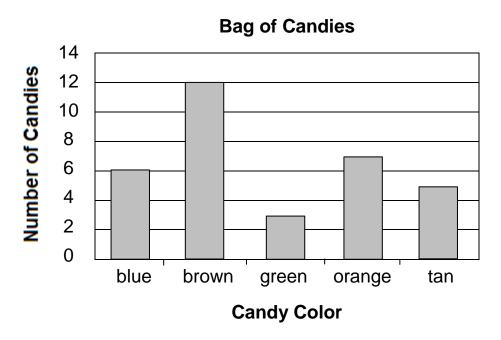
1. Pablo had a bag of different-colored candies. He made the graph below to show the numbers of candies that were in the bag.



Based on Pablo's graph, which statement is true?

- A There were 12 tan candies in the bag.
- **B** There were 7 orange candies in the bag.
- **C** Most of the candies in the bag were green.
- **D** There were more blue candies than any other color.
- **2.** Jonah is ordering a T-shirt. Jonah can choose among 4 different colors and 3 different logos. How many possible combinations of 1 color and 1 logo can Jonah choose from?
- **A** 7
- **B** 9
- **C** 12
- **D** 24

3. As part of his job as a salesman, Mr. Armstrong travels from his office in Anchorage to other cities. The number of miles he travels from his office to each city is shown in the table below.

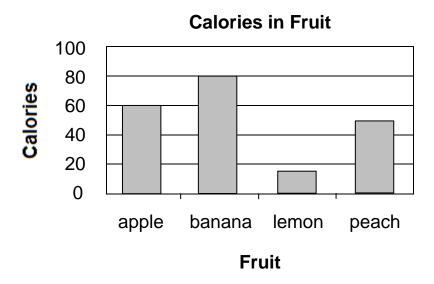
Distance from Anchorage

City	Number of Miles
Fairbanks	360
Haines	782
Homer	225
Kenai	158
Tok	325

What is the median number of miles Mr. Armstrong travels from his office?

- **A** 225
- **B** 325
- **C** 370
- **D** 624
- **4.** The dinner special at a restaurant includes a choice of 3 salads, 3 main dishes, and 2 desserts. How many different combinations of 1 salad, 1 main dish, and 1 dessert are possible?
- **A** 3
- **B** 8
- **C** 12
- **D** 18

5. The bar graph below shows the average number of calories in different kinds of fruit.



Which table represents the data in the bar graph?

A Calories in Fruit

Fruit	Calories
apple	60
banana	15
lemon	80
peach	50

B Calories in Fruit

Fruit	Calories
apple	60
banana	80
lemon	15
peach	50

C Calories in Fruit

Fruit	Calories
apple	30
banana	40
lemon	7
peach	25

D Calories in Fruit

Fruit	Calories
apple	60
banana	100
lemon	5
peach	50

6. A pizza restaurant offers 3 choices of crust and 5 choices of topping as shown in the table below.

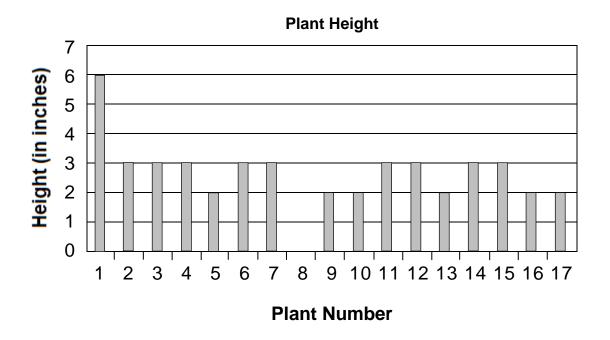
Pizza Choices

Crust	Topping
thin	pepperoni
medium	Canadian bacon
thick	sausage
	vegetables
•	cheese

How many different kinds of pizza can be ordered if each kind uses 1 crust and 1 topping?

