

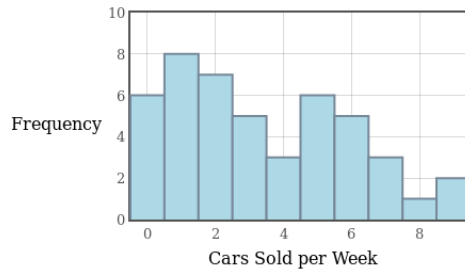
1. Listed below are a random sample of the heights in feet of 25 trees sampled from the SWOCC Coos Bay Campus in order from smallest to largest.

21, 22, 33, 34, 34, 35, 35, 35, 36, 37, 37, 40, 41, 42, 44, 46, 47, 47, 47, 49, 49, 51, 53, 55, 58

What is the standard deviation of tree height in this sample?

- A. The standard deviation of the tree heights is 10.33. feet
- B. The standard deviation of the tree heights is 8.83. feet
- C. The standard deviation of the tree heights is 10.83. feet
- D. The standard deviation of the tree heights is 9.33. feet
- E. The standard deviation of the tree heights is 5.33. feet
- F. The standard deviation of the tree heights is 11.83. feet
- G. The standard deviation of the tree heights is 8.33. feet
- H. The standard deviation of the tree heights is 12.33. feet

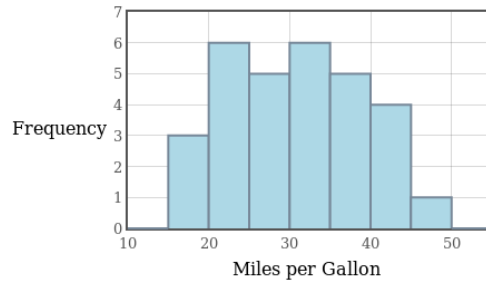
2. 46 randomly selected car salespersons were asked the number of cars they generally sell in one week. The results are summarized by the histogram below.



Use the histogram to find the standard deviation s of the number of cars sold in one week by the sales people asked.

- A. The standard deviation s of the number of cars sold in one week by the sales people in the sample is 2.19 cars.
- B. The standard deviation s of the number of cars sold in one week by the sales people in the sample is 3.39 cars.
- C. The standard deviation s of the number of cars sold in one week by the sales people in the sample is 1.99 cars.
- D. The standard deviation s of the number of cars sold in one week by the sales people in the sample is 1.79 cars.
- E. The standard deviation s of the number of cars sold in one week by the sales people in the sample is 2.09 cars.
- F. The standard deviation s of the number of cars sold in one week by the sales people in the sample is 1.69 cars.
- G. The standard deviation s of the number of cars sold in one week by the sales people in the sample is 2.59 cars.
- H. The standard deviation s of the number of cars sold in one week by the sales people in the sample is 2.89 cars.

3. Below is a histogram of a random sample the miles per gallon rating of 30 cars.



Use the histogram to estimate the standard deviation s of the gas mileages of the sample.

- A. The standard deviation of gas mileages s of this sample is approximately 9.24 miles per gallon.
- B. The standard deviation of gas mileages s of this sample is approximately 8.84 miles per gallon.
- C. The standard deviation of gas mileages s of this sample is approximately 8.04 miles per gallon.
- D. The standard deviation of gas mileages s of this sample is approximately 7.74 miles per gallon.
- E. The standard deviation of gas mileages s of this sample is approximately 8.64 miles per gallon.
- F. The standard deviation of gas mileages s of this sample is approximately 8.14 miles per gallon.
- G. The standard deviation of gas mileages s of this sample is approximately 8.44 miles per gallon.
- H. The standard deviation of gas mileages s of this sample is approximately 8.74 miles per gallon.

4. The figure below is a frequency table of the number of servings of fruit per day claimed by 44 seventeen-year-old girls in a study in Martinville, U.S.A.

Number of Servings	Frequency
0	3
1	7
2	3
3	7
4	9
5	5
6	3
7	3
8	4
9	0

Use the table to find the standard deviation of number of servings of fruit per day s which these girls ate.

