Question ID f890dc20

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Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: f890dc20

1.1

2, 2, 2, 3, 4, 4, 11

What is the median of the seven data values shown?

A. 2

B. 3

C. 4

D. 9

Question ID 8736334b

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: 8736334b

1.2

Data set A: 72, 73, 73, 76, 76

Data set B: 61, 64, 74, 85, x

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

$$74 = \frac{284 + x}{5}$$

$$x = 86$$

Question ID c88e0663

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: c88e0663

1.3

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

$\bar{X} = \frac{90}{10} = 9$

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

Question ID 12dae628

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: 12dae628

1.4

$2, 9, 14, 23, 32$

What is the mean of the data shown?

A. 14

B. 16

C. 17

D. 32

$\bar{x} = 16$ //

Question ID fa7a0164

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: fa7a0164

1.5

The table below shows the high and low temperatures in Houston, Texas, during a five-day 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

$\bar{x}_{low} = 48.8$

B. 49

C. 59

D. 59.1

Question ID 708590d7

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: 708590d7

1.6

Data set A: 1, 2, 3, 4, 5, 6, 7 $\bar{A} = 4$

Data set B: 1, 1, 2, 2, 3, 3, 4 $\bar{B} = 2.2857$

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.

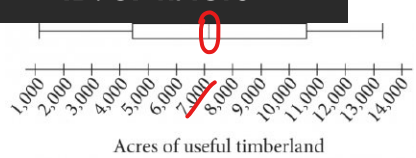
D. The mean of data set A is greater than the mean of data set B.

Question ID 374b18f9

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: 374b18f9

1.7



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

Question ID c54b92a2

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: c54b92a2

1.8

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.

One-hour period	Number of wheels made
A	24
B	24
C	21
D	21
E	21
F	19
G	24
H	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

24 − 19 = 5 //

Question ID d1db8def

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: d1db8def

1.9

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

53 + 29 = 82 //

Question ID 4bb25495

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: 4bb25495

1.10

Five Smallest Countries in 2016

Country	Land area (square kilometers)
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?

$\bar{X} = 22.088$

≈ 22

A. 20

B. 22

C. 61

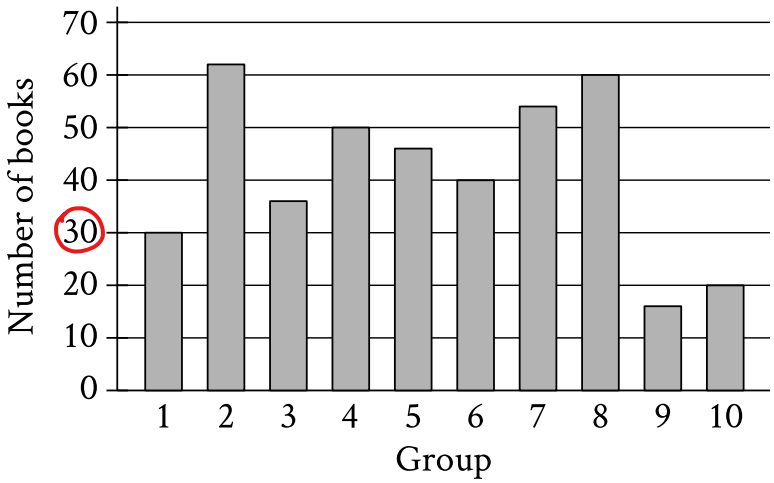
D. 110

Question ID 79340403

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: 79340403

1.11



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?

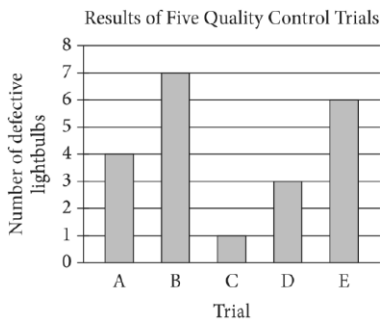
30

Question ID a9647302

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: a9647302

1.12



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

$\bar{X} = 4.2$ //

Question ID 869a32f1

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: 869a32f1

1.13

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 $82 - 80 = 2$

Question ID 6670e407

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: 6670e407

1.14

Number of High School Students Who Completed Summer Internships

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

$\bar{X} = 77.6$

$\bar{X} = 64.2$

70 75 76 80 87

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?

