-2: Independent Samples T-Test for Means. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.04 - Explain the difference between an independent sample t-test for means and a paired sample t-test for means. | | *DATE CREATED:* | 7/31/2017 5:29 AM | | *DATE MODIFIED:* | 7/31/2017 5:36 AM | |

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| 12. Suppose that the relationship between sales (Y, in $000) and number of salespeople (X) is represented by the following regression equation: Y = 105.2 + 35.8X. What will be the average contribution to sales of one additional salesperson?   |  |  |  | | --- | --- | --- | |  | a. | $35.80 | |  | b. | $141,000 | |  | c. | $35,800 | |  | d. | $141.00 | |  | e. | More information is needed to answer this question. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | The average contribution to sales of one additional salesperson would be $35,800. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 5:37 AM | | *DATE MODIFIED:* | 7/31/2017 5:39 AM | |

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| 13. Suppose that the relationship between sales (Y, in $000) and number of salespeople (X) is represented by the following regression equation: Y = 105.2 + 35.8X. What will average sales be equal to when 10 salespeople are used?   |  |  |  | | --- | --- | --- | |  | a. | $358,000 | |  | b. | $463.20 | |  | c. | $358.00 | |  | d. | $463,200 | |  | e. | More information is needed to answer this question. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | The average sales will be equal to $463,200 when 10 sales people are used. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 5:40 AM | | *DATE MODIFIED:* | 7/31/2017 5:42 AM | |

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| 14. Suppose the ordinary least-squares approach to a regression analysis produced the following: Y = 20 - 39X and R2 = .90. Which of the following statements is FALSE?   |  |  |  | | --- | --- | --- | |  | a. | For every unit change in X there is a corresponding negative change in the average value of Y of 39 units. | |  | b. | 90% of the variation in Y is associated with variation in X. | |  | c. | The slope of the line is 20. | |  | d. | The average value of Y given x = 10 is −370. | |  | e. | If X = 0, then Y = 20. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | All of the statements are true except that the slope of the line is 20. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 5:43 AM | | *DATE MODIFIED:* | 7/31/2017 5:45 AM | |

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| 15. An analyst has a set of normally distributed internally scaled data resulting from two observations on the same sample of subjects, and he wishes to investigate if there is any difference in these two means. The appropriate statistical procedure is   |  |  |  | | --- | --- | --- | |  | a. | a z-test for difference in two means. | |  | b. | analysis of variance (ANOVA). | |  | c. | a paired samples t-test. | |  | d. | a chi-square goodness-of-fit test. | |  | e. | regression analysis. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | The appropriate procedure is a paired samples t-test. See 18-3: Paired Sample T-Test for Means. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.04 - Explain the difference between an independent sample t-test for means and a paired sample t-test for means. | | *DATE CREATED:* | 7/31/2017 6:10 AM | | *DATE MODIFIED:* | 7/31/2017 6:12 AM | |

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| 16. If the correlation between two variables x and y is equal to −0.90, which of the following is TRUE?   |  |  |  | | --- | --- | --- | |  | a. | x and y are highly related, whereby a positive change in x is accompanied by a positive change in y. | |  | b. | The two variables x and y are not related to one another. | |  | c. | x and y are highly related, whereby a negative change in x is accompanied by a positive change in y. | |  | d. | The coefficient of determination is equal to −0.81. | |  | e. | An increase in x is accompanied by a decrease in y. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | x and y are highly related, whereby a negative change in x is accompanied by a positive change in y. See 18-4: Pearson Product-Moment Correlation Coefficient. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.05 - Discuss the Pearson product-moment correlation coefficient. | | *DATE CREATED:* | 7/31/2017 6:13 AM | | *DATE MODIFIED:* | 7/31/2017 6:16 AM | |

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| 17. The value of the product-moment coefficient of correlation ranges from   |  |  |  | | --- | --- | --- | |  | a. | −1.0 to 0.0. | |  | b. | −1.0 to 1.0. | |  | c. | −0.5 to 0.5. | |  | d. | 0.0 to 1.0. | |  | e. | −∞ to ∞. |  |  |  | | --- | --- | | *ANSWER:* | b | | *RATIONALE:* | The value of the product-moment coefficient of correlation ranges from −1.0 to 1.0. See 18-4: Pearson Product-Moment Correlation Coefficient. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.05 - Discuss the Pearson product-moment correlation coefficient. | | *DATE CREATED:* | 7/31/2017 6:18 AM | | *DATE MODIFIED:* | 7/31/2017 6:25 AM | |

