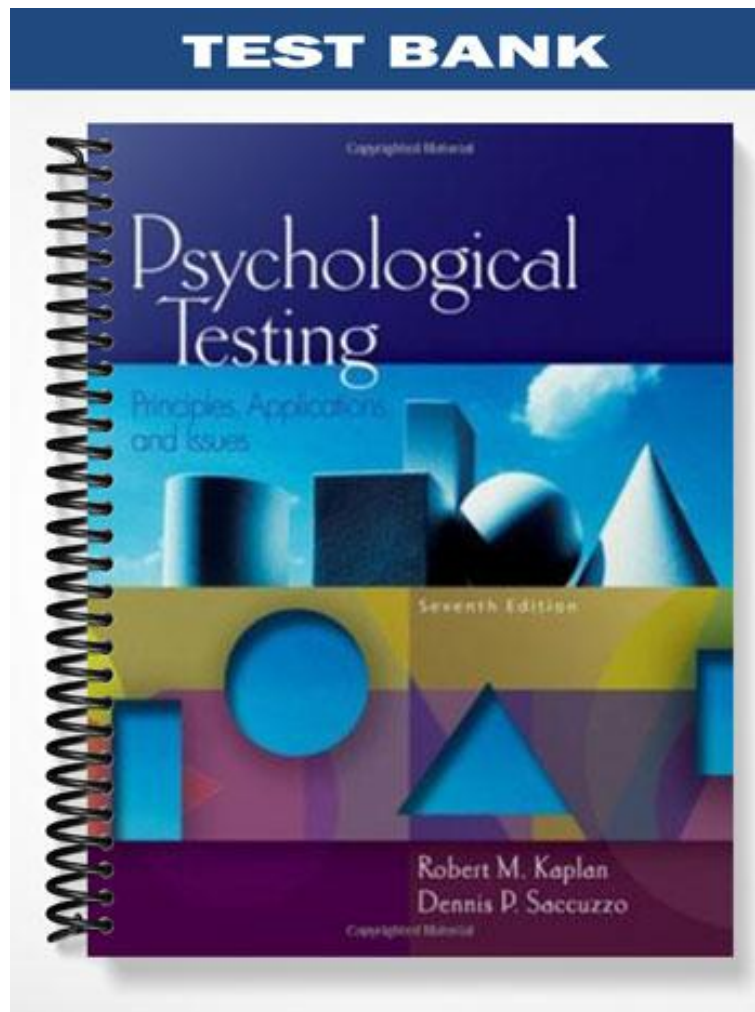


**TEST BANK**



# Chapter 2--Norms and Basic Statistics for Testing

Student: \_\_\_\_\_

1. Statistical procedures that summarize and describe a series of observations are called
  - A. inferential statistics.
  - B. descriptive statistics.
  - C. scales.
  - D. ratios.
2. Statistical procedures that allow one to make inferences about large groups by examining a smaller sample are called
  - A. populations.
  - B. descriptive statistics.
  - C. inferential statistics.
  - D. ratios.
3. Scales of measurement differ from one another in terms of
  - A. magnitude, absolute measurement, and equal intervals.
  - B. magnitude, relative zero, and equal intervals.
  - C. numbers, relative zero, and equal intervals
  - D. magnitude, absolute zero, and equal intervals.
4. Which of the following scales has the properties of magnitude, absolute zero, and equal intervals?
  - A. ordinal
  - B. interval
  - C. nominal
  - D. ratio
5. A scale that allows one to determine if there is more, less, or an equal amount of the attribute in comparison to another observation is called a(n) \_\_\_\_ scale.
  - A. nominal
  - B. ordinal
  - C. interval
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6. A property of a scale that implies the complete absence of an attribute is called a(n)
  - A. magnitude.
  - B. absolute zero.
  - C. equal interval.
  - D. ratio.
7. Many feel that the difference between an IQ of 100 and 105 is not the same as the difference between an IQ 70 and 75. These people feel that IQ tests lack \_\_\_\_.
  - A. absolute zeroes
  - B. magnitudes
  - C. ratios
  - D. equal intervals