- A. The standard deviation of s of the data set is 2.44 servings of fruit per day.
- B. The standard deviation of s of the data set is 1.94 servings of fruit per day.
- C. The standard deviation of s of the data set is 2.24 servings of fruit per day.
- D. The standard deviation of s of the data set is 2.04 servings of fruit per day.
- E. The standard deviation of s of the data set is 2.54 servings of fruit per day.
- F. The standard deviation of s of the data set is 2.34 servings of fruit per day.
- G. The standard deviation of s of the data set is 1.74 servings of fruit per day.
- H. The standard deviation of s of the data set is 2.74 servings of fruit per day.

5. Linda Lou took the SAT and got a score of 411. The distribution of SAT Math scores in 2010 had a mean of 516 and standard deviation of 116.

On the other hand, Billy Bob took the ACT and scored 17 on the Mathematics portion. ACT Math scores for 2010 had a mean of 21.0 and standard deviation 5.3.

Assuming that both tests measure the same kind of ability, did Linda Lou or Billy Bob have the higher score?

A. Linda Lou got the higher score..

B. Billy Bob got the higher score.

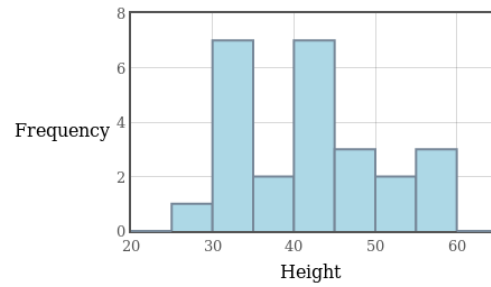
6. Listed below are a random sample of commute times to work (in minutes) of 20 for workers in Martinville, U.S.A. in order from smallest to largest.

7, 11, 12, 13, 13, 14, 15, 20, 20, 21, 24, 32, 35, 39, 42, 43, 56, 58, 65, 89

What is the standard deviation of commute time s of this data set? (If necessary, round your answer to the nearest two decimal places.)

- A. The standard deviation of commute times s is 21.23 minutes.
- B. The standard deviation of commute times s is 22.23 minutes.
- C. The standard deviation of commute times s is 22.03 minutes.
- D. The standard deviation of commute times s is 22.53 minutes.
- E. The standard deviation of commute times s is 21.83 minutes.
- F. The standard deviation of commute times s is 21.93 minutes.
- G. The standard deviation of commute times s is 21.53 minutes.
- H. The standard deviation of commute times s is 22.73 minutes.

7. Below is a histogram of a random sample of the heights in feet of 25 trees sampled from the SWOCC Coos Bay Campus.



Use the histogram to estimate the standard deviation s of tree height of the sample.

- A. The approximate standard deviation s of tree height of the sample is 9.13 feet.
- B. The approximate standard deviation s of tree height of the sample is 9.63 feet.
- C. The approximate standard deviation s of tree height of the sample is 8.03 feet.
- D. The approximate standard deviation s of tree height of the sample is 8.63 feet.
- E. The approximate standard deviation s of tree height of the sample is 8.93 feet.
- F. The approximate standard deviation s of tree height of the sample is 8.23 feet.
- G. The approximate standard deviation s of tree height of the sample is 9.33 feet.
- H. The approximate standard deviation s of tree height of the sample is 8.83 feet.

8. Listed below are a random sample the miles per gallon rating for 30 in order from smallest to largest.

15, 17, 20, 20, 21, 22, 24, 24, 25, 26, 27, 27, 29, 29, 32, 32, 32, 33, 35, 35, 36, 36, 37, 38, 38, 39, 39, 42, 45, 46

What is the standard deviation of gas mileages s in the sample? (If necessary, round your answer to the nearest two decimal places.)

- A. The standard deviation of gas mileages s is 8.23 miles per gallon.
- B. The standard deviation of gas mileages s is 8.83 miles per gallon.
- C. The standard deviation of gas mileages s is 8.63 miles per gallon.
- D. The standard deviation of gas mileages s is 7.53 miles per gallon.
- E. The standard deviation of gas mileages s is 7.33 miles per gallon.
- F. The standard deviation of gas mileages s is 8.53 miles per gallon.
- G. The standard deviation of gas mileages s is 8.73 miles per gallon.
- H. The standard deviation of gas mileages s is 7.73 miles per gallon.