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| 18. A brand product manager needs to know if men and women hold different attitudes about her product. What test should the brand product manager use?   |  |  |  | | --- | --- | --- | |  | a. | Cross-tabulation | |  | b. | Independent samples t-test for means | |  | c. | Pearson chi-square test of independence | |  | d. | Paired sample t-test for means | |  | e. | Regression analysis |  |  |  | | --- | --- | | *ANSWER:* | b | | *RATIONALE:* | The appropriate test would be an independent samples t-test for means. See 18-2: Independent Samples T-Test for Means. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.03 - Describe a technique for comparing groups on a continuous dependent variable. | | *DATE CREATED:* | 7/31/2017 6:26 AM | | *DATE MODIFIED:* | 7/31/2017 6:29 AM | |

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| 19. When performing cross tabulations, percentages are always calculated in the direction of the   |  |  |  | | --- | --- | --- | |  | a. | dependent variable. | |  | b. | independent variable. | |  | c. | causal variable. | |  | d. | dependent and causal variables. | |  | e. | independent and causal variables. |  |  |  | | --- | --- | | *ANSWER:* | e | | *RATIONALE:* | When performing cross tabulations, percentages are always calculated in the direction of the independent and causal variable. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 6:30 AM | | *DATE MODIFIED:* | 9/21/2017 11:22 AM | |

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| 20. In testing a multiple regression equation for statistical significance, the first step involves   |  |  |  | | --- | --- | --- | |  | a. | testing the intercept term using a t-test. | |  | b. | using a t-test to examine the significance of the overall equation. | |  | c. | using an F-test to examine the significance of the overall equation. | |  | d. | testing each of the slope coefficients using a t-test. | |  | e. | testing each of the slope coefficients using an F-test. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | The first step is using an F-test to examine the significance of the overall equation. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 6:35 AM | | *DATE MODIFIED:* | 7/31/2017 6:39 AM | |

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| 21. Which of the assumptions listed below are necessary in order for the coefficients in a partial regression equation to be interpreted as the average change in the criterion variable associated with a unit change in the appropriate predictor variable holding other predictor variables constant?   |  |  |  | | --- | --- | --- | |  | a. | The predictor variables must be correlated. | |  | b. | The variance among predictor variables must be equal. | |  | c. | The criterion variable must be normally distributed. | |  | d. | The predictor variables must be uncorrelated. | |  | e. | None of these are necessary assumptions. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | The predictor variables must be uncorrelated. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 6:41 AM | | *DATE MODIFIED:* | 7/31/2017 6:45 AM | |

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| 22. Assuming the two predictors X1 and X2 are not correlated, the coefficients of partial regression can be interpreted as the   |  |  |  | | --- | --- | --- | |  | a. | unit change in the criterion variable associated with an average change in the appropriate predictor variable while holding the other predictor variable constant. | |  | b. | change in the criterion variable associated with an average change in the predictor variables. | |  | c. | average change in the criterion variable associated with an average change in the appropriate predictor variable while holding the other predictor variable constant. | |  | d. | average change in the criterion variable associated with a unit change in the appropriate predictor variable while holding the other predictor variable constant. | |  | e. | average change in the criterion variable associated with a unit change in the appropriate predictor variable. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | The coefficients of partial regression can be interpreted as the average change in the criterion variable associated with a unit change in the appropriate predictor variable while holding the other predictor variable constant. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 6:46 AM | | *DATE MODIFIED:* | 7/31/2017 6:49 AM | |

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| 23. When comparing the independent samples t-test for means and the paired sample t-test for means, one is for   |  |  |  | | --- | --- | --- | |  | a. | univariate analysis while the other is for multivariate analysis. | |  | b. | small sample sizes while the other is for large sample sizes. | |  | c. | continuous variables while the other is for categorical variables. | |  | d. | measures from separate groups while the other is for measures from the same group. | |  | e. | All of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | One is for measures from separate groups while the other is for measures from the same group. See 18-2: Independent Samples T-Test for Means. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.03 - Describe a technique for comparing groups on a continuous dependent variable. | | *DATE CREATED:* | 7/31/2017 6:50 AM | | *DATE MODIFIED:* | 7/31/2017 6:53 AM | |

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| 24. Which of the following is FALSE about cross tabulations?   |  |  |  | | --- | --- | --- | |  | a. | Cross tabulations work equally well with continuous measures that have been recast as categorical measures. | |  | b. | Cross tabulations are used for studying the relationships between two (or more) categorical variables. | |  | c. | Recasting continuous measures into categories may result in lowered statistical power. | |  | d. | Cross tabulation seeks to investigate the influence of the independent variable on the dependent variable. | |  | e. | Recasting continuous measures into categories almost never results in the loss of information. |  |  |  | | --- | --- | | *ANSWER:* | e | | *RATIONALE:* | All of these are true except that recasting continuous measures into categories almost never results in the loss of information. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 6:53 AM | | *DATE MODIFIED:* | 7/31/2017 6:55 AM | |