- **A** 8
- **B** 9
- **C** 15
- **D** 25
- **7.** There are 3 classes of 22 students making ice cream sundaes. A sundae can be made using one of 3 syrups and one of 3 candy toppings. Each student makes one sundae. Which expression can be used to find the total number of sundaes made by the students?
- **A** 3 x 22
- **B** $3^2 \times 22$
- **C** 3 x 3 x 22
- **D** $3^2 \times 9 \times 22$

8. Stephen planted seeds for a science experiment. Several weeks after he planted the seeds, Stephen made the bar graph below to show how high the plants had grown.



Which conclusion can be drawn from Stephen's bar graph?

- A More than half of the plants are at least 5 inches tall.
- **B** More than half of the plants are exactly 3 inches tall.
- **C** More than half of the plants are exactly 2 inches tall.
- **D** All of the seeds planted have grown.
- **9.** Aaron wants to compare the heights of the players on the school's basketball team. Which graph would be the most appropriate for comparing the heights of these players?
- A Bar graph
- **B** Circle graph
- C Line graph
- **D** Picture graph

10. In the table below, Erica listed the number of calories in one chocolate—chip cookie for five different brands.

Calories in Chocolate-Chip Cookies

Brand	Number of Calories in One Cookie
Cookie-Ohs!	60
Ci-Ci's Cookies	75
Baker's Cookies	60
Tom's Cookies	75
Tasty Cookies	80

For the brands listed, what is the mean number of calories in one chocolate—chip cookie?

- **A** 60
- **B** 70
- **C** 75
- **D** 80
- **11.** Caroline wants to show the change in population of her town from year to year. Which graph is most appropriate for her to use?
- A line plot
- **B** histogram
- **C** line graph
- **D** circle graph

12. A survey was taken to find the mean ages of the people in 9 different states. The results are shown in the chart below.

State	Mean Age
Alaska	29
Arizona	32
Idaho	33
Iowa	34
Mississippi	31
North Carolina	33
Texas	31
Vermont	33
Wyoming	32

What is the mode of the ages shown in the chart? _____

The data below lists the number of pages in each book Harry read last summer.

What is the median of the data?

- **A** 168
- **B** 223
- **C** 225
- **D** 312

13. The table below shows the amount of rain that fell during each month of 2002 in Livermore, California.

Rainfall in Livermore in 2002

Month	Rainfall (in inches)
January	0.72
February	0.62
March	1.65
April	0.16
May	0.68
June	0.00
July	0.00
August	0.00
September	0.00
October	0.00
November	2.65
December	7.01

What was the mean amount of monthly rainfall, rounded to the nearest hundredth of an inch, in Livermore in 2002?

- **A** 0.00 inches
- **B** 0.39 inches
- **C** 1.12 inches
- **D** 1.93 inches

14. Look at the table.

Number of Customers at a Restaurant

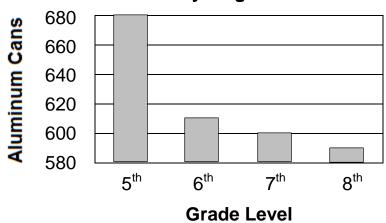
Day	Number
Monday	134
Tuesday	126
Wednesday	115
Thursday	108
Friday	172

According to the table, what was the median number of customers?

- **A** 115
- **B** 126
- **C** 131
- **D** 172

15.

Aluminum Can Recycling Contest



The graph makes it <u>appear</u> that 5th graders collected ten times the number of cans that 8th graders collected. Which statement is true about why the graph is misleading?

- A There are more students in the 5th grade than in the 8th grade.
- **B** The vertical axis begins with the number 580 instead of the number 0.
- **C** Grade levels should be on the vertical axis and the number of cans should be on the horizontal axis.
- **D** There is not a difference of 10 between each consecutive number on the vertical axis.

16. Eight winners of the dogsled race in Iditarod, Alaska, are listed in the table.

Iditarod Winners

Year	Name of Winner	Finish Time (days)
1973	Dick Wilmarth	20
1975	Emmitt Peters	14
1977	Rick Swenson	16
1980	Joe May	14
1981	Rick Swenson	12
1987	Susan Butcher	11
1992	Martin Buser	10
1995	Doug Swingley	9

What is the median of the number of days it took these winners to finish the Iditarod race?

