Ма	th Problem Solving and Data A	nalysis I C)ne-variable d	ata I Easy	
#1	ID: f890dc20	#2			ID: 52f9a2 4
2, 2, 2, 3, 4, 4, 1 What is the median shown?	1 of the seven data values	Which data lis	frequency ta	4, 8, 8, 8, 13, 1 ble correctly re	
A) 2		A)	Number	Frequency	
			4	4	
B) 3			8	3	
C) 4			13	2	
D) 9		B)	Number	Frequency	
			4	4	
			3	8	
			2	13	
		1	L		•

C)

D)

Frequency

Frequency

Number

Number

ID: 52f9a246





ID: 8736334b

Data set A: 72,73,73,76,76 Data set B: 61,64,74,85,×

Data set A and data set B each contain 5 numbers. If the mean of data set A is equal to the mean of data set B, what is the value of x ?

A) 77

B) 85

C) 86

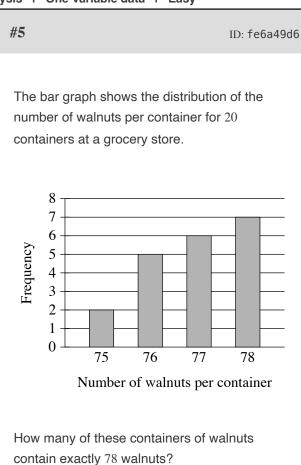
D) 95

#4

ID: c88e0663

For a school fund-raiser, 10 students sold a total of 90 boxes of cookies. Which of the following can be calculated from this information?

- A) The average number of boxes sold per student
- B) The median number of boxes sold per student
- C) The greatest number of boxes sold by one student
- D) The least number of boxes sold by one student



A) 2

- **B**) 7
- **C)** 20
- **D)** 78

#6

ID: c3d65f93

Five *Eretmochelys imbricata*, a type of sea turtle, each have a nest. The table shows an original data set of the number of eggs that each turtle laid in its nest.

Nest	Number of eggs
А	149
В	144
С	148
D	136
Е	139

A sixth nest with 121 eggs is added to create a new data set. Which of the following correctly compares the means of the two data sets?

- A) The mean of the original data set is greater than the mean of the new data set.
- B) The mean of the original data set is less than the mean of the new data set.
- C) The means of both data sets are equal.
- D) There is not enough information to compare the means.

#7

ID: 35bec412

73, 74, 75, 77, 79, 82, 84, 85, 91

What is the median of the data shown?

ID: 12dae628

2, 9, 14, 23, 32

What is the mean of the data shown?

A) 14

B) 16

C) 17

D) 32

#9

ID: 4b09f783

A list of 10 data values is shown.

6, 8, 16, 4, 17, 26, 8, 5, 5, 5

What is the mean of these data?

#10

ID: bfa8a85c

6, 6, 8, 8, 8, 10, 21

Which of the following lists represents a data set that has the same median as the data set shown?

A) 4, 6, 6, 6, 8, 8

- B) 6, 6, 8, 8, 10, 10
- C) 6, 8, 10, 10, 10, 12
- D) 8, 8, 10, 10, 21, 21

#11

ID: fa7a0164

The table below shows the high and low temperatures in Houston, Texas, during a fiveday period.

	Temperatures in Houston, Texas (degrees Fahrenheit)					
	Monday	Tuesday	Wednesday	Thursday	Friday	
High temperature	73	56	62	75	81	
Low temperature	49	37	41	54	63	

What was the mean low temperature, in degrees Fahrenheit, during the five-day period?

A) 48.8

B) 49

- C) 59
- D) 59.1

#12

ID: 708590d7

Data set A: 1, 2, 3, 4, 5, 6, 7 Data set B: 1, 1, 2, 2, 3, 3, 4

Which of the following statements correctly compares the means of data set A and data set B?