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| 25. The upper limit of the Pearson chi-square test of independence is limited by   |  |  |  | | --- | --- | --- | |  | a. | sample size. | |  | b. | the distribution of cases across the cells. | |  | c. | degrees of freedom. | |  | d. | sample size and distribution of cases across the cells. | |  | e. | sample size and degrees of freedom. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | The upper limit of the Pearson chi-square test of independence is limited by sample size and the distribution of cases across the cells. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 6:57 AM | | *DATE MODIFIED:* | 9/21/2017 11:23 AM | |

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| 26. Which of the following concerning the Pearson chi-square test is FALSE?   |  |  |  | | --- | --- | --- | |  | a. | The Pearson chi-square test is conceptually similar to the chi-square goodness-of-fit test. | |  | b. | The Pearson chi-square test tests the null hypothesis that the variables are independent. | |  | c. | The Pearson chi-square test measures the degree of association between variables. | |  | d. | The Pearson chi-square test assesses the degree to which the two variables in a cross tabulation analysis are independent of one another. | |  | e. | All of the these statements concerning the Pearson chi-square test are true. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | All of these are true except that the Pearson chi-square test measures the degree of association between variables. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 7:03 AM | | *DATE MODIFIED:* | 7/31/2017 7:06 AM | |

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| 27. A popular approach to measuring the strength of the relationship between two categorical variables is   |  |  |  | | --- | --- | --- | |  | a. | cross tabulation. | |  | b. | Pearson chi-square test of independence. | |  | c. | Cramer's V. | |  | d. | regression analysis. | |  | e. | Kendall's coefficient of concordance. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | Cramer’s V is a popular approach to measuring the strength of the relationship between two categorical variables. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 7:09 AM | | *DATE MODIFIED:* | 7/31/2017 7:12 AM | |

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| 28. Cramer's V is scaled to range between   |  |  |  | | --- | --- | --- | |  | a. | 0.0 and 1.0. | |  | b. | −1.0 and 0.0. | |  | c. | −1.0 and 1.0. | |  | d. | 0.0 to ∞. | |  | e. | −∞ to ∞. |  |  |  | | --- | --- | | *ANSWER:* | a | | *RATIONALE:* | Cramer's V is scaled to range between 0.0 and 1.0. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 7:13 AM | | *DATE MODIFIED:* | 7/31/2017 7:18 AM | |

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| 29. A gum manufacturer wants to determine whether blue packaging or red packaging is preferred. The company performs a sales test by introducing red packages into a random sample of ten stores, and blue packages are introduced in an independent, random sample of ten stores. The technique most appropriate for analyzing the data is   |  |  |  | | --- | --- | --- | |  | a. | a paired sample t-test for means. | |  | b. | the Spearman rank-order correlation analysis. | |  | c. | regression analysis. | |  | d. | an independent samples t-test for means. | |  | e. | correlation analysis. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | The most appropriate technique is the independent samples t-test for means. See 18-2: Independent Samples T-Test for Means. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.03 - Describe a technique for comparing groups on a continuous dependent variable. | | *DATE CREATED:* | 7/31/2017 7:18 AM | | *DATE MODIFIED:* | 7/31/2017 7:23 AM | |

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| 30. A gas station wants to compare a group of consumers' overall perceptions of service with overall perceptions of service for a nearby competitor. This situation calls for the use of   |  |  |  | | --- | --- | --- | |  | a. | a paired sample t-test for means. | |  | b. | analysis of variance (ANOVA). | |  | c. | regression analysis. | |  | d. | an independent samples t-test for means. | |  | e. | correlation analysis. |  |  |  | | --- | --- | | *ANSWER:* | b | | *RATIONALE:* | This situation calls for the use of ANOVA. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 7:33 AM | | *DATE MODIFIED:* | 7/31/2017 7:37 AM | |

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| 31. In ANOVA, the independent variables are typically called   |  |  |  | | --- | --- | --- | |  | a. | treatments. | |  | b. | factors. | |  | c. | F-statistics. | |  | d. | causal variables. | |  | e. | tabulations. |  |  |  | | --- | --- | | *ANSWER:* | b | | *RATIONALE:* | The independent variables are typically called factors. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 7:37 AM | | *DATE MODIFIED:* | 7/31/2017 7:41 AM | |

