Solutions for Basic Statistics For Business And Economics 7th Edition by Lind

Seventh Canadian Edition

BASIC STATISTICS
FOR BUSINESS & ECONOMICS

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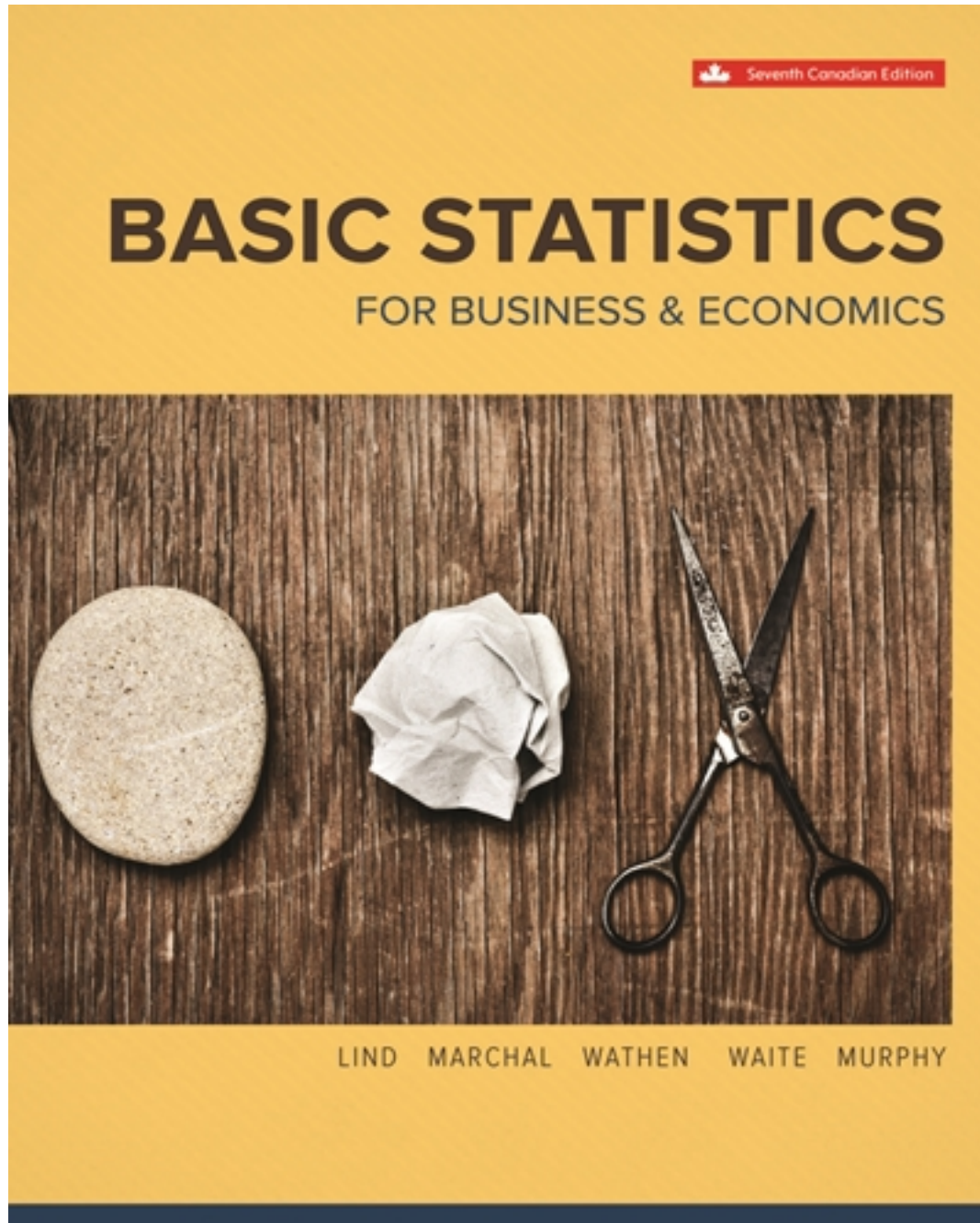
Solutions

CHAPTER 1
WHAT IS STATISTICS?

