

12.5.4 By the end of the twelfth grade, students will evaluate how transformations on data affect the measures of central tendency and variability.

1. Find the mode of the following distribution: 86, 72, 86, 95, 84, 78, 86, 77, 84, 92
 - A. 86
 - B. 85
 - C. 85.5
 - D. 84
2. Find the median of the following distribution: 86, 72, 86, 95, 84, 78, 86, 77, 84, 92
 - A. 86
 - B. 85
 - C. 85.5
 - D. 84
3. 3. Find the mean of the following distribution: 86, 72, 86, 95, 84, 78, 86, 77, 84, 92
 - A. 86
 - B. 85
 - C. 85.5
 - D. 84
4. Find the mode if the numbers 73 and 85 are added to the distribution for question number one.
 - A. 86
 - B. 84.5
 - C. 83.16
 - D. 84,16
5. Find the median if the numbers 73 and 85 are added to the distribution for question number two.
 - A. 86
 - B. 84.5
 - C. 83.16
 - D. 84,16
6. Find the mean if the numbers 73 and 85 are added to the distribution for question number three.
 - A. 86
 - B. 84.5
 - C. 83.16
 - D. 84,16

7. Find the mode for the following distribution: 5, 6, 6, 6, 8, 10, 13, 13, 13, 16, 18, 20
- A. 6
 - B. 13
 - C. 10
 - D. 6 and 13
8. Find the median for the following distribution: 5, 6, 6, 6, 8, 10, 13, 13, 13, 16, 18, 20
- A. 10.5
 - B. 11.5
 - C. 12.5
 - D. 13.5
9. How is the mode affected if each score in a set of scores is increased by 5 points?
- A. It stays the same
 - B. It is increased by 5
 - C. It is decreased by 2.5
 - D. It is increased by 2.5
10. How is the median affected if each score in a set of scores is increased by 5 points?
- A. It stays the same
 - B. It is increased by 5
 - C. It is decreased by 2.5
 - D. It is increased by 2.5
11. How is the mean affected if each score in a set of scores is increased by 5 points?
- A. It stays the same
 - B. It is increased by 5
 - C. It is decreased by 2.5
 - C. It is increased by 2.5
12. Find the mode if 45 is added to the distribution in question number seven.
- A. 6 and 13
 - B. 8
 - C. 10
 - D. 13
13. Find the median if 45 is added to the distribution in question number eight.
- A. 10
 - B. 11
 - C. 12
 - D. 13
14. Find the mean if 45 is added to the distribution in question number seven.
- A. 15.00
 - B. 13.77
 - C. 13.54
 - D. 13.00

Answers 12.5.4

1. A
2. B.
3. D
4. A
5. B
6. C
7. D
8. B
9. B
10. B
11. B
12. A
13. D
14. B