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| 32. In ANOVA, a \_\_\_\_ allows a researcher to examine simultaneously the effects of two or more independent variables.   |  |  |  | | --- | --- | --- | |  | a. | cross tabulation | |  | b. | scatter diagram | |  | c. | correlation coefficient | |  | d. | factorial design | |  | e. | coefficient of determination |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | In ANOVA, a factorial design allows a researcher to examine simultaneously the effects of two or more independent variables. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 7:42 AM | | *DATE MODIFIED:* | 7/31/2017 7:57 AM | |

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| 33. If the null hypothesis of no differences across groups is true,   |  |  |  | | --- | --- | --- | |  | a. | total variation should be equal to between-group variation. | |  | b. | between-group variation should be equal to within-group variation. | |  | c. | within-group variation should be equal to total variation. | |  | d. | None of these are correct. | |  | e. | All of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | e | | *RATIONALE:* | All of these are true if the null hypothesis of no differences across groups is true. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 7:59 AM | | *DATE MODIFIED:* | 9/21/2017 11:24 AM | |

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| 34. The numerator in the Pearson product-moment correlation coefficient formula   |  |  |  | | --- | --- | --- | |  | a. | is called the cross-products sum. | |  | b. | establishes the degree of covariation between two variables. | |  | c. | can range from −1.0 to +1.0. | |  | d. | is called the cross-products sum and establishes the degree of covariation between two variables. | |  | e. | is called the cross-product sum and can range from −1.0 to +1.0. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | The numerator in the Pearson product-moment correlation coefficient formula is called the cross-products sum and establishes the degree of covariation between two variables. See 18-4: Pearson Product-Moment Correlation Coefficient. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.05 - Discuss the Pearson product-moment correlation coefficient. | | *DATE CREATED:* | 7/31/2017 8:05 AM | | *DATE MODIFIED:* | 9/21/2017 11:24 AM | |

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| 35. If a researcher were to take ten Asian countries where per capita income and automobile ownership by per capita were known, trying to find the overall picture of market size for the market could probably be done by using which of the following methods?   |  |  |  | | --- | --- | --- | |  | a. | Analogy method | |  | b. | Latin square | |  | c. | Trade audit | |  | d. | Chain ratio method | |  | e. | Regression analysis |  |  |  | | --- | --- | | *ANSWER:* | e | | *RATIONALE:* | Regression analysis is the most appropriate method. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 8:09 AM | | *DATE MODIFIED:* | 7/31/2017 8:11 AM | |

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| 36. Which statistical technique should you use to answer the question: "Is there a significant relation-ship between education level (a four-category ordinal variable) and whether or not consumers are aware that Firestone is a brand of tires?"   |  |  |  | | --- | --- | --- | |  | a. | Multiple regression analysis | |  | b. | Pearson correlation coefficient | |  | c. | Chi-square test | |  | d. | Simple regression analysis | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | The Chi-square test is appropriate. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 8:19 AM | | *DATE MODIFIED:* | 7/31/2017 8:21 AM | |

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| 37. If an organization selects two towns for a market study (one for the test and the other as a control) and measures the amount of trash in pounds per household, it must first determine the equality of the two towns using a test of   |  |  |  | | --- | --- | --- | |  | a. | a single proportion. | |  | b. | a single mean. | |  | c. | two means. | |  | d. | two proportions. | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | A test of two means would be appropriate. See 18-3: Paired Sample T-Test for Means. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.04 - Explain the difference between an independent sample t-test for means and a paired sample t-test for means. | | *DATE CREATED:* | 7/31/2017 8:23 AM | | *DATE MODIFIED:* | 7/31/2017 8:25 AM | |

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| 38. A research study involving the research question: "On the basis of a survey of husband-wife house-holds, is there a significant difference between the mean attitude score of husbands and that of wives toward our product?" will involve a test   |  |  |  | | --- | --- | --- | |  | a. | for a single proportion. | |  | b. | of two means when samples are independent. | |  | c. | for a single mean. | |  | d. | of two means when samples are dependent. | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | This will involve a test of two means when samples are dependent. See 18-3: Paired Sample T-Test for Means. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.04 - Explain the difference between an independent sample t-test for means and a paired sample t-test for means. | | *DATE CREATED:* | 7/31/2017 8:28 AM | | *DATE MODIFIED:* | 7/31/2017 8:29 AM | |

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| 39. If a = 0.152 and b = 1.32, the simple regression equation is   |  |  |  | | --- | --- | --- | |  | a. | Yi = 1.32 − 0.152 Xi | |  | b. | Yi = 0.152 + 1.32 Xi | |  | c. | Yi = 0.152 − 1.32 Xi | |  | d. | Yi = 0.152/1.32 + Xi | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | b | | *RATIONALE:* | Yi = 0.152 + 1.32 Xi. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 8:32 AM | | *DATE MODIFIED:* | 7/31/2017 8:35 AM | |

