

1

2

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

2

32

4, 13, 5, 8, R , 5, 11

In the data set shown, R is an integer. If the median of the data set is 8 and $R < 11$, what is a possible value of R ?

3

14

The table below shows the number of calories in a cheeseburger at six different restaurants.

Calories in a Cheeseburger	
Restaurant	Calories
Blue Jay	810
Clear Lake Cafe	900
Molly's	740
Riverside Diner	1,120
Maya's Bistro	1,050
Tom's Place	790

What is the difference in the number of calories in a cheeseburger at the Riverside Diner and the median number of calories in cheeseburgers at all six restaurants?

- A) 190
- B) 233
- C) 265
- D) 390

4

14

Type	Mass(kg)	Length(cm)
Leatherback sea	650	210
Loggerhead sea	545	213
Green sea	500	140
Galapagos giant	400	187
Aldabra giant	360	150
Alligator snapping	183	81
Hawksbill sea	127	100
Black sea	126	100
Flatback sea	84	95

The table above shows the masses, in kilograms (kg), and lengths, in centimeters (cm), of the largest known specimens of the 9 most massive types of turtles and tortoises. The mean mass of the 9 turtles and tortoises is approximately 331 kg. The mass of the Aldabra giant tortoise is closest to the mean mass. Which of the following is true about the length of the Aldabra giant tortoise in relation to the median length of the 9 turtles and tortoises?

- A) It is the median length.
- B) It is 29 cm longer than the median length.
- C) It is 10 cm longer than the median length.
- D) It is 10 cm shorter than the median length.

5

Questions 19 and 20 refer to the following information.

A sociologist chose 300 students at random from each of two schools and asked each student how many siblings he or she has. The results are shown in the table below.

Students' Sibling Survey

Number of siblings	Lincoln School	Washington School
0	120	140
1	80	110
2	60	30
3	30	10
4	10	10

There are a total of 2,400 students at Lincoln School and 3,000 students at Washington School.

19 What is the median number of siblings for all the students surveyed?

- A) 0
- B) 1
- C) 2
- D) 3

6

22

Percent of Residents Who Earned a Bachelor's Degree or Higher

State	Percent of residents
State A	21.9%
State B	27.9%
State C	25.9%
State D	19.5%
State E	30.1%
State F	36.4%
State G	35.5%

A survey was given to residents of all 50 states asking if they had earned a bachelor's degree or higher. The results from 7 of the states are given in the table above. The median percent of residents who earned a bachelor's degree or higher for all 50 states was 26.9%. What is the difference between the median percent of residents who earned a bachelor's degree or higher for these 7 states and the median for all 50 states?

- A) 0.05%
- B) 0.95%
- C) 1.22%
- D) 7.45%

7

37

International Tourist Arrivals, in millions

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

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?

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.

8

22

Number of States with 10 or More Electoral Votes in 2008

Electoral votes	Frequency
10	4
11	4
12	1
13	1
15	3
17	1
20	1
21	2
27	1
31	1
34	1
55	1

In 2008, there were 21 states with 10 or more electoral votes, as shown in the table above. Based on the table, what was the median number of electoral votes for the 21 states?

A) 13
B) 15
C) 17
D) 20

9

25

Value	Frequency
1	1
2	4
3	2
4	3
5	7

What is the median of the data set summarized in the frequency table?

A) 2
B) 3
C) 4
D) 5

10

31

Value	Frequency
33	4
34	7
35	6
36	5
37	3
38	2
39	2
40	1
41	1

The table above shows the frequencies for the 9 different values that occur in a 31 item data set. What is the median value of the data set?

11

34

Class size	Frequency
21	10
22	13
23	36
24	36
25	20

The table shows the distribution of class sizes for the 109 classes of a high school. What is the median class size at the high school?

12

11

Month	Average price (US dollars)
February	761
March	793
April	841
May	825
June	825
July	777
August	761

Which of the following is closest to the median price, in dollars, of the seven recorded prices of one metric ton of oranges?

A) 834
B) 808
C) 783
D) 768

The line graph above shows the average price of one metric ton of oranges, in dollars, for each of seven months in 2014.