- A) The mean of each data set is 2.
- B) The mean of each data set is 4.
- C) The mean of data set A is less than the mean of data set B.
- D) The mean of data set A is greater than the mean of data set B.

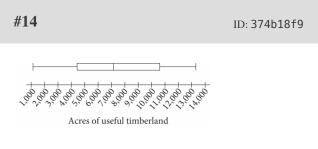
#13

ID: 7760c516

Each value in the data set shown represents the height, in centimeters, of a plant.

6, 10, 13, 2, 15, 22, 10, 4, 4, 4

What is the mean height, in centimeters, of these plants?



The number of acres of useful timberland in 13 counties in California is summarized in the box plot above. Which of the following is closest to the median number of acres?

- A) 4,399
- B) 7,067
- C) 8,831
- D) 10,595

#15

ID: c54b92a2

A study was conducted on the production rates for a company that produces tractor wheels. The table below shows the number of wheels made during 11 consecutive one-hour production periods.

	Number
One-hour	of wheels
period	made
А	24
В	24
С	21
D	21
Е	21
F	19
G	24
Н	24
I	19
J	22
K	23

What is the range of the number of wheels made for the 11 one-hour periods?

- A) 5.5
- B) 5.0
- C) 4.5
- D) 4.0

71, 72, 73, 76, 77, 79, 83, 87, 93

What is the median of the data shown?

A) 71

#16

- **B)** 77
- **C)** 78
- D) 79

#17

ID: d1db8def

ID: 66f03086

Response	Frequency
Once a week or more	3
Two or three times a month	16
About once a month	26
A few times a year	73
Almost never	53
Never	29
Total	200

The table gives the results of a survey of 200 people who were asked how often they see a movie in a theater. How many people responded either "never" or "almost never"?

- A) 24
- **B**) 53
- **C)** 82
- D) 118

#18

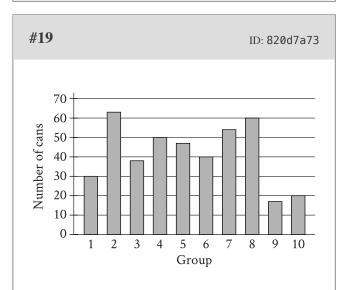
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Data set X: 5, 9, 9, 13

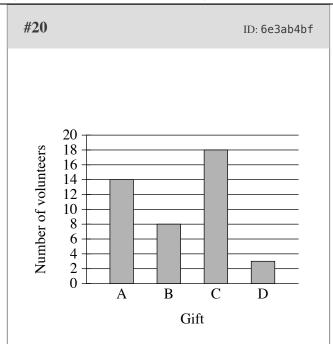
Data set Y: 5, 9, 9, 13, 27

The lists give the values in data sets X and Y. Which statement correctly compares the mean of data set X and the mean of data set Y?

- A) The mean of data set X is greater than the mean of data set Y.
- B) The mean of data set X is less than the mean of data set Y.
- C) The means of data set X and data set Y are equal.
- D) There is not enough information to compare the means.



The bar graph shows the distribution of 419 cans collected by 10 different groups for a food drive. How many cans were collected by group 6?



In April, there were 43 volunteers in a cleanup project. Each volunteer was asked to choose a small gift labeled A, B, C, or D. The bar graph shows the number of volunteers who chose each gift. How many volunteers chose gift C?