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| 40. Which statistical technique should you use when you are attempting to answer the question: "Is there a significant relationship between the customers' disposable income (measured in dollars) and their repeat-buying behavior (measured by the number of rebuys in a twelve-month period)?"   |  |  |  | | --- | --- | --- | |  | a. | Multiple regression analysis | |  | b. | Chi-Square test | |  | c. | Simple regression analysis | |  | d. | Pearson correlation coefficient | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | The Pearson correlation coefficient is the appropriate technique. See 18-4: Pearson Product-Moment Correlation Coefficient. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.05 - Discuss the Pearson product-moment correlation coefficient. | | *DATE CREATED:* | 7/31/2017 8:37 AM | | *DATE MODIFIED:* | 7/31/2017 8:39 AM | |

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| 41. Which of the following statements about the interpretation of correlations is NOT true?   |  |  |  | | --- | --- | --- | |  | a. | Just because two variables are correlated doesn't mean that one necessarily caused the other. | |  | b. | There is nothing in correlation analysis that can be used to establish causality. | |  | c. | When you obtain a statistically significant correlation coefficient between two variables, you can safely assume that one variable caused another. | |  | d. | All that analytical procedures can do is measure the nature and degree of association between variables. | |  | e. | Statements of causality must come from underlying knowledge and theories about the phenomena under investigation. |  |  |  | | --- | --- | | *ANSWER:* | c | | *RATIONALE:* | All of these are true except that when you obtain a statistically significant correlation coefficient between two variables, you can safely assume that one variable caused another. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 8:42 AM | | *DATE MODIFIED:* | 7/31/2017 8:44 AM | |

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| 42. Multiple regression analysis is useful when there are \_\_\_\_ independent variable(s) and \_\_\_\_ dependent variable(s).   |  |  |  | | --- | --- | --- | |  | a. | more than one, one | |  | b. | one, more than one | |  | c. | more than one, more than one | |  | d. | one, one | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | a | | *RATIONALE:* | Multiple regression analysis is useful when there are more than one independent variable(s) and one dependent variable(s). See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Remember | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 8:46 AM | | *DATE MODIFIED:* | 7/31/2017 8:48 AM | |

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| 43. In which of the following situations would it be useful to test for differences between two groups?   |  |  |  | | --- | --- | --- | |  | a. | A retailer wishes to know if customer satisfaction is different between in-store vs. online shoppers. | |  | b. | A beverage company wants to know if a new beverage concept differs between users vs. nonusers of the current brand. | |  | c. | A department store wishes to know the differences between online catalogs vs. mail order catalog shoppers. | |  | d. | A state university wants to know is there is a significant difference in GPA between undergradu-ate and graduate students. | |  | e. | All of these situations would benefit from tests for differences between two groups. |  |  |  | | --- | --- | | *ANSWER:* | e | | *RATIONALE:* | All of these would benefit. See 18-3: Paired Sample T-Test for Means. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.04 - Explain the difference between an independent sample t-test for means and a paired sample t-test for means. | | *DATE CREATED:* | 7/31/2017 8:51 AM | | *DATE MODIFIED:* | 7/31/2017 8:53 AM | |

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| 44. When a computed z-value (for a test for differences between two percentages), say 4.51, is larger than the standard z-value, say 1.96, then this amounts to   |  |  |  | | --- | --- | --- | |  | a. | support for the null hypothesis; the two percentages are different. | |  | b. | no support for the null hypothesis; the two percentages are not different. | |  | c. | support for the null hypothesis; the two percentages is not different. | |  | d. | no support for the null hypothesis; the two percentages are different. | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | This amounts to no support for the null hypothesis; the two percentages are different. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 8:55 AM | | *DATE MODIFIED:* | 7/31/2017 8:57 AM | |

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| 45. Let's assume there are sophomores, juniors, and seniors in your marketing research class and we want to know if their average GPAs differ. What is the proper statistical test?   |  |  |  | | --- | --- | --- | |  | a. | t-test | |  | b. | z-test | |  | c. | Chi-square test | |  | d. | Analysis of variance (ANOVA) | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | The proper statistical method is ANOVA. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 9:00 AM | | *DATE MODIFIED:* | 7/31/2017 9:04 AM | |