8. Which of the following scales would be used when the information is qualitative rather than quantitative?
- A. ordinal
  - B. interval
  - C. nominal
  - D. ratio
9. When the relationship between the unit of measurement of a scale (strength) and an outcome (pounds lifted) can be described by a linear equation  $Y = a + bX$ , the scale is said to have what property?
- A. magnitude
  - B. equal intervals
  - C. absolute zero
  - D. nominal
10. The speedometer on your car is an example of what kind of scale measurement?
- A. nominal
  - B. ordinal
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11. A scale which allows us to rank individuals or objects but not to say anything about the meaning of the differences between the ranks is a(n)
- A. nominal scale.
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12. The Fahrenheit scale of temperature ( $32^{\circ}\text{F}$ = freezing;  $212^{\circ}\text{F}$ = boiling) is best described as
- A. nominal.
  - B. ordinal.
  - C. interval.
  - D. ratio.
13. In a frequency distribution, the scores, from lowest to highest, are typically arranged
- A. on the horizontal axis.
  - B. on the vertical axis.
  - C. in the legend.
  - D. below the horizontal axis.
14. There are more people with incomes on the low end as compared to the high end. What kind of distribution does this illustrate?
- A. normal
  - B. positively skewed
  - C. negatively skewed
  - D. bell curve

15. In order to rank group members in relationship to the number of other members of groups of arbitrary size, you would use the
- A. class interval.
  - B. simple rank.
  - C. percentile rank.
  - D. mean.
16. In order to calculate a percentile rank, you need to know
- A. how many cases are below the score of interest.
  - B. how many cases are in the group.
  - C. the mean score.
  - D. more than one of these.
17. Suppose you are in the 87th percentile on a test. This means
- A. you are among the top 13 students in the class.
  - B. 87% of the students got a score lower than yours.
  - C. you got 87% of the test items correct.
  - D. 87% of the students got a score higher than yours.
18. Suppose there were 50 people in your class and you obtained the 20th highest score. Your percentile rank would be
- A. 20.
  - B. 50.
  - C. 60.
  - D. 40.
19. A percentile rank is a measure of
- A. actual performance.
  - B. relative performance.
  - C. absolute performance.
  - D. peak performance.
20. Calculate the mean for the following set of scores: 4, 8, 3, 7.
- A. 5.5
  - B. 4.5
  - C. 3
  - D. 6
21. The Roman letter *S* refers to
- A. the variance of a population.
  - B. the variance of a sample.
  - C. the standard deviation of a population.
  - D. the standard deviation of a sample.
22. The standard deviation
- A. reflects the similarity among a set of scores.
  - B. equals the sum of all scores minus the mean squared.
  - C. is an approximation of the average deviation around the mean.
  - D. always equals 0.

23. A measure of how much scores within a distribution differ among themselves is the
- mean.
  - frequency.
  - variance.
  - standard deviation.
24. If you are given  $\bar{X} = 57$  and  $S = 4$  what is the variance?
- 30.5
  - 16
  - 14.25
  - 2
25. Which set of scores below contains the most variability?
- 15  
15  
15  
15  
15
  - 3  
4  
3  
4  
3  
4
  - 1  
4  
2  
5  
1  
6
  - 25  
27  
25  
27  
25  
27
26. A Z score
- is the difference between a score and the mean, divided by the standard deviation.
  - tells us how many standard deviations the score is below the average score.
  - tells us how many standard deviations the score is below the mean.
  - is the standard deviation of a population.
27. In a distribution where  $X = 21$  and  $S = 3$ , what is the  $z$ -score of a raw score of 15?
- 12
  - 2
  - 2
  - 12

