

Applied statistics in business and economics ch 1



**ASSIGN
BUSTER**

Chapter 1 1. Statistics is the science of collecting, organizing, analyzing, interpreting, and presenting data. TRUE 2. Inferential statistics refers to generalizing from a sample to a population, estimating unknown parameters, drawing conclusions, and making decisions. TRUE 3. Descriptive statistics refers to summarizing data rather than generalizing about the population. FALSE 4. Estimating parameters and testing hypotheses are important aspects of descriptive statistics. FALSE 5. Inconsistent treatment of data by a researcher is a symptom of poor survey or research design.

FALSE 6. Empirical data are collected through observations and/or experiments. TRUE 7. Business intelligence refers to collecting, storing, accessing, and analyzing data on the company's operations in order to make better business decisions. TRUE 8. When a statistician omits data contrary to her findings in a study, she is justified as long as the sample supports her objective. FALSE 9. A strong correlation between A and B would imply that B is caused by A. FALSE 10. The post hoc fallacy says that when B follows A then B is caused by A. TRUE 11.

A statistical test may be significant yet have no practical importance.

True False 12. Valid statistical inferences cannot be made when sample sizes are small. TRUE 13. Statistics is an essential part of critical thinking, because it allows us to transform the empirical evidence from a sample so it will agree with our preferred conclusions. TRUE 14. Statistical challenges include imperfect data, practical constraints, and ethical dilemmas. TRUE 15. A business data analyst needs a PhD in statistics. FALSE 16. The science of statistics tells us whether the sample evidence is convincing. True False 17.

Pitfalls to consider in a statistical test include non-random samples, small sample size, and lack of causal links. TRUE 18. In business communication, a table of numbers is preferred to a graph because it is more accurate. FALSE 19. Statistical data analysis can often distinguish between real vs. perceived ethical issues. TRUE 20. Excel has limited use in business because advanced statistical software is widely available. FALSE 21. Statistics helps surmount language barriers to solve problems in multinational businesses. TRUE 22. Statistics can help you handle either too little or too much information.

TRUE 23. Predicting a presidential candidate's percent of the statewide vote from a sample of 800 voters would be an example of inferential statistics.

TRUE 24. An example of descriptive statistics would be reporting the percent of students in your accounting class that attended the review session for the last exam. TRUE 25. " Bob must be rich. He's a lawyer, and lawyers make

lots of money. " This statement best illustrates which fallacy? 1) Generalizing from an average to an individual D 26. Which is not an ethical obligation of a statistician? Explain.) To support client wishes in drawing conclusions from

data C 27. Which of the following statements is not true? 3) 28. Which is least likely to be an application where statistics will be useful? 4) Choosing

the wording of a corporate policy prohibiting smoking D 29. Because 25% of the students in my morning statistics class watch 8 or more hours of

television a week, I conclude that 25% of all students at the University watch 8 or more hours of television a week. The most important logical weakness of

this conclusion would be 5) using a sample that may not be representative of all students B 30.

Which of the following is not a characteristic of an ideal statistician? 6)

Advocates client's objectives. C 31. Which of the following statements is not

true? 7) Estimating parameters is an important aspect of descriptive

statistics. C 32. Which is not a practical constraint facing the business

researcher or data analyst? 8) Survey respondents usually will tell the truth if

well compensated D 33. Which is not an essential characteristic of a good

business data analyst? 9) Has a Ph. D. or master's degree in statistics C 34.

An ethical statistical consultant would not always 0) support management's

desired conclusions B 35. The NASA experiences with Challenger and

Columbia disasters suggest that 11) 36. Which is not a goal of the ethical

data analyst? 12) To learn to downplay inconvenient data B 37. Which of the

following statements is not true? 13) 38. " Smoking is not harmful. My Aunt

Harriet smoked, but lived to age 90. " This best illustrates which fallacy? 14)

Small sample generalization D 39. Which best illustrates the distinction

between statistical significance and practical importance? 5) " Our new

manufacturing technique has increased the life of the 80 GB USB AsimoDrive

external hard disk significantly, from 240, 000 hours to 250, 000 hours. " B

40. " Circulation fell in the month after the new editor took over the

newspaper Oxnard News Herald. The new editor should be fired. " Which is

not a serious fallacy in this conclusion? 16) Failing to identify causes C 41. An

ethical data analyst would be least likely to 17) rely on consultants for all

calculations D 42. " Tom's SUV rolled over. SUVs are dangerous. " This best

illustrates which fallacy? 8) Post hoc reasoning C 43. " Bob didn't wear his

lucky T-shirt to class, so he failed his chemistry exam". This best illustrates

which fallacy? 19) Post hoc reasoning C 44. Which is not a reason for an

average student to study statistics? 20) Learn stock market strategies D 45.

<https://assignbuster.com/applied-statistics-in-business-and-economics-ch-1/>

Which is not a likely area of application of statistics in business? 21) 46.

Which is not a likely task of descriptive statistics? 22) Estimating unknown parameters C 47. We would associate the term inferential statistics with which task? 23) Estimating unknown parameters B