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| 46. Regression analysis   |  |  |  | | --- | --- | --- | |  | a. | is a means for getting at the nature of the relationship between one or more predictor variables and an outcome variable. | |  | b. | "regresses" the independent variable on the set of outcome variables. | |  | c. | produces regression coefficients for each of the predictor variables. | |  | d. | All of these are correct. | |  | e. | is a means for getting at the nature of the relationship between one or more predictor variables and an outcome variable and produces regression coefficients for each of the predictor variables. |  |  |  | | --- | --- | | *ANSWER:* | e | | *RATIONALE:* | Regression analysis is a means for getting at the nature of the relationship between one or more predictor variables and an outcome variable and produces regression coefficient for each of the predictor variables. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 9:05 AM | | *DATE MODIFIED:* | 9/21/2017 11:25 AM | |

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| 47. What should be done before trying to interpret individual regression coefficients?   |  |  |  | | --- | --- | --- | |  | a. | See whether there is an overall statistically significant relationship between the set of predictors and the outcome variable. | |  | b. | Verify that the set of predictors can explain a meaningful portion of the variation in the outcome variable. | |  | c. | Calculate the coefficient of multiple determination, or coefficient of determination, whichever is appropriate. | |  | d. | All of these are correct. | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | d | | *RATIONALE:* | Calculate the coefficient of multiple determination, or coefficient of determination, whichever is appropriate. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 9:12 AM | | *DATE MODIFIED:* | 9/21/2017 11:26 AM | |

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| 48. If we were comparing the difference between the mean number of sports drinks consumed by male vs. female athletes during a typical week, and we calculated a z value of 4.33, we would conclude that the probability of support of the   |  |  |  | | --- | --- | --- | |  | a. | null hypothesis of no difference is less than < 0.01 because 4.33 is greater than 2.58. | |  | b. | alternative hypothesis of no difference is less than < 0.01 because 4.33 is greater than 2.58. | |  | c. | null hypothesis of no difference is less than < 0.01 because 4.33 is less than 2.58. | |  | d. | alternative hypothesis of no difference is less than < 0.01 because 4.33 is less than 2.58. | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | a | | *RATIONALE:* | The probability of support of the null hypothesis of no difference is less than < 0.01 because 4.33 is greater than 2.58. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 9:17 AM | | *DATE MODIFIED:* | 7/31/2017 9:19 AM | |

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| 49. Suppose you were given an example of running a chi-square test using SPSS. The output shows a "Pearson Chi-Square" value of 82.123, df = 3 and the Asymp. Sig. = 0.000. This means   |  |  |  | | --- | --- | --- | |  | a. | there is a significant association. | |  | b. | there is no significant association. | |  | c. | the difference is associative. | |  | d. | the means are not equal. | |  | e. | the variances are equal. |  |  |  | | --- | --- | | *ANSWER:* | a | | *RATIONALE:* | There is a significant association. See 18-1: Cross Tabulation. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 9:22 AM | | *DATE MODIFIED:* | 7/31/2017 9:24 AM | |

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| 50. Assume that a researcher determines that a p-value of 0.01 or below determines significance. Listed below are several correlation coefficients and their respective significance levels. Which correlation coefficient demonstrates an association not likely due to chance (i.e., significant)?   |  |  |  | | --- | --- | --- | |  | a. | 0.22, 0.06 | |  | b. | 0.75, 0.00 | |  | c. | −0.32, 0.15 | |  | d. | −0.76, 0.95 | |  | e. | 0.26, 0.10 |  |  |  | | --- | --- | | *ANSWER:* | b | | *RATIONALE:* | 0.75, 0.00 is an association. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 9:27 AM | | *DATE MODIFIED:* | 7/31/2017 9:29 AM | |

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| 51. Let's assume we find in a study that the Pearson's correlation coefficient between number of years of education and cigarette smoking is −0.73. This means that as education level increases,   |  |  |  | | --- | --- | --- | |  | a. | smoking tends to increase. | |  | b. | smoking tends to decrease. | |  | c. | smoking changes 73%. | |  | d. | Education and smoking are unrelated. | |  | e. | An educated person smokes 73 cigarettes a day. |  |  |  | | --- | --- | | *ANSWER:* | b | | *RATIONALE:* | As education level increases, smoking tends to decrease. See 18-4: Pearson Product-Moment Correlation Coefficient. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.05 - Discuss the Pearson product-moment correlation coefficient. | | *DATE CREATED:* | 7/31/2017 9:32 AM | | *DATE MODIFIED:* | 7/31/2017 9:35 AM | |