1. The mean number from Foothill High School is greater than the mean number from Valley High School. ✓
2. 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

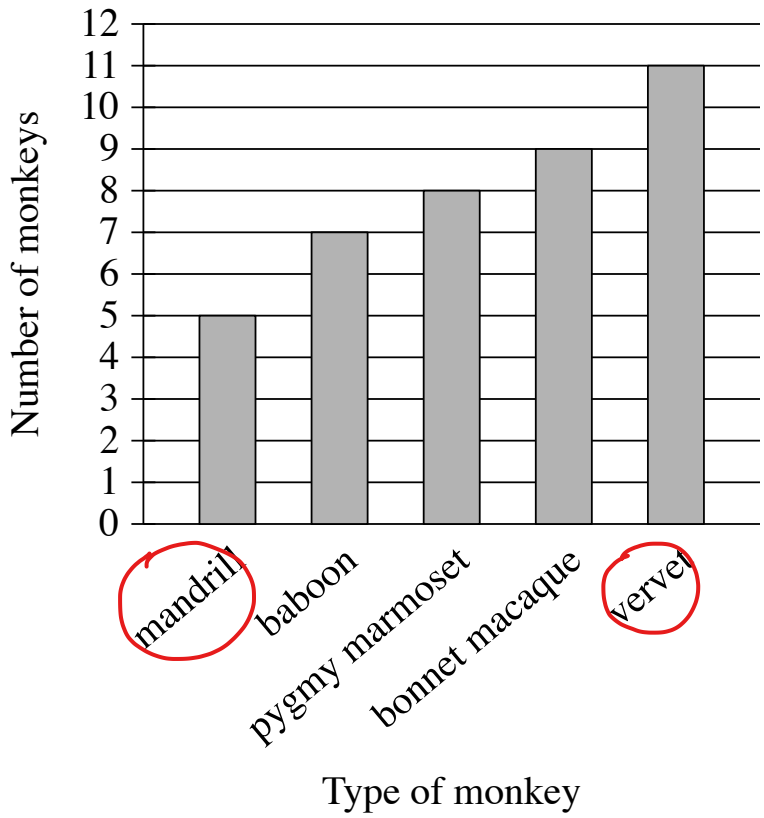
Question ID 57481175

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: 57481175

1.15

The bar graph shows the number of each type of monkey in a sanctuary.



How many more vervets are in this sanctuary than mandrills?

A. 11

B. 6

C. 5

D. 3

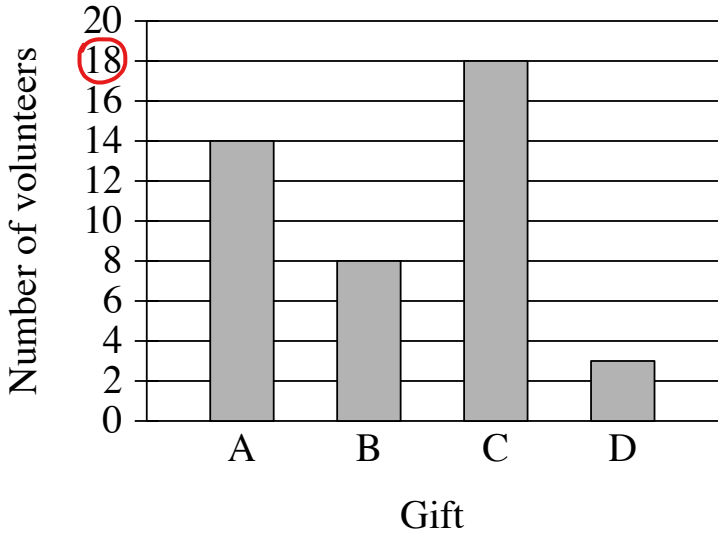
$|11 - 5| = 6$ //

Question ID 6e3ab4bf

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	■□□

ID: 6e3ab4bf

1.16



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