

P.I. A2.S.4: Calculate measures of dispersion (range, interquartile range, standard deviation, variance) for both samples and populations

1. Find the standard deviation for the given data.

4, 6, 6, 13, 11

[A] 3.92 [B] 11.60 [C] 6.32 [D] 3.41

2. Find the standard deviation for the set of data.

{3, 4, 10, 14, 14}

[A] 22.40 [B] 4.73

[C] 6.71 [D] 45.00

3. What is the standard deviation of this data?

423, 398, 401, 411, 413, 420, 397, 409

4. Use a graphing calculator to find the standard deviation for this data.

1.2, 3.4, 1.5, 2.6, 3.1, 2.5, 1.9, 2.3

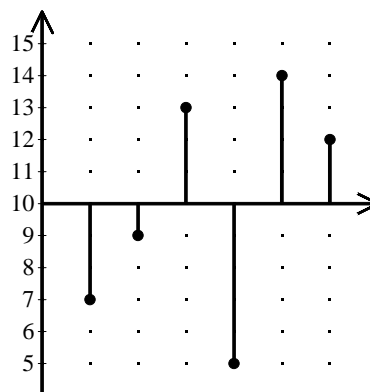
5. Use a graphing calculator to find the standard deviation of the following set of data.

{2.5, 6.8, 9.9, 10.4, 12.2, 8.9, 5.4, 6.7}

6. Find the standard deviation for the given data.

3, 8, 10, 12, 7

7. The graph shows the differences from the mean in a set of data. Find the standard deviation of the data set.



8. Find the variance for the following set of data. 20, 7, 15, 4, 22, 17, 7, 21, 13

[A] 38.67 [B] 37.56

[C] 39.78 [D] 36.45

9. What is the difference between the interquartile range and the standard deviation for this set of data?

3, 4, 4, 5, 7, 9, 10

[A] 5 [B] 7 [C] 2.49 [D] 0.29

10. Find the range and the mean deviation of the chemistry scores for Ms. Martinez's class. Round your answer to the nearest hundredth. 98, 75, 93, 81, 56, 67, 76, 85, 71

[A] range: 42 [B] range: 31 [C] range: 42 [D] range: 42
mean deviation: 10.5 mean deviation: 9 mean deviation: 9.5 mean deviation: 10

11. This chart shows the weekly salary of five employees working at company ABC.

Employee Number	Salary
3201	\$612
2734	\$588
2461	\$604
3582	\$625
3144	\$621

Find the mean and standard deviation of this data.

12. Compare the quantity in Column A with the quantity in Column B.

<u>Column A</u>	<u>Column B</u>
the standard deviation of	the standard deviation of
42, 41, 42.3, 41.8, 41.6	2, 5, 1, 6, 8, 10

[A] The quantity in Column A is greater. [B] The quantity in Column B is greater.
[C] The two quantities are equal.
[D] The relationship cannot be determined on the basis of the information supplied.

13. The mean for a set of data is 8.9 and the standard deviation is 1. The mean for a second set of data is 8.9 and the standard deviation is 2. In which data set do the values cluster closer to the mean?
14. The mean for a set of data is 12.6 and the standard deviation is 10. The mean for a second set of data is 8.4 and the standard deviation is 10. In which data set do the values cluster closer to the mean?

Algebra 2 & Trigonometry Practice: Dispersion #1

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- [1] D
- [2] B
- [3] 9.12
- [4] 0.7061117121
- [5] 2.910755916
- [6] 3.03
- [7] 3.27
- [8] C
- [9] C
- [10] D
- [11] \$610; 13.19
- [12] B
- [13] the first set
- [14] Both sets cluster around the mean in the same way.