

- A teacher allows her students to decide whether to use the mean, median, or mode to determine their test averages. One student determined that he will receive the highest average if he uses the mean. Which test scores are his?

[A] 81, 85, 73, 82, 76    [B] 92, 83, 76, 76, 93    [C] 72, 83, 95, 70, 85    [D] 81, 85, 70, 72, 85
- For which of the following sets of data is the mode 5?

[A] 3, 6, 5, 8, 1, 5, 9, 5    [B] 2, 4, 1, 5, 7, 5, 2, 2

[C] 5, 0, 1, 2, 1, 4, 1, 0    [D] 8, 4, 8, 8, 3, 5, 5, 1
- For which of the following sets of data is the mode 3?

[A] 5, 7, 3, 8, 4, 3, 5, 6, 1, 3, 6    [B] 0, 1, 1, 2, 2, 3, 6, 8, 8, 9, 9

[C] 3, 12, 8, 5, 1, 4, 11, 13, 11, 2    [D] 6, 2, 7, 6, 6, 6, 3, 1, 3, 9, 3
- For which of the following sets of data is the mean 8.1?

[A] 8.5, 8.0, 8.0, 9.0, 7.0    [B] 6.6, 7.5, 8.1, 9.2, 9.8

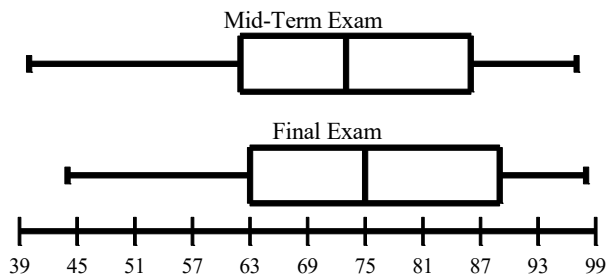
[C] 8.1, 8.1, 8.7, 8.8, 9.9    [D] 4.2, 6.7, 8.1, 5.5, 9.1
- Compare the quantity in Column A with the quantity in Column B.

<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

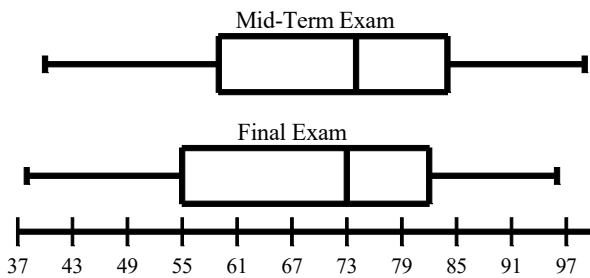
[A] The quantity in Column A is greater.    [B] The quantity in Column B is greater.

[C] The two quantities are equal.

[D] The relationship cannot be determined on the basis of the information supplied.
- Ms. Brodie drew two box-and-whisker plots to represent her students' scores on the mid-year test and the final exam. What do the plots tell you about the progress of Ms. Brodie's class?



7. Ms. Brodie drew two box-and-whisker plots to represent her students' scores on the mid-year test and the final exam. What do the plots tell you about the progress of Ms. Brodie's class?



8. For the three sets of numbers below, the value of  $x$  represents the same type of measure of central tendency (mean, median, or mode). Find the value of  $x$  for the fourth set of numbers.

5	4	10	11
20	20	17	13
25	24	17	15
45	28	17	27
50	32	23	27
	40		29

\_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_  
 $x=25$      $x=26$      $x=17$      $x=$  \_\_\_\_\_

9. 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?
10. 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 I Practice S.ID.A.2: Central Tendency and Dispersion

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- [1] B
- [2] A
- [3] A
- [4] A
- [5] B
- [6] The class improved on the final exam.
- [7] The class did better on the mid-term than on the final.
- [8] 21
- [9] the first set
- [10] Both sets cluster around the mean in the same way.