

1. In a normal distribution, which of the following statements is true about the area that falls between one standard deviation above and one standard deviation below the mean? (2013 AP Psychology Exam)
 - A. It contains the bottom 50% of the distribution
 - B. It contains the middle 50% of the distribution
 - C. It contains the bottom 68% of the distribution
 - D. It contains the middle 68% of the distribution
 - E. It is the same as the square of the average deviation

2. On a test, the mean score for a class of 100 students is 80 and the standard deviation of the scores is 10. The professor who gave the test then realizes that she made a scoring error, which she corrects by adding 5 points to each student's score. The standard deviation of students' new scores is (2013 AP Psychology Exam)
 - A. 5
 - B. 10
 - C. 10.5
 - D. 15
 - E. 85

3. Tamar scores 145 on an IQ Test with a mean of 100 and a standard deviation of 15. What is her z-score? (Barron's AP Psychology, 4E.)
 - A. -3
 - B. -1.5
 - C. +0.67
 - D. 1.5
 - E. +3

4. Sandy scores a perfect 100 on a test that everyone else fails. If we were to graph this distribution, it would be (Barron's AP Psychology, 4E.)
 - A. Symmetrical
 - B. Normal
 - C. Positively skewed
 - D. Negatively skewed
 - E. A straight line

5. Which of the following is true of the frequency distributions shown in the graphs below? (2012 AP Psychology Exam)
 - A. Distribution A has more variation than distributions B or C.
 - B. Distribution B has more variation than distributions A or C
 - C. Distribution B and Distribution C have the same variation.
 - D. The standard deviation of distribution A is infinite.
 - E. The standard deviation of distribution B is zero.

6. A student's test score is at the 42nd percentile. This means that the student has _____ (2007 AP Psychology Exam)
- Received the 42nd highest score
 - Answered 86% of the test correctly
 - Scored the same as 42% of her fellow students
 - Scored the same as or higher than 42% of her fellow students.
 - Scored the same as or higher than 58% of her fellow students.
7. Which of the following correlation coefficients most likely represents the relationship between length of sleep deprivation and level of alertness? (2007 AP Psychology Exam)
- 1.35
 - 0.85
 - 0.01
 - 0.4
 - 1.25
8. For a language test with a normally distributed scores, the mean was 70 and the standard deviation was 10. Approximately what percentage of test takers scored 60 and above? (2004 AP Psychology Exam)
- 16
 - 34
 - 68
 - 84
 - 95
9. Which of the following sets of scores has the greatest standard deviation? (2008 AP Psychology Practice Exam)
- 5,7,9,12
 - 2,7,9,12
 - 25,27,29,32
 - 50,51,52,53
 - 100,101,101,102,103

10.

Set A	Set B
60	60
56	41
58	76
62	35
61	65
59	50

Which of the following is true of the two sets of scores to the left? (2008 AP Psychology Practice Exam)

- Set A has a larger standard deviation
- Set B has a larger standard deviation
- The range is the same for both distributions
- Set A has a lower median score than set B
- The mean score is the same for both distributions

Use the following scenario to answer questions 11-13.

A student hypothesizes that high school students consuming different flavors of drink before a spelling test will perform differently. A study to test the hypothesis finds that with a bitter drink, performance is best 6 hours after drinking it, whereas with a sweet drink, performance is better 1 hour after drinking it.

11. Which of the following are the independent variables? (Study Guide to Accompany Martin's *Psychology*)
 - A. Test scores and high school students
 - B. Test scores and time of consumption
 - C. Flavor of drink and time of consumption
 - D. Flavor of drink and high school students
 - E. Flavor of drink and test scores

 12. Which of the following is the dependent variable? (Study Guide to Accompany Martin's *Psychology*)
 - A. Flavor of drink
 - B. Participants' spelling scores
 - C. Participants' ages
 - D. Time the drink was consumed
 - E. Number of drinks consumed

 13. An interaction between two variables complicates the researcher's explanation of findings. Which of the following are most likely involved in this interaction? (Study Guide to Accompany Martin's *Psychology*)
 - A. Test scores and high school students
 - B. Test scores and time of consumption
 - C. Flavor of drink and time of consumption
 - D. Flavor of drink and high school students
 - E. Flavor of drinks and test scores
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14. Which of the following correlations between self-esteem and body weight would enable you to most accurately predict body weight from knowledge of level of self-esteem? (Study Guide to Accompany Martin's *Psychology*)
 - A. +0.60
 - B. +0.01
 - C. -0.10
 - D. -0.06
 - E. 0.0

 15. When Mr. Adams calculated his students' algebra test scores, he noticed that two students had extremely low scores. Which measure of central tendency is affected most by the scores of these two students? (Myers Test Bank)
 - A. Standard deviation
 - B. Mean
 - C. Mode
 - D. Median
 - E. Range

16. On a 10-item test, three students in Professor Hsin's advanced chemistry seminar received scores of 2, 5, and 8, respectively. For this distribution of test scores, the standard deviation is equal to the square root of _____ (Myers Test Bank)
- A. 3
 - B. 4
 - C. 5
 - D. 6
 - E. 9
17. Andy took a test in which the average score was an 88, with a standard deviation of 3. He scored better than 88% of those who took the same test. How many standard deviations from the mean was his score? (Mr. G)
- A. +1
 - B. -1
 - C. +2
 - D. -2
 - E. +3
18. The grades on a language midterm are normally distributed with a mean of 83 and a standard deviation of 6. Gabriela earned an 80 on the exam. What is the z-score for Gabriela's exam grade? (Mr. G.)
- A. +1
 - B. +1.5
 - C. -1
 - D. -1.5
 - E. -0.5
19. You scored a 24 on your ACT math test. The mean for this exam is 21, with a standard deviation of 3. On the math SAT, the mean is 500 with a standard deviation of 50. If you plan to take the SAT and want to do just as well as you did on the ACT, what score will you need to receive on the SAT?
- A. 450
 - B. 503
 - C. 550
 - D. 650
 - E. 553
20. In a distribution of test scores, which measure of central tendency would likely be the most affected by a couple of extremely high scores (outliers)?
- A. Median
 - B. Mode
 - C. Range
 - D. Mean
 - E. Standard deviation

ANSWERS

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|-----|---|-----|---|
| 1. | D | 11. | C |
| 2. | B | 12. | B |
| 3. | E | 13. | C |
| 4. | C | 14. | A |
| 5. | B | 15. | B |
| 6. | D | 16. | D |
| 7. | D | 17. | C |
| 8. | D | 18. | E |
| 9. | B | 19. | C |
| 10. | B | 20. | D |