13

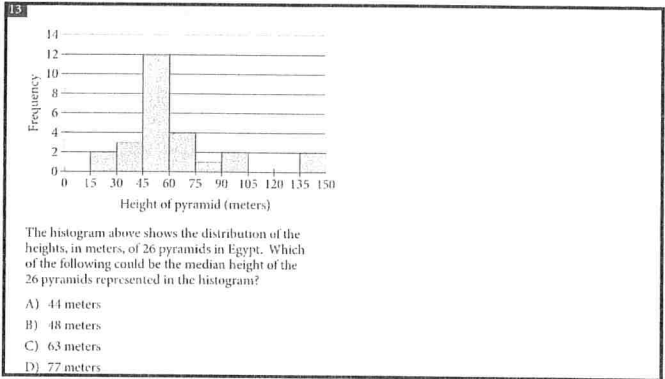
34

Monthly Enrollments in Art Classes

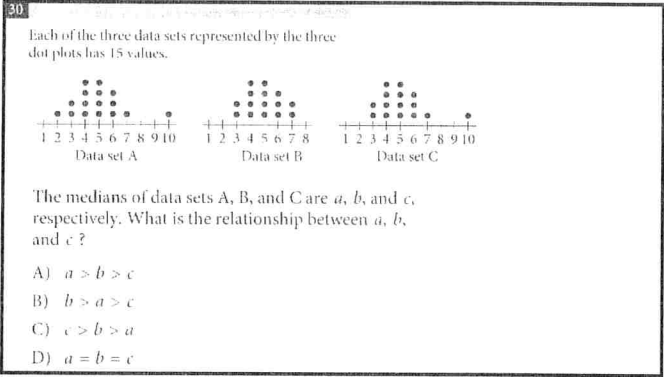
Community center	Jan	Feb	Mar	Apr	May	Jun	Jul
A	124	111	98	82	77	152	133
B	465	407	391	354	365	511	495

The table above shows monthly enrollments in art classes at two community centers for 7 consecutive months. Based on the table, by how much does the median monthly enrollment in community center B exceed the median monthly enrollment in community center A for the 7 months?