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| 52. The NFL office discovered data covering attendance at professional football games in the late 1940s and early 1950s. The game with the highest attendance was between the St. Louis Cardinals and the New York Giants. The office also found considerable information that someone had collected on each game day such as the level of GDP, the Dow, number of persons employed, number of new businesses formed during the week preceding the game, and the population. A student intern took the information and built a regression model to predict game attendance for the upcoming season. The model should   |  |  |  | | --- | --- | --- | |  | a. | accurately predict game attendance. | |  | b. | NOT predict game attendance accurately because the variable levels of today (i.e., population, Dow, etc.) are out of range of those used to build the regression model. | |  | c. | predict game attendance accurately because the variable levels of today (i.e., population, Dow, etc.) are out of range of those used to build the regression model. | |  | d. | predict game attendance accurately because the variable levels (i.e., population, Dow, etc.) are within range of those used to build the regression model. | |  | e. | None of these are correct. |  |  |  | | --- | --- | | *ANSWER:* | b | | *RATIONALE:* | The model should not predict game attendance accurately because the variable levels of today (i.e., population, Dow, etc.) are out of range of those used to build the regression model. See 18-5: Regression Analysis. | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Apply | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 9:38 AM | | *DATE MODIFIED:* | 7/31/2017 9:42 AM | |

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| 53. If the F-value in ANOVA produces a significantly high p-value (a.k.a. "Sig." in SPSS) of 0.11 or more, then it is appropriate to proceed with a post-hoc test (e.g., Duncan).   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 9:45 AM | | *DATE MODIFIED:* | 7/31/2017 9:48 AM | |

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| 54. In the chi-square analysis, the greater the differences between the observed frequencies and the expected frequencies, the less likely it is that there will be a statistically significant relationship.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 9:52 AM | | *DATE MODIFIED:* | 7/31/2017 9:53 AM | |

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| 55. If you have a significant and very strong (e.g., > 0.90) correlation coefficient, you may assume there is a causal relationship between the two variables.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.05 - Discuss the Pearson product-moment correlation coefficient. | | *DATE CREATED:* | 7/31/2017 9:56 AM | | *DATE MODIFIED:* | 7/31/2017 9:57 AM | |

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| 56. The manager of the New England Patriots conducted a large survey. He wanted to know if there was an association between fans being "season ticket holders" vs. "non-season ticket holders" and whether they "bought" vs. "didn't buy" team merchandise at the game. Because his survey included these measurements, he used SPSS to run a Pearson correlation coefficient that turned out to be 0.88 with a Sig. value of .001. This meant there is a significant relationship.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.05 - Discuss the Pearson product-moment correlation coefficient. | | *DATE CREATED:* | 7/31/2017 10:00 AM | | *DATE MODIFIED:* | 7/31/2017 10:01 AM | |

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| 57. Olive Garden restaurants know that customers drink beverages for lunch and alcoholic drinks at supper. This is an example of an associative type of relationship.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 10:04 AM | | *DATE MODIFIED:* | 7/31/2017 10:05 AM | |

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| 58. Carters, a marketer of children apparel, knows that as girls increase in age, their dress size tends to get larger. This is an example of a causal type of relationship.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 10:08 AM | | *DATE MODIFIED:* | 7/31/2017 10:09 AM | |

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| 59. The multiple R, also called the coefficient of determination, in multiple regression ranges from 0.00 to +1.00 and represents the amount of the dependent variable "explained" by the combined independent variables.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 10:13 AM | | *DATE MODIFIED:* | 7/31/2017 10:14 AM | |

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| 60. In multiple regression analysis, *t* tests are used to test for the statistical significance of betas. If a beta is insignificant, it means that its respective independent variable plays no meaningful role in predicting the dependent variable, and the independent variable should be "removed" from the model.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 10:17 AM | | *DATE MODIFIED:* | 7/31/2017 10:18 AM | |

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| 61. The simple regression technique in SPSS, not the researcher, specifies which variable should be the independent variable and which one should be the dependent variable.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 10:21 AM | | *DATE MODIFIED:* | 7/31/2017 10:22 AM | |

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| 62. In a regression analysis, determining the statistical significance of the slope involves the use of the *t*-statistic.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 10:26 AM | | *DATE MODIFIED:* | 7/31/2017 10:27 AM | |

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| 63. The magnitude of the Pearson correlation coefficient indicates the direction of association, while its sign indicates the strength of the association.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.05 - Discuss the Pearson product-moment correlation coefficient. | | *DATE CREATED:* | 7/31/2017 10:30 AM | | *DATE MODIFIED:* | 7/31/2017 10:33 AM | |

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| 64. All other variables held constant, a 95% confidence interval will give us a narrower range than will a 99% confidence interval.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.04 - Explain the difference between an independent sample t-test for means and a paired sample t-test for means. | | *DATE CREATED:* | 7/31/2017 10:36 AM | | *DATE MODIFIED:* | 7/31/2017 10:38 AM | |

