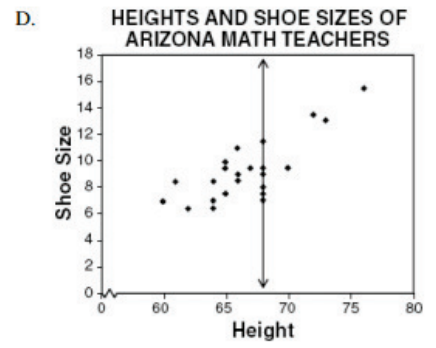
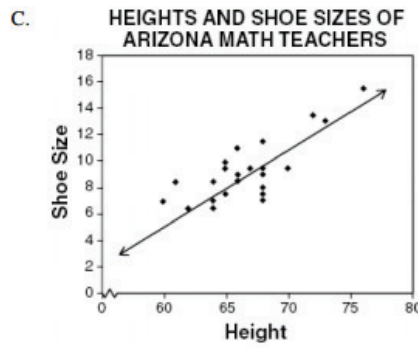
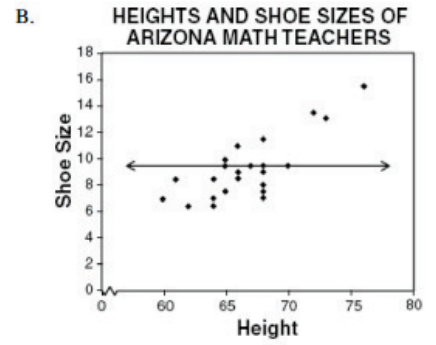
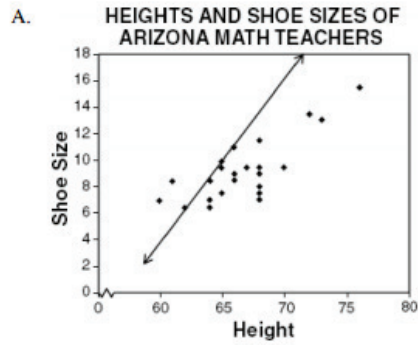




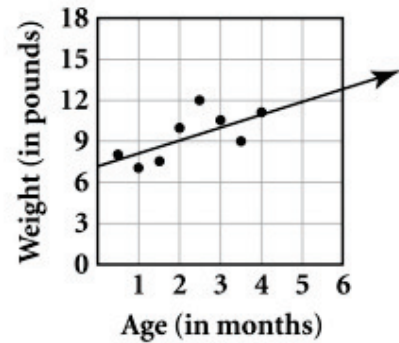
1. Which of the graphs below contains a line of best fit that best represents the data?



- A) Italian
- B) American
- C) Indonesian
- D) Michiganian

2

2. Thomas recorded the weight, in pounds, of several infants of different ages for his science experiment. He made a scatterplot of the data, as shown in the figure below.



He drew a line of best fit through the points. According to his line of best fit, at approximately what age, in months, should a typical infant weigh 17 pounds?

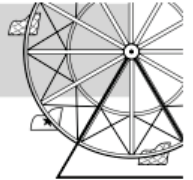
- A. 6 months B. 10 months
C. 13 months D. 16 months

- a) Reality TV Host
b) Singer-songwriter
c) Hip-hop artist
d) X-Factor Singer

3

3.

Amusement Park



A family of four wants to spend 4 days at the Fun Land amusement park. There are three options for purchasing individual entrance passes for Fun Land. The table below shows the prices for the different options.

ONE-DAY PASS PRICES AT FUN LAND

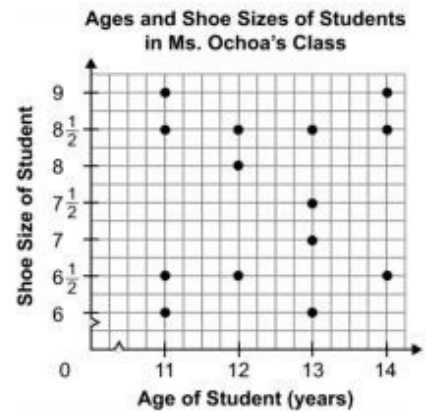
Year	Price
1985	\$18.00
1987	\$19.00
1989	\$21.50
1991	\$23.00
1993	\$24.50
1995	\$26.50

If the trend in the cost of passes continues, what do you predict would be the cost of a one-day pass in the year 2005? In the box below, explain how you arrived at your answer.

