Chapter 4 Literacy

Use the terms to answer or complete each sentence. Terms may be used more than once.

advertisements	leading	response bias
bias	mail-in	sample
compare	mathematical	sampling bias
comparisons	measurement bias	second
correlation	median	statistical bias
critical analysis	net worth	statistical index
critical thinking	non-response bias	stock index
descriptive	per capita	study
first	percent change	telephone
gross domestic product	percentile	third
human error	percentile rank	weighted mean
index	real value	when
inferential	reliable	

1. When critically analysing statistics, it is important to consider if the data suggest any

   _____ between the variables.

2. A _____ involves analysing a claim made by the author of a study that

   is meant to be supported by statistical data.

3. A _____ may result from using a non-random sampling method or

   using a sample that is too small.

4. An _____ is an indicator of the level of related components.

5. An expression that means "for each head." _____

6. _____ is total assets (wealth) minus total liabilities (debt).

7. When critically analysing a statistical claim, it is important to consider whether the

   methods introduce any _____.

8. Bias that occurs in a survey when survey participants purposely give false or misleading

   answers. _____

9. The percent of the population with a score less than a specific score. _____

10. A mean in which each component has a different weighting factor. _____

11. It is important to use _____ to understand how the media might be manipulating statistics for their own purposes.

12. In a survey, a _____ question is one that causes respondents to favour a certain answer.

13. When critically analysing statistics, it is important to consider whether the sources may be _____.

14. A _____ is a weighted mean used to show change over time.

15. Per capita figures can be used to make _____.

16. The _____ of an investment is the value of the investment less the effects of inflation.

17. The _____ is the total value of all goods and services produced in an economy.

18. Bias that occurs in a survey that contains a leading question. _____

19. _____ often use statistical claims to convey a message.

20. A number between 1 to 99 indicating the percent of the population with a score less than or equal to a specific value. _____

21. _____ measures a change in value over time.

22. The 25th, 50th, and 75th percentiles are commonly known as the _____, _____, and _____ quartiles.

23. In statistics, _____ is the average amount or value per person.

24. The 50th percentile is also the _____.

25. Bias that occurs in a survey when the measurement technique has errors which cause unreliable results. _____

26. _____ statistics are used to summarize or describe the characteristics of known data.

27. When calculating the values of a statistical _____, change is measured with respect to a base period.

28. Bias that occurs in a survey if there is a low overall response rate (below 80%). _____

29. When critically analysing statistical claims, it is important to consider _____ the study was conducted.

30. A _____ is a weighted mean of the prices of a group of stocks selected to represent all the stocks from a specific stock market.

31. External influences that may affect the accuracy of statistics. _____

32. When critically analysing statistics, it is important to consider whether an appropriate _____ was used.

33. An index is often used to _____ changes in values over time.

34. When critically analysing statistics, it is important to consider who conducted the _____.

35. A _____ is calculated by multiplying each value by its weighting factor and then dividing by the sum of the factors.

36. _____ surveys tend to have a high level of non-response bias compared to _____ surveys.

37. Bias that occurs when the sample does not reflect the population being studied. _____

38. Measurement bias can result from improper _____ of measuring equipment.

39. Measurement bias can result from _____ in reading and recording measurements.

40. Bias that occurs in a survey when specific groups are under represented in a sample due

to low rates of participation. _____

41. _____ statistics involve using a sample to draw conclusions about a larger population.

42. Statistics can be categorized as _____ or _____ statistics.

43. When critically analysing statistics, it is important to check that _____ terms

are used properly.

Chapter 4 Literacy Answers

1. correlation
2. critical analysis
3. sampling bias
4. index
5. per capita
6. net worth
7. bias
8. response bias
9. percentile rank
10. weighted mean
11. critical thinking
12. leading
13. reliable
14. statistical index
15. comparisons
16. real value
17. gross domestic product
18. response bias
19. advertisements
20. percentile
21. percent change
22. first, second, third
23. per capita
24. median
25. measurement bias
26. descriptive
27. index
28. non-response bias
29. when
30. stock index
31. statistical bias
32. sample
33. compare
34. study
35. weighted mean
36. mail-in, telephone
37. sampling bias
38. calibration
39. human error
40. non-response bias
41. inferential
42. descriptive, inferential
43. mathematical