S O L U T I O N S

(1) Roughly how many observations in a sample described below lie within 3 standard deviations from the mean? **(D)**

(2) What is the height of the bar for the density histogram of variable X which starts at -2.545 and ends at -0.545? **(B)**

(3) Since the mode is the most frequently occurring value of observations in the data, it: **(E)**

(4) This is an example of _____study with _____data and _____variables. **(B)**

(5) What is the correct interpretation of the OLS line? **(A)**

(6) The population is bell-shaped, and roughly 95% of the population lies within 26 and 50. The mean and variance of the population are: **(E)**

(7) Which of the following is <u>NOT</u> true statement about the data: **(D)**

(8) Variable Z has unimodal and positively skewed distribution. Which one of the statements about the distribution is true? **(B)**

(9) Which of above four statements is true? Choose the correct combination from (A)-(E). **(D)**

(10) In a survey, 1500 individuals in three cities in Canada are asked if they have more than one credit card. The result shows that 37 percent of respondents own more than one credit card. Of all the respondents, 47 percent live in Toronto, 21 percent live in Montreal, and 32 percent live in Vancouver. If location of a respondent and the number of credit cards she owns are independent, what is the probability that a randomly chosen respondent lives in Vancouver and has more than one credit card? **(E)**

(11) Which statement is true regarding variability of customer's spending? **(C)**

(12) Which one of these statements best describes difference between two graphs? **(C)**

(13) Which one of following statements about nominal data is true? **(B)**

(14) Coefficient of correlation for variables X_1 and X_2 are -0.6. It implies that **(A)**