- A) 33
- B) 38
- C) 35
- D) 30

Oprah Winfrey
Jenifer Aniston
Justin Bieber
Selena Gomez

4. Ms. Ochoa recorded the age and shoe size of each student in her physical education class. The graph below shows her data.

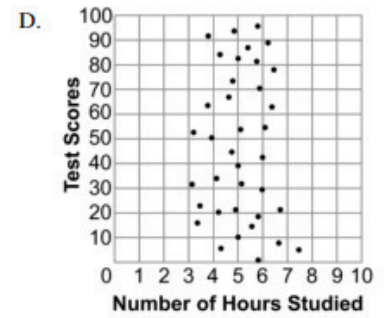
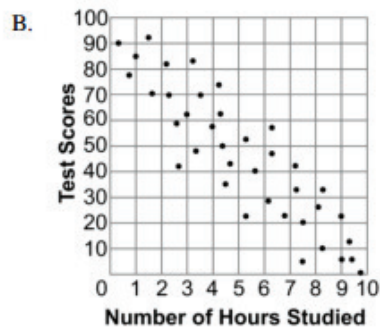
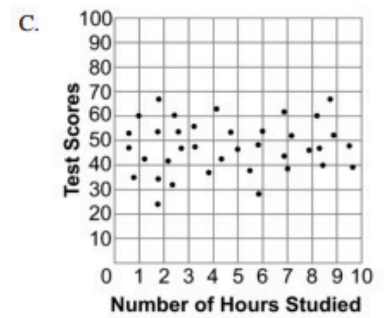
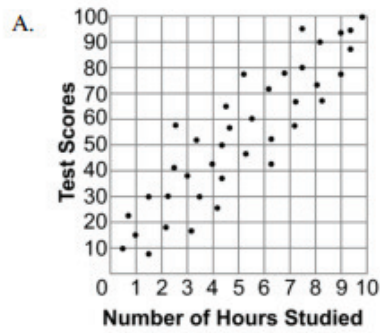


Which of the following statements about the graph is true?

- A. The graph shows a positive trend.
- B. The graph shows a negative trend.
- C. The graph shows a constant trend.
- D. The graph shows no trend.

- A) Dirt
- B) Earth
- C) Soil
- D) Garbage

5. Which graph *best* shows a positive correlation between the number of hours studied and the test scores?



- a) Trapezoidal
- b) Circular
- c) Spherical
- d) Square

6. The table below shows approximate flight times between Petersburg and other cities.

Flight Times From Petersburg

To	Time (in minutes)
Anchorage	170
Seattle	150
Ketchikan	45
Juneau	30
Sitka	35

What is the mean flight time?

- A. 45 minutes B. 86 minutes
C. 140 minutes D. 170 minutes

- a) Pyramid
b) Shape
c) Cup
d) Water Bottle

7. The table below shows the heights of 6 basketball players at Ling Middle School.

Heights of Basketball Players

Name	Height (cm)
Ann	130
Hank	162
Fiona	140
Steve	178
Travis	130
Lexi	142

What is the median of the heights?

- A. 130 cm B. 141 cm
C. 147 cm D. 159 cm

- a) Cheese
b) Grapes
c) Raisins
d) Peanut Butter

8. A group of friends studied together for a science quiz. The table below shows their quiz scores.

Quiz Scores of Friends

Friend	Nancy	Franz	Cindy	Brandon	Sarah
Score	10	9	7	8	1

Which measure *best* describes the data?

- A. mean B. median
C. mode D. maximum

- a) Cheddar
b) Colby Jack
c) Pepper Jake
d) Goat

9. Paul's first project scores for art were:

6, 87, 84, 96, 100, 87, 87

Which statement is true about the project scores?

- A. The mode is the same as the median.
- B. The median is the same as the mean.
- C. The range is the same as the mode.
- D. The mode is the same as the mean.

- a) Garlic
- b) Pencil shavings
- c) Lettuce
- d) bacon

10. A scientist measured the thickness (t) of the ice on a lake each week (n) during a thaw. The equation below represents her findings.

$$t = 38 - 3n$$

Which table shows the thickness (t) of the ice each week (n) for the first 4 weeks?