1. a. Interval
    b. Ratio
    c. Ratio
    d. Nominal
    e. Ordinal
    f. Ratio
    g. Nominal
    h. Ordinal
    i. Nominal
    j. Ratio   **(LO1-5)**

2. a. Ratio
    b. Ratio
    c. Ratio
    d. Ratio
    e. Ratio
    f. Ratio   **(LO1-5)**

3. Answers will vary   **(LO1-6)**

4. a. Sample
    b. Population
    c. Population
    d. Sample **(LO1-3)**

5. Qualitative data are not numerical, whereas quantitative data are numerical. Examples will vary by student.   **(LO1-4)**

6. A population is the entire group which you are studying. A sample is a subset taken from a population.   **(LO1-3)**

7. Discrete variables can assume only certain values, whereas continuous variables can assume any value within a specific range. Examples will vary.   **(LO1-4)**

8. The cell phone provider is nominal level data. The minutes used are ratio level. Satisfaction is ordinal level.   **(LO1-5)**

9. If you were using one store as typical of all of the stores selling electronic book readers in the mall then it would be sample data. However, if you were considering all of the stores selling electronic book readers in the mall, then the data would be population data.   **(LO1-3)**

10. Based on these findings, we can infer that 270/300 or 90 percent of the executives would move.   **(LO1-3)**

11.   If you were using this store as typical of all Best Buy stores, then the daily number sold last month would be a sample. However, if you considered the store as the only store of interest, then the daily number sold last month would be a population.   **(LO1-3)**

12.   The clear majority of customers surveyed (400/500, or 80%) believe the take-out service is excellent. Based on this finding, we can expect a similar proportion of all customers to feel the same way.   **(LO1-3)**

13.   a   This year total sales = 1 000 772; last year total sales = 942 973; total sales increased about 6% from last year to this year.
        b.   Increases: Hockey Men's Finals by 19.9% and Hockey Women's by 23.5%. It appears that there has been a significant shift within the market from last year to this year. **(LO1-3)**

14.   a.   qualitative   **(LO1-4)**
      b.   nominal   **(LO1-5)**

15.   a.   quantitative   **(LO1-4)**
      b.   discrete   **(LO1-4)**
      c.   interval   **(LO1-5)**

16.   a.   quantitative   **(LO1-4)**
      b.   discrete   **(LO1-4)**
      c.   ratio   **(LO1-5)**

17.   a.   quantitative   **(LO1-4)**
      b.   discrete   **(LO1-4)**
      c.   ratio   **(LO1-5)**

18.   sample   **(LO1-3)**

19.   a.   quantitative   **(LO1-4)**
      b.   continuous   **(LO1-4)**
      c.   ratio   **(LO1-5)**

20.   population   **(LO1-3)**

21.   sample   **(LO1-3)**

22.   a.   qualitative   **(LO1-4)**
      b.   nominal   **(LO1-5)**

23.   a.   qualitative   **(LO1-4)**
      b.   nominal   **(LO1-5)**

24.   a.   A sample is used because it is difficult to locate every student.
      b.   A population is employed because the information is easy to find.
      c.   A population is used because the information is easy to find.
      d.   A sample works because it is difficult to locate every musical.   **(LO1-3)**

25. a. discrete, quantitative, ratio
     b. discrete, qualitative, nominal
     c. discrete, quantitative, ratio
     d. discrete, qualitative, nominal
     e. continuous, quantitative, interval
     f.   continuous, quantitative, interval
     g. discrete, qualitative, ordinal
     h. discrete, qualitative, ordinal
     i. discrete, quantitative, ratio   **(LO1-4 & 1-5)**

26. a.   Qualitative: Company, Industry, Established, Public, Parent, Physical rating, Cafeteria, and on site fitness
          Quantitative: Full time, Part time, % Contract, and Starting vacation   **(LO1-4)**
     b.   Nominal: Company, Industry, Established, Public, Parent, Cafeteria, on-site fitness
          Ordinal: Physical rating
          Ratio: Full time, Part time, % Contract, and Starting vacation **(LO1-5)**

27   a.   Qualitative: region
          Quantitative: average house prices   **(LO1-4)**
     b.   Nominal: region
          Ratio: average house prices   **(LO1-5)**

28. a.   Qualitative: Team name, Country, Star power.
          Quantitative: FMV worth, Revenue, Temperature, Total Snow, Average Attendance, Post season, Appearance in the cup, Cup wins, 2019/2020 season points   **(LO1-4)**
     b.   Nominal: Team name, Country
          Ordinal: Star power
          Interval: Temperature
          Ratio: FMV worth, Revenue Total Snow, Average attendance, Post Season, Appearances in the Cup, Cup wins, 2019/2020 Points. **(LO1-5)**