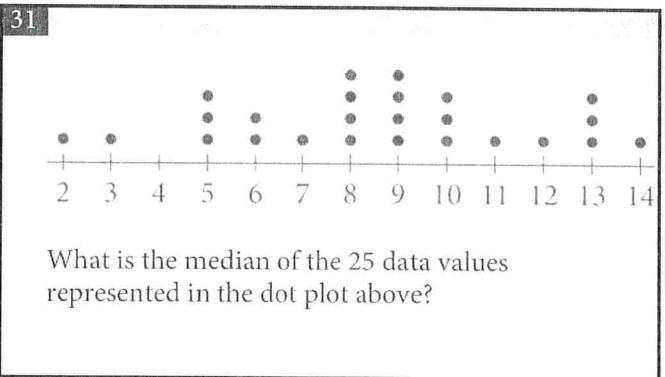
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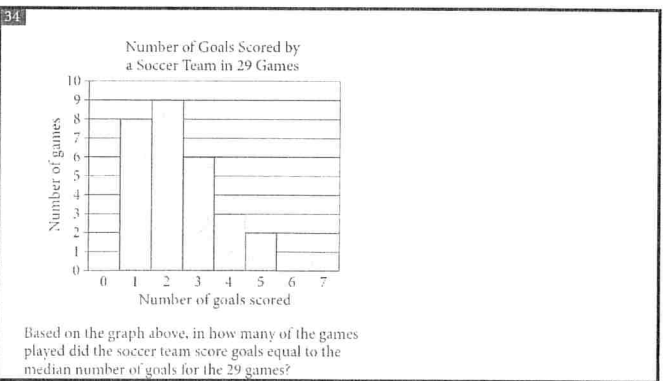
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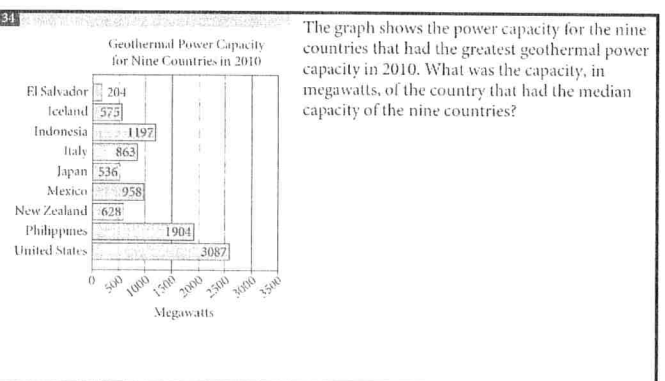
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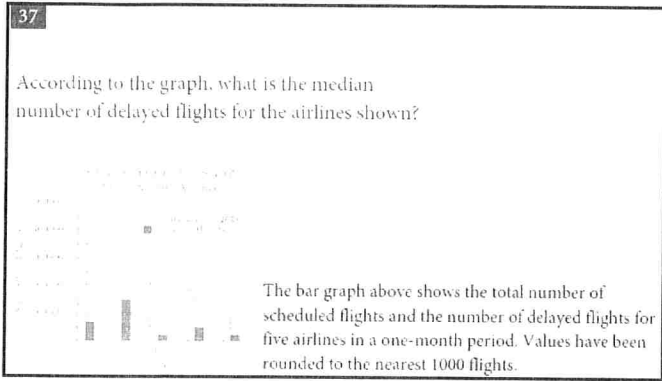
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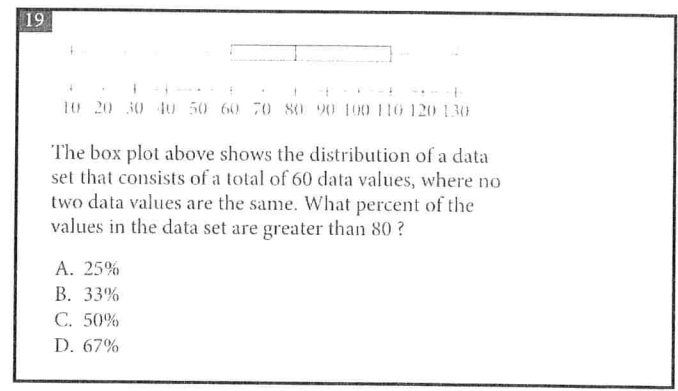
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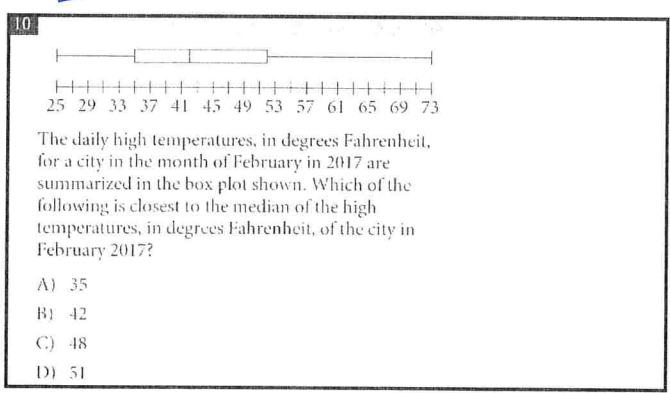
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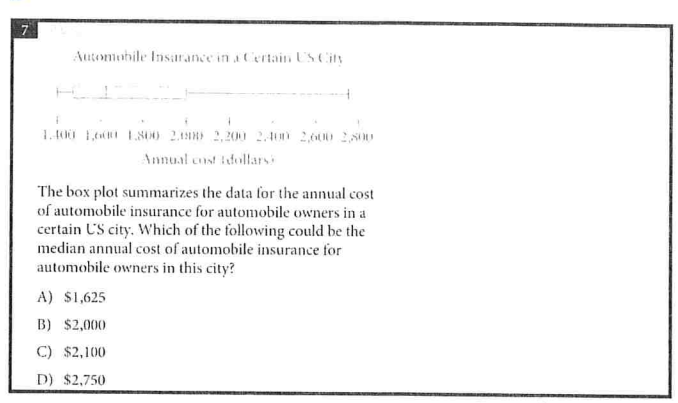
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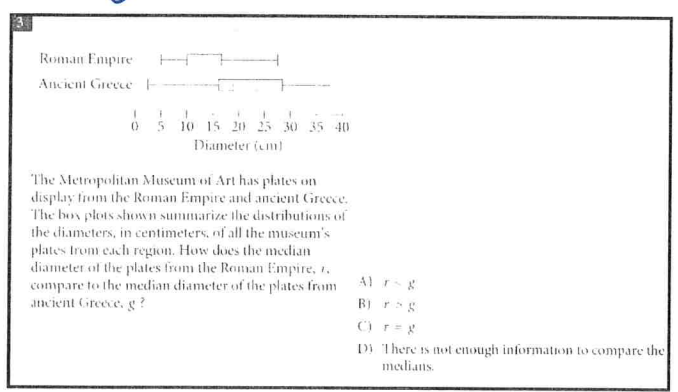
21



22



23



1 B
2 8,9,10
3 C
4 C
5 B
6 B
7 10.3
8 B
9 C
10 35
11 24
12 B

13 296
14 B
15 D
16 9
17 9
18 863
19 5000
20 C
21 B
22 A
23 A