A. **Ice Thickness**

Number of Weeks (n)	Thickness of Ice (t) (inches)
1	34
2	33
3	32
4	31

B. **Ice Thickness**

Number of Weeks (n)	Thickness of Ice (t) (inches)
1	38
2	35
3	32
4	29

C. **Ice Thickness**

Number of Weeks (n)	Thickness of Ice (t) (inches)
1	35
2	70
3	105
4	140

D. **Ice Thickness**

Number of Weeks (n)	Thickness of Ice (t) (inches)
1	35
2	32
3	29
4	26

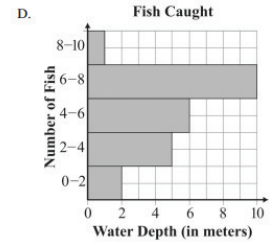
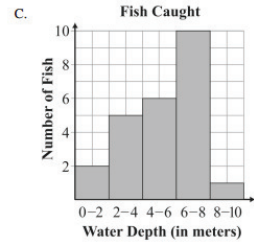
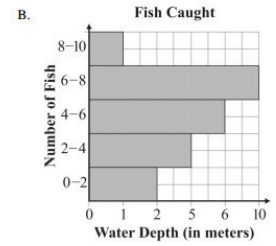
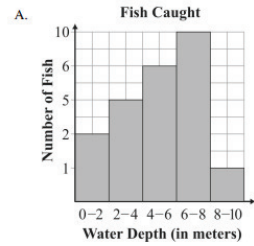
- a) Oven
- b) Stove
- c) Microwave
- d) Car

11. The chart below shows the number of fish Danny caught at different depths in a lake.

Fish Caught

Water Depth (in meters)	Number of Fish
0-2	2
2-4	5
4-6	6
6-8	10
8-10	1

Which histogram *best* represents Danny's data?



- a) Put
- b) Cut
- c) Sing
- d) dance

12. The math club sold candy bars as a fundraiser. The number of candy bars sold by each member is shown below.

65 76 100 67 44 94 71 83
69 88 30 63 75 32 62 82

Which frequency chart accurately represents the data?

A.

# of Candy Bars Sold	Frequency
40–49	1
50–59	1
60–69	3
70–79	3
80–89	5
90–99	0
100–109	1

B.

# of Candy Bars Sold	Frequency
40–49	2
50–59	0
60–69	5
70–79	3
80–89	2
90–99	1
100–109	1

C.

# of Candy Bars Sold	Frequency
40–49	0
50–59	1
60–69	5
70–79	4
80–89	3
90–99	1
100–109	1

D.

# of Candy Bars Sold	Frequency
40–49	1
50–59	0
60–69	5
70–79	3
80–89	3
90–99	1
100–109	1

- a) Taylor Swift's
- b) Beyoncé's
- c) Kanye's
- d) Eco Smith's

13. Aaron measured the heights of his plants. The heights, in inches, are shown below.

10, 11, 13, 15, 17, 18, 19, 20, 20, 23, 25, 27

What is the value of the lower quartile?

- A. 14.0 inches B. 18.5 inches
C. 21.5 inches D. 20.0 inches

- a) Music Video
b) Mansion
c) Luxury Bentley
d) Yacht

14. Dan recorded the heights of all his relatives at a family reunion.

Which statement explains why Dan might choose a histogram to represent his data?

- A. A histogram shows the frequency of heights for each person.
- B. A histogram shows the frequency of heights by using equal intervals
- C. A histogram shows the frequency of heights as they change overtime
- D. A histogram shows the frequency of heights as a percentage in each group

