

Mean, Variance, and Standard Deviation

What are the mean, variance, and standard deviation of these values? Round to the nearest tenth.

_____ 1. 7, 3, 11, 10, 3, 11

- a. mean = 7.5
variance = 1.9;
standard deviation = 3.8
- b. mean = 8.5
variance = 11.9;
standard deviation = 3.8

- c. mean = 7.5
variance = 11.9;
standard deviation = 3.5
- d. mean = 8.5
variance = 1.9;
standard deviation = 3.5

_____ 2. 75, 72, 52, 57, 84, 90

- a. mean = 71.7
variance = 183.6;
standard deviation = 13.5
- b. mean = 73.5
variance = 183.6;
standard deviation = 14.8

- c. mean = 73.5
variance = 3.7;
standard deviation = 14.8
- d. mean = 71.7
variance = 3.7;
standard deviation = 13.5

_____ 3.

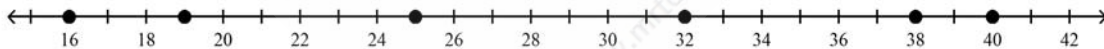
x	$x - \bar{x}$	$(x - \bar{x})^2$
38	1.8	3.2
30	-6.2	38.4
32	-4.2	17.6
53	16.8	282.2
28	-8.2	67.2

- a. mean = 158.6
variance = 81.8
standard deviation = 9
- b. mean = 36.2
variance = 355
standard deviation = 9

- c. mean = 36.2
variance = 81.8
standard deviation = 6684.7
- d. mean = 36.2
variance = 81.8
standard deviation = 9

Use a calculator to find the mean and standard deviation of the data. Round to the nearest tenth.

- _____ 4. 18, 11, 11, 12, 7, 17, 19
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| a. mean = 13.6;
standard deviation = 17.1 | c. mean = 12;
standard deviation = 4.1 |
| b. mean = 12;
standard deviation = 17.1 | d. mean = 13.6;
standard deviation = 4.1 |
- _____ 5. 959, 867, 825, 940, 560, 267, 778, 687, 101, 493, 373, 877
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| a. mean = 643.9;
standard deviation = 271.4 | c. mean = 732.5;
standard deviation = 271.4 |
| b. mean = 643.9;
standard deviation = 73641.7 | d. mean = 732.5;
standard deviation = 73641.7 |
- _____ 6. Susan keeps track of the number of tickets sold for each play presented at The Community Theater. Within how many standard deviations from the mean do all the values fall?
163, 62, 77, 87, 116, 127, 76, 160, 103, 102, 155, 168
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|------|------|------|------|
| a. 1 | b. 4 | c. 3 | d. 2 |
|------|------|------|------|
- _____ 7. The graph below displays how many pieces of candy Timmy and his five friends each received last Halloween. Within how many standard deviations of the mean do the values fall?



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|------|------|------|------|
| a. 1 | b. 4 | c. 3 | d. 2 |
|------|------|------|------|

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Answer Section

1. C
2. A
3. D
4. D
5. A
6. D
7. D

