Math | Problem Solving and Data Analysis | One-variable data | Medium

#1 D: a5b069b4 4, 10, 18, 4, 4, 5, 6, 5 What is the median of the data set shown? A) 4 B) 5

- C) 7
- **D)** 14
- #2

ID: 4c774b00

Ages of 20 Students Enrolled in a College Class

Age Frequency

18 6

19 5

20 4

21 2

22 1

23 1

30 1

The table above shows the distribution of ages of the 20 students enrolled in a college class. Which of the following gives the correct order of the mean, median, and mode of the ages?

- A) mode < median < mean
- B) mode < mean < median
- C) median < mode < mean

D) mean < mode < median

#	#3	
		r
	Data value	Frequency
	6	3
	7	3
	8	8
	9	8
	10	9
	11	11
	12	9
	13	0
	14	6

The frequency table summarizes the 57 data values in a data set. What is the maximum data value in the data set?

ID: a456cfd2

Math I	Problem Solving	and Data Analysis	I One-variable data	I Medium
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#6

Ħ	4
π	-

ID: 3f2ee20a

ID: 07f2829b

The results of two independent surveys are shown in the table below.

Men's Height

	Sample up size	Mean (centimeters)	Standard
Group			deviation
			(centimeters)
А	2,500	186	12.5
В	2,500	186	19.1

Which statement is true based on the table?

- A) The Group A data set was identical to the Group B data set.
- B) Group B contained the tallest participant.
- C) The heights of the men in Group B had a larger spread than the heights of the men in Group A.
- D) The median height of Group B is larger than the median height of Group A.

#5

ID: d0efc1dd

15, 14, 18, 17, x

The mean and the median of the five numbers above are equal. Which of the following is NOT a possible value of x ?

A) 6

- B) 11
- C) 16

D) 21

International Tourist					
Arrivals, in m	nillions				
Country	2012 2013				
France	83.0 84.7				
United States	66.7 69.8				
Spain	57.5 60.7				
China	57.7 55.7				
Italy	46.4 47.7				
Turkey	35.7 37.8				
Germany	30.4 31.5				
United Kingdom	26.3 32.2				
Russia	24.7 28.4				

The table above shows the number of international tourist arrivals, rounded to the nearest tenth of a million, to the top nine tourist destinations in both 2012 and 2013. Based on the information given in the table, how much greater, in millions, was the median number of international tourist arrivals to the top nine tourist destinations in 2013 than the median number in 2012, to the nearest tenth of a million?

#7

ID: a29e89fc

The list gives the mass, in grams, of 5 alpine marmots.

4,010; 4,010; 3,030; 4,050; 3,050

What is the mean mass, in grams, of these 5 alpine marmots?

#8	ID: 7b65bb28	#10	
 Station 1 Station 2 Station 3 \$\$\$3.699 \$3.609 \$3.729 \$\$ In the table above, Melissa r one gallon of regular gas fro gas stations on the same da median of the gas prices Me A) \$3.679 B) \$3.689 C) \$3.699 D) \$3.729 	Station 4 Station 5 \$3.679 \$3.729 ecorded the price of m five different local y. What is the lissa recorded?	The table data set. Value 19 21 23 25 What is th	shows th Frequent 7 1 7 4 e minimu
#9	ID: be00d896		

For which of the following data sets is the mean greater than the median?

- A) 5, 5, 5, 5, 5, 5, 5, 5, 5
- B) 0, 10, 20, 30, 40, 50, 60, 70, 80
- C) 2, 4, 8, 16, 32, 64, 128, 256, 512
- D) 7, 107, 107, 207, 207, 207, 307, 307, 307

ID: 560fab82

ne frequency of values in a

Value	Frequency	
19	7	
21	1	
23	7	
25	4	

Im value of the data set?

Math | Problem Solving and Data Analysis | One-variable data | Medium



Each of the dot plots shown represents the number of glue sticks brought in by each student for two classes, class A and class B. Which statement best compares the standard deviations of the numbers of glue sticks brought in by each student for these two classes?

A) The standard deviation of the number of glue sticks brought in by each student for class A is less than the standard deviation of the number of glue sticks brought in by each student for class B.

B) The standard deviation of the number of glue sticks brought in by each student for class A is equal to the standard deviation of the number of glue sticks brought in by each student for class B.

C) The standard deviation of the number of glue sticks brought in by each student for class A is greater than the standard deviation of the number of glue sticks brought in by each student for class B.

D) There is not enough information to compare these standard deviations.

#12

ID: f52123e0

23, 27, 27, 32, 35, 36, 52

What is the range of the 7 scores shown?

#13

ID: 5c3c2e3c

The weights, in pounds, for 15 horses in a stable were reported, and the mean, median, range, and standard deviation for the data were found. The horse with the lowest reported weight was found to actually weigh 10 pounds less than its reported weight. What value remains unchanged if the four values are reported using the corrected weight?

- A) Mean
- B) Median
- C) Range
- D) Standard deviation

Math Problem Solving and Data Analysis One-variable data Medium				
# 14 ID: 9110	c120 #16	ID: 9e2bf782		
 Data set A: 5, 5, 5, 5, 5, 5, 5, 5, 5 Data set B: 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 100 Which of the following statements about the means and medians of data set A and data set B is true? A) Only the means are different. B) Only the medians are different. C) Both the means and the medians are different. D) Neither the means nor the medians are different. 	A fish hatchery has t before they are intro- weighing less than 5 A. Eleven fish weigh more than 13 ounces Twelve fish weighing placed in tank C. Wh be the median of the these 33 fish? A) 4.5 B) 8 C) 13.5 D) 15	hree tanks for holding fish duced into the wild. Ten fish ounces are placed in tank ing at least 5 ounces but no s are placed in tank B. more than 13 ounces are hich of the following could weights, in ounces, of		
#15 ID: 881e	f5f5			
If a is the mean and b is the median of nine consecutive integers, what is the value of $e(a)$	#17	ID: 8193e8cd		

?

Γ

As(5)210376

The mean of the list of numbers above is what fraction of the sum of the five numbers?