SOLUTIONS

(1) For the slope what is the test of statistical significance? **(B)**

(2) For that test of statistical significance if t = -1.10 what is the <u>best</u> conclusion? **(D)**

(3) Which is an <u>INCORRECT</u> statement about the residuals? **(A)**

(4) If the slope estimate is zero then the constant term estimate will be _____. **(E)**

(5) Increasing the sample size to 200 would cause _____. **(E)**

(6) By varying the salt content a lot, _____ is reduced. **(A)**

(7) Considering the described approach to the research question, are these valid criticisms? **(E)**

(8) For α = 0.10, what is the rejection region? **(D)**

(9) A Type I error is obtaining results that are _____. **(A)**

(10) To test if the slope is statistically positive, what is the approximate p-value? **(B)**

(11) We have good evidence that television viewing _____. **(C)**

(12) If x1 and x2 are related to each other then _____. **(D)**

(13) Referring back to the STATA output, is the multiple regression model statistically significant? **(A)**

(14) Suppose Wendy Lee has a 92 for the high school mark (Best-6). You could be 95% sure that her university GPA would fall in which interval? **(A)**

(15) Consider students with an 85 for the high school mark (Best-6). You could be 95% sure that the average university GPA for this group would fall in which interval? **(C)**

(16) Do we have sufficient evidence to conclude that each additional unit of lux increases students' attention rating by at least 0.025? (Choose the best answer.) **(D)**

(17) What is the coefficient of determination (R^2)? **(C)**

(18) What is the 98% confidence interval estimator of the effect of each additional unit of lux on students' attention rating? **(B)**