28. When deviation scores around the mean are added up, their mean will be
- A. indeterminate.
  - B.  $< 0$ .
  - C. 0.
  - D.  $> 0$ .
29. In a symmetrical binomial probability distribution, the greatest frequency of scores is near the
- A. ends of the distribution.
  - B. center of the distribution.
  - C. top of the distribution.
  - D. bottom of the distribution.
30. If a score is equal to the mean, its z score will be
- A.  $< 0$ .
  - B. exactly 0.
  - C.  $> 0$ .
  - D. impossible to calculate.
31. A Z score of 1.0 is associated with approximately the
- A. 16th percentile.
  - B. 50th percentile.
  - C. 75th percentile.
  - D. 84th percentile.
32. The square root of the variance is the
- A. true variance.
  - B. standard deviation.
  - C. mean.
  - D. variability of the population.
33. One advantage of using Z scores is that
- A. you do not need to know the mean.
  - B. they can show the effects of test bias.
  - C. they are easier to interpret.
  - D. you don't need to know the standard deviation.
34. A Z score of 0 would correspond to approximately what percentile?
- A. 50
  - B. 0
  - C. 1
  - D. 16
35. A Z score of 3 is approximately how many standard deviations above the mean?
- A. 3
  - B. 0
  - C. 99
  - D. 6

36. A Z score of -1 would correspond to approximately what percentile?
- A. 50
  - B. 0
  - C. 16
  - D. 84
37. A score at the 98th percentile is approximately how many standard deviations above the mean?
- A. 98
  - B. 0
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38. A score at the 50th percentile is approximately how many standard deviations above the mean?
- A. 50
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39. McCall's T scores have
- A. a mean of 50 and a standard deviation of 10.
  - B. a mean of 10 and a standard deviation of 2.
  - C. a mean of 5 and a standard deviation of 2.
  - D. a mean of 0 and a standard deviation of 1.
40. Approximately what percentage of scores falls below the mean in a standard normal distribution?
- A. 50%
  - B. 34%
  - C. 1%
  - D. 16%
41. In the standard normal distribution,
- A. most of the scores cluster on the ends of the distribution.
  - B. more scores fall above the mean than below the mean.
  - C. more scores fall below the mean than above the mean.
  - D. approximately 95% of all scores fall between plus and minus two standard deviations from the mean.
42. Distributions of scores can be divided into how many equal deciles?
- A. 10
  - B. 25
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43. Three fourths of all scores in a distribution fall
- A. below Q2.
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44. What system is standardized to have a mean of 5 and a standard deviation of approximately 2?
- A. decile
  - B. McCall's T
  - C. stanine
  - D. quartile
45. The mean of a standardization sample
- A. is zero.
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  - C. never changes.
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46. The performance by a defined group on a particular test is called a(n)
- A. quartile.
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- A. bias.
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52. In the Civil Rights Act of 1991, Section 106,
- A. within-group norming was made legal.
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55. When you assert that it is improbable that the mean intelligence test score of a group is 100, you are using \_\_\_\_\_.
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56. In which scales can you make meaningful interpretation of an arithmetic operation such as addition?
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  - B. ordinal scale and interval scale
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57. Which type of scale simply ranks observations?
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- A. middle 25% of the distribution.
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59. An equal interval is found in which of the following?
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  - B. rulers
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60. A raw score is also called a(n)
- A. estimated score.
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61. Develop an example of each of the following scales: nominal, ordinal, interval, ratio.
62. Explain why the mean of a distribution of Z scores is equal to 0.
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25. Which set of scores below contains the most variability?

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15  
15
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4  
4
- C. 1  
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2  
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1  
6**
- D. 25  
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26. A Z score

- A. is the difference between a score and the mean, divided by the standard deviation.**
- B. tells us how many standard deviations the score is below the average score.
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- D. is the standard deviation of a population.

27. In a distribution where  $X = 21$  and  $S = 3$ , what is the  $z$ -score of a raw score of 15?

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- B. 2
- C. -2**
- D. -12

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Answer not provided.

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Answer not provided.

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