



Statistical Terms Quiz

by Laura King, MA, ELS

Directions: Choose the correct statistical terms for the definitions provided. For further explanation of the correct answers, refer to [§20.9](#) (pp 852-900 in print) of the [AMA Manual of Style](#).

1. Which of the following terms means the distance between the 25th and 75th percentiles, used to describe the dispersion of values?

- confidence interval
- F* distribution
- interquartile range
- normal range

2. Which of the following terms means the probability of obtaining the observed data if the null hypothesis were exactly true?

- P* value
- relative risk
- reliability
- true-positive rate

LEARNING RESOURCES

3. Which of the following terms means the size of the likelihood acceptable to the investigators that a relationship observed between 2 variables is due to chance?

- α level
- β level
- κ statistic
- P value

4. Which of the following terms means the probability of showing no significant difference when a true difference exists (a false acceptance of the null hypothesis)?

- α level
- β level
- κ statistic
- P value

5. Which of the following terms means the range of numerical expressions within which one can be confident that the population value the study is intended to estimate lies?

- coefficient of determination
- coefficient of variation
- confidence interval
- confidence limits

6. Which of the following terms means agreement between an observed set of values and a second set that is derived wholly or partly on a hypothetical basis?

- goodness of fit
- group matching
- true-positive rate
- unity

LEARNING RESOURCES

7. Which of the following terms means a test considered to be the diagnostic standard for a particular disease or condition, used as a basis of comparison for other tests?

Cox-Mantel test
criterion standard
Dunnett test
t test

8. Which of the following terms means a theoretical measure of the likelihood that an individual will experience an event within a given period?

attributable risk
cohort effect
Hawthorne effect
hazard rate

9. Which of the following terms means the ratio of the standard deviation to the mean?

coefficient of determination
coefficient of variation
correlation coefficient
criterion standard

10. Which of the following terms means a statistic used to measure nonrandom agreement between observers or measurements?

C statistic
 κ statistic
Yates correction
z score



LEARNING RESOURCES

11. Which of the following terms means the correlation coefficient for bivariate analysis?

- r
- R
- r^2
- R^2

12. Which of the following terms means a measure of the area under a receiver operating characteristic curve?

- C statistic
- Hotelling T statistic
- κ statistic
- Spearman rank correlation

13. Which of the following terms means a method of using the relative death rates in subgroups to compare differences between survival curves for different treatments?

- log-rank test
- Mann-Whitney test
- McNemar test
- t test

14. Which of the following terms means the spread or dispersion of data (the positive square root of the variance)?

- standard deviation (SD)
- standard error (SE)
- standard error of the estimate
- standard error of the mean (SEM)

LEARNING RESOURCES

15. Which of the following terms means the vertical axis of a graph?

- abscissa
- x-axis
- y-axis
- z-axis

16. Which of the following terms means the horizontal axis of a graph?

- ordinate
- x-axis
- y-axis
- z-axis

17. Which of the following terms means the third axis of a 3-dimensional graph?

- abscissa
- x-axis
- y-axis
- z-axis

18. Which of the following terms means the number of arithmetically independent comparisons that can be made among members of a sample?

- analysis of covariance (ANCOVA)
- analysis of variance (ANOVA)
- area under the curve (AUC)
- df* (degrees of freedom)

LEARNING RESOURCES

19. Which of the following terms means the probability of developing an outcome within a specified period if the risk factor is present, divided by the probability of developing the outcome in that same period if the risk factor is absent?

P value
relative risk
reliability
true-positive rate

20. Which of the following terms means a statistical method used to compare a continuous dependent variable and more than 1 nominal independent variable?

analysis of covariance
analysis of variance
bivariate analysis
discriminant analysis