- A) 3
- **B**) 8
- **C)** 14
- **D)** 18

ID: 4bb25495

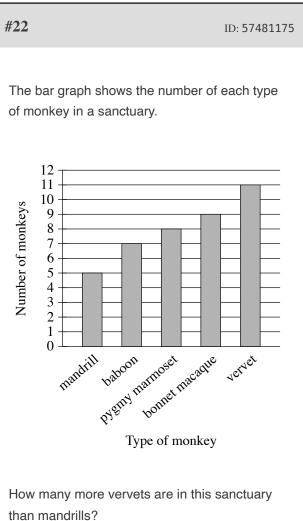
#21

Five Smallest Countries in 2016

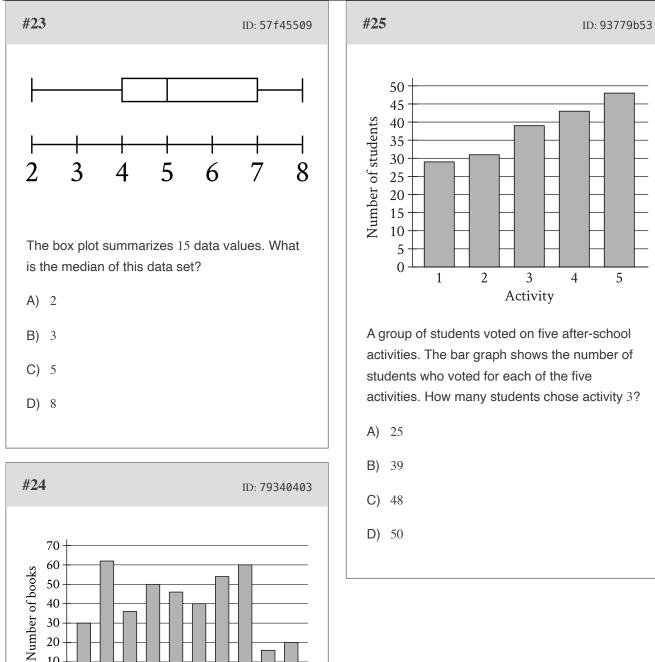
Country	Land area (square kilometers)			
Monaco	2.0			
Monaco	2.0			
Nauru	21			
San Marino	61			
Tuvalu	26			
Vatican City	0.44			

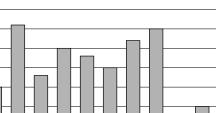
The table above shows the land area, in square kilometers, of the five smallest countries of the world in 2016. Based on the table, what is the mean land area of the 5 smallest countries in 2016, to the nearest square kilometer?

- A) 20
- B) 22
- C) 61
- D) 110



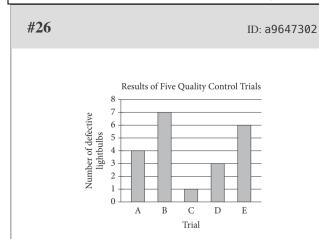
- A) 11
- **B**) 6
- **C**) 5
- **D)** 3





Group

The bar graph shows the distribution of 414 books collected by 10 different groups for a book drive. How many books were collected by group 1?



For quality control, a company that manufactures lightbulbs conducted five different trials. In each trial, 500 different lightbulbs were tested. The bar graph above shows the number of defective lightbulbs found in each trial. What is the mean number of defective lightbulbs for the five trials?

- A) 4.0
- B) 4.2
- C) 4.6
- D) 5.0

#27

ID: 869a32f1

The high temperature, in degrees Fahrenheit (°F), in a certain city was recorded for each of 5 days. The data are shown below.

Day 1 2 3 4 5 High temperature (°F) 81 80 81 81 82

Over this 5-day period, which of the following is NOT equal to 81°F?

- A) Median of the high temperatures
- B) Mean of the high temperatures
- C) Mode of the high temperatures
- D) Range of the high temperatures

#28

ID: 6670e407

Number of High School Students Who

Completed Summer Internships

High school	Year				
nigh school	2008	2009	2010	2011	2012
Foothill	87	80	75	76	70
Valley	44	54	65	76	82
Total	131	134	140	152	152

The table above shows the number of students from two different high schools who completed summer internships in each of five years. No student attended both schools. Which of the following statements are true about the number of students who completed summer internships for the 5 years shown?

- The mean number from Foothill High School is greater than the mean number from Valley High School.
- The median number from Foothill High School is greater than the median number from Valley High School.
- A) I only
- B) II only
- C) I and II
- D) Neither I nor II