- a) McDonald's
- b) Burger King's
- c) Wendy's
- d) Bojangle's

15. When making a box-and-whisker plot of the following set of data, what does the number 303 represent?

305, 299, 286, 305, 311, 302, 307, 300, 303

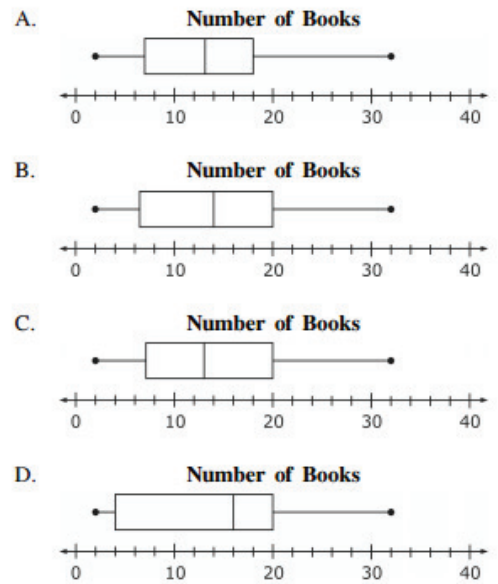
- A. the lower quartile of the set of data
- B. the upper quartile of the set of data
- C. the interquartile range of the set of data
- D. the median of the set of data

- a) Ten
- b) A million
- c) A billion
- d) A trillion

16. The data below represents the numbers of books that twelve students read.

2, 4, 7, 8, 9, 12, 14, 18, 19, 21, 30, 32

Which box plot correctly summarizes the data?



- a) My kitties
- b) A lion
- c) A panda
- d) My dog

17. A college surveyed 3,500 of its students to determine if the students preferred music, movies, or sports. The results of the survey are shown in the relative frequency table below.

	Music	Movies	Sports
Freshmen	0.06	0.10	0.09
Sophomores	0.09	0.05	0.10
Juniors	0.10	0.06	0.08
Seniors	0.08	0.09	0.10

How many more seniors than juniors were included in the survey?

- A. 70 B. 105 C. 140 D. 175

- a) Bae
b) Blue Ivey
c) Blanket Jackson
d) North West

18. Students were surveyed about book bags. The results are shown below.

	Male	Female
Carry a Book Bag	47	57
Do Not Carry a Book Bag	63	48

A student concluded that, for those in the survey, females are more likely to carry a book bag than males. Which explanation *best* supports the student's conclusion?

- A. For females, 54% carry a book bag, while for males, 43% carry a book bag.
 - B. For females, 27% carry a book bag, while for males, 22% carry a book bag.
 - C. For females, 57 carry a book bag, while for males, 47 carry a book bag.
 - D. For females, 48 do not carry a book bag, while for males, 63 do not.
- a) Their birthday
 - b) Christmas
 - c) Chanukah
 - d) Thanksgiving

19. The table shows the number of turkey and ham sandwiches sold by Derby's Deli for several days in one week.

**Sandwiches Sold
at Derby's Deli**

Day	Turkey	Ham
Monday	7	9
Tuesday	13	11
Wednesday	8	8
Thursday	15	6
Friday	12	16

What is the difference between the median number of turkey sandwiches sold and the median number of ham sandwiches sold?

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

- a) Oprah
b) Jay-Z
c) Ellen
d) Snoop Dogg

20. The height of players in inches for a basketball team is:

85, 83, 76, 78, 89, 80, 79,
81, 74, 82, 82, 84, 80, 84

The height of players in inches for a soccer team is:

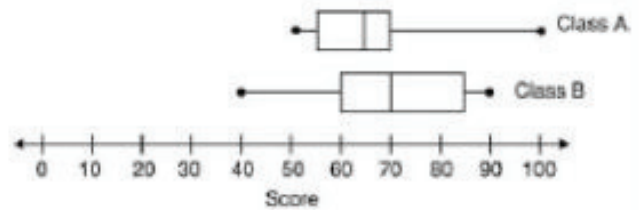
70, 65, 79, 80, 69, 66, 71, 70, 74, 62, 65, 74, 74,
79, 70, 71, 72, 69, 77, 74, 70, 67, 67, 72

What is the approximate mean height difference between the two sports?

A. 11 B. 19 C. 10 D. 8

- a) Four (from Divergent)
- b) Harry Potter
- c) Katniss Everdeen
- d) Percy Jackson

21. The box plots below show the distribution of social studies test scores for two different classes.



The minimum passing score was 70. No two students earned the same score. Class A has 28 students and class B has 32 students. How many more students in class B passed the test than in class A?

- A. 4 B. 8 C. 9 D. 10

- a) Historic
- b) Retro
- c) Delicious
- d) crusty