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| 65. A toy storeowner hypothesizes, at the 95% level of confidence, that parents spend less than $100 on toys per visit to her store. A sample is taken, and the hypothesis test shows a z value of −1.65. We accept the hypothesis.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.04 - Explain the difference between an independent sample t-test for means and a paired sample t-test for means. | | *DATE CREATED:* | 7/31/2017 10:41 AM | | *DATE MODIFIED:* | 7/31/2017 10:43 AM | |

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| 66. A statistic used to measure the strength of relationship between categorical variables is called a Cramer's V.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 10:52 AM | | *DATE MODIFIED:* | 7/31/2017 10:53 AM | |

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| 67. Correlation analysis, along with other mathematical procedures, can be used to establish causality.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 10:54 AM | | *DATE MODIFIED:* | 7/31/2017 10:54 AM | |

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| 68. Cross tabulation works equally well with continuous measures that have been recast as categorical measures.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 10:55 AM | | *DATE MODIFIED:* | 7/31/2017 10:55 AM | |

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| 69. The error term in the regression model represents all factors that determine the criterion variables that are not part of the model.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 10:56 AM | | *DATE MODIFIED:* | 7/31/2017 10:56 AM | |

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| 70. Percentages are always calculated in the direction of the causal variable.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 10:57 AM | | *DATE MODIFIED:* | 7/31/2017 10:57 AM | |

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| 71. The coefficient of determination represents the relative proportion of the total variation in the outcome variable that can be accounted for by the predictor variable in the regression.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 10:59 AM | | *DATE MODIFIED:* | 7/31/2017 10:59 AM | |

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| 72. A factorial design is an ANOVA analysis that includes two or more dependent variables.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 11:00 AM | | *DATE MODIFIED:* | 7/31/2017 11:00 AM | |

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| 73. A simple regression is a statistical technique used to derive an equation that relates a single continuous dependent variable to two or more independent variables.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 11:01 AM | | *DATE MODIFIED:* | 7/31/2017 11:01 AM | |

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| 74. A statistical technique used with a continuous dependent variable and one or more categorical independent variables is called a Cramer V.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 11:02 AM | | *DATE MODIFIED:* | 7/31/2017 11:02 AM | |

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| 75. While the chi-square test indicates whether two variables are independent, it doesn't measure the strength of association when they are dependent.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 11:03 AM | | *DATE MODIFIED:* | 7/31/2017 11:03 AM | |

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| 76. A statistic used to measure the strength of relationship between categorical variables is called a regression analysis.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.02 - Explain the purpose and importance of cross tabulation. | | *DATE CREATED:* | 7/31/2017 11:04 AM | | *DATE MODIFIED:* | 7/31/2017 11:04 AM | |

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| 77. The independent samples t-test for means always compares mean scores for the same variable measured in two groups.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.04 - Explain the difference between an independent sample t-test for means and a paired sample t-test for means. | | *DATE CREATED:* | 7/31/2017 11:05 AM | | *DATE MODIFIED:* | 7/31/2017 11:05 AM | |

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| 78. Regression is a robust analytical tool that can also be used when one or more dependent variables are categorical as opposed to continuous variables.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 11:06 AM | | *DATE MODIFIED:* | 7/31/2017 11:07 AM | |

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| 79. Multiple regression is used to derive an equation that relates a single continuous dependent variable to two or more independent variables.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 11:07 AM | | *DATE MODIFIED:* | 7/31/2017 11:08 AM | |

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| 80. Regression coefficients represent the average change in the outcome variable per unit change in the associated predictor variable, holding all other predictor variables constant.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 11:08 AM | | *DATE MODIFIED:* | 7/31/2017 11:08 AM | |

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| 81. Compare and contrast the use of analysis of variance (ANOVA) versus conducting a series of t-tests to examine differences across groups.   |  |  | | --- | --- | | *ANSWER:* | The ANOVA technique (a) would be more efficient, requiring fewer computations, (b) would decrease the likelihood of rejecting a true null hypothesis, and (c) would consider the joint effects of different independent variables. | | *POINTS:* | 1 | | *DIFFICULTY:* | Medium | | *REFERENCES:* | Understand | | *QUESTION TYPE:* | Essay | | *HAS VARIABLES:* | False | | *LEARNING OBJECTIVES:* | 18.06 - Discuss a technique for examining the influence of one or more predictor variables on an outcome variable. | | *DATE CREATED:* | 7/31/2017 11:10 AM | | *DATE MODIFIED:* | 7/31/2017 11:10 AM | |