- **A** 14
- **B** 13
- **C** 11
- **D** 10

17. The table shows the number of birds Chandra saw each day during a week.

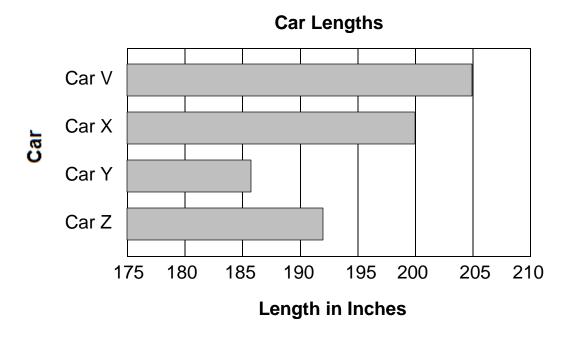
Birds Chandra Saw

Day	Number of Birds
Sunday	27
Monday	20
Tuesday	27
Wednesday	14
Thursday	21
Friday	20
Saturday	33

What is the mode of the data in the table?

- **A** 14, 33
- **B** 19
- **C** 20, 27
- **D** 21

18. The lengths of 4 cars are displayed on the graph.

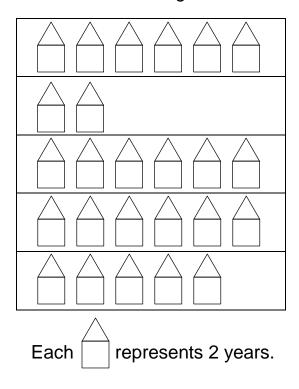


Which feature of the graph may be misleading?

- **A** The scale does not start at zero.
- **B** The values on the horizontal axis increase by 5.
- **C** The bars are horizontal instead of vertical.
- **D** The bars are not in order from longest to shortest.

19. The graph below shows the number of years that 5 families have lived in a neighborhood.

Families in a Neighborhood



What is the mean number of years these families have lived in this neighborhood?

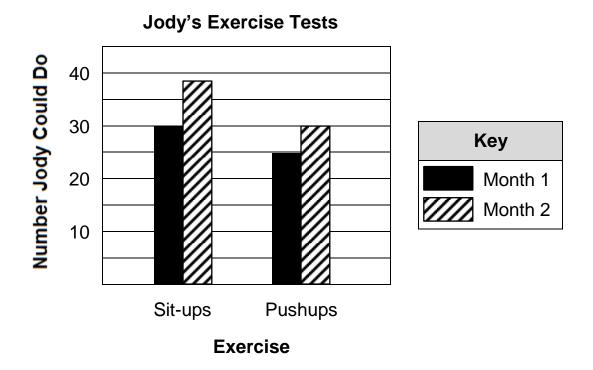
- A 10 years
- **B** 6 years
- C 12 years
- **D** 5 years

20. Jeremiah is on the Eagles bowling team. His scores for the last 12 games are shown below.

What is the mode of the scores?

- **A** 90
- **B** 102
- **C** 104
- **D** 110

21. Jody took a monthly test to see how many sit-ups and pushups she could do without stopping. The graph below displays the result of each test.



Which statement is supported by the graph?

- A The number of sit-ups Jody could do in Month 1 was less than the number of pushups she could do in Month 2.
- B The number of each exercise Jody could do without stopping in Month 2 was less than the number she could do in Month 1.
- **C** The number of pushups Jody could do in Month 1 was less than the number of sit-ups she could do in Month 2.
- **D** The number of each exercise Jody could do in Month 1 was different by the same amount from the number she could do in Month 2.

22. The table shows the distance, in centimeters, that a balloon rocket traveled along a string during 5 trials in a science experiment.

Balloon Rocket Travel

Trial	Distance (in centimeters)
1	339
2	339
3	345
4	347
5	330

What is the **mean** distance, in centimeters, the balloon rocket traveled?

- **A** 339
- **B** 340
- **C** 345
- **D** 347

Abe found the mean and median of this list of numbers.

1, 3, 3

If the number 6 were added to the list, then

- **A** the mean would increase.
- **B** the mean would decrease.
- **C** the median would increase.
- **D** the median would decrease.