

TEST NAME: **S-ID.1**
TEST ID: **844065**
GRADE: **09 - Ninth Grade**
SUBJECT: **Mathematics**
TEST CATEGORY: **School Assessment**

Student: _____

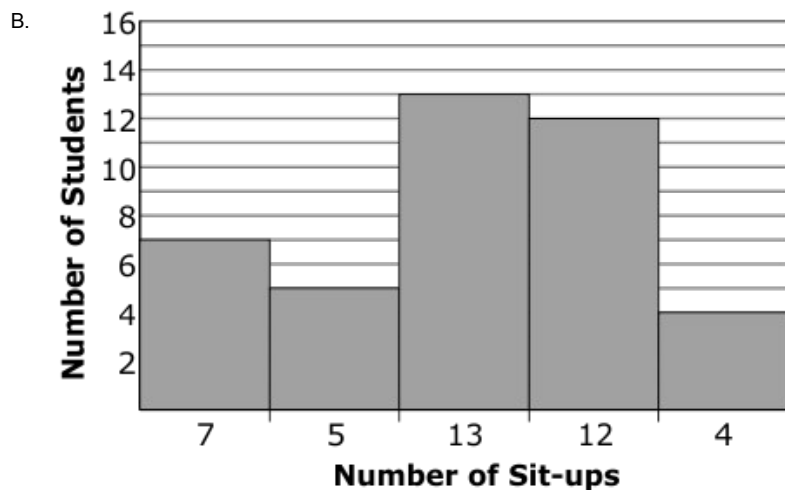
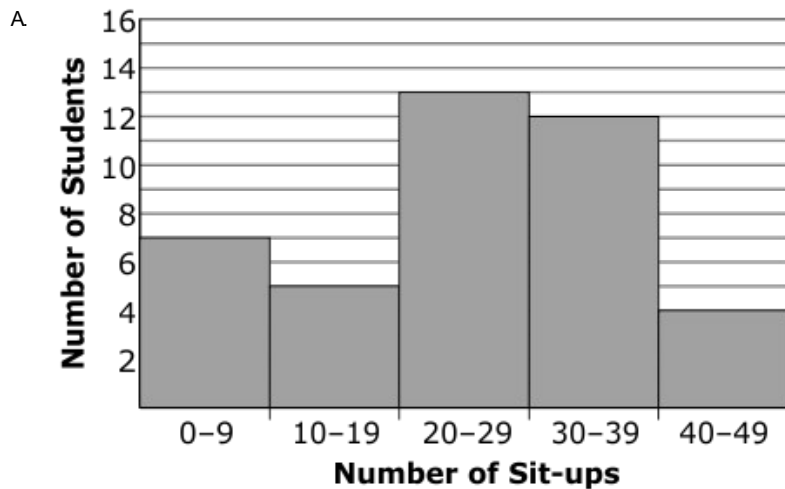
Class: _____

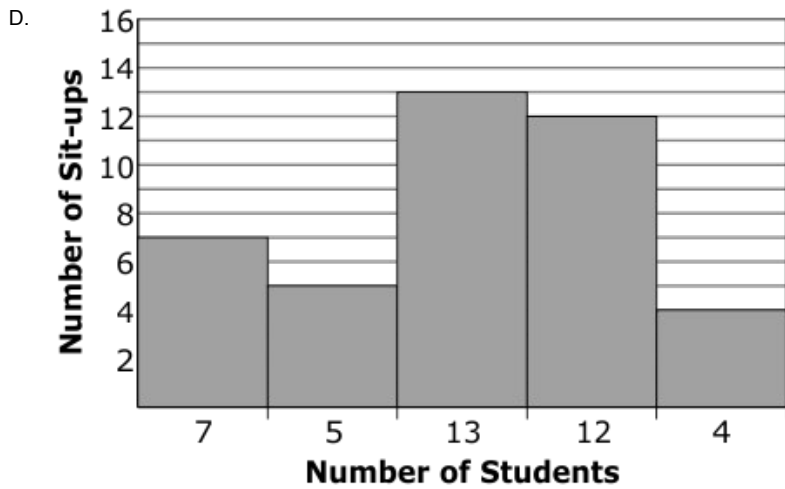
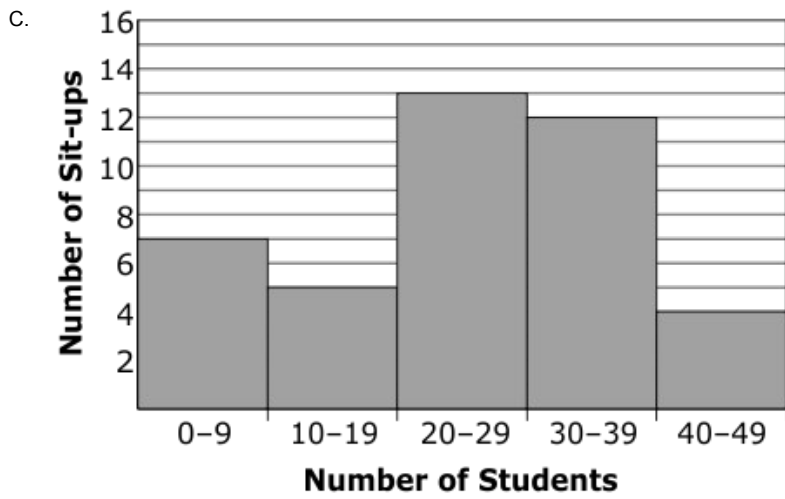
Date: _____

1. In a gym class, each student counted how many sit-ups he could do in one minute. The frequency data are shown in the table below. The class has 41 students.

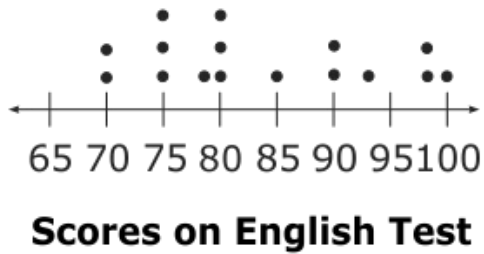
Number of Sit-Ups	0 – 9	10 – 19	20 – 29	30 – 39	40 – 49
Number of Students	7	5	13	12	4

Which histogram correctly displays the frequency data from the table?





2. The graph displays the test scores in an English class.



What percent of the students scored higher than 90 on the test?

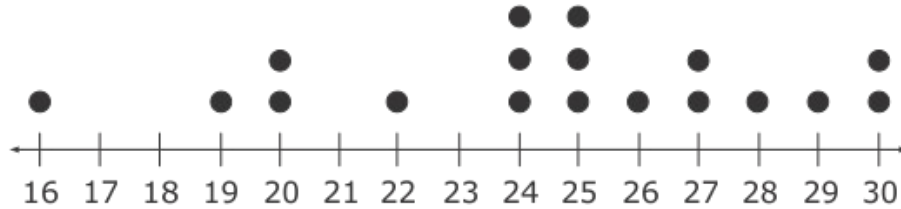
- A. 19%
- B. 25%
- C. 33%
- D. 38%

3. The data shows the approximate time it takes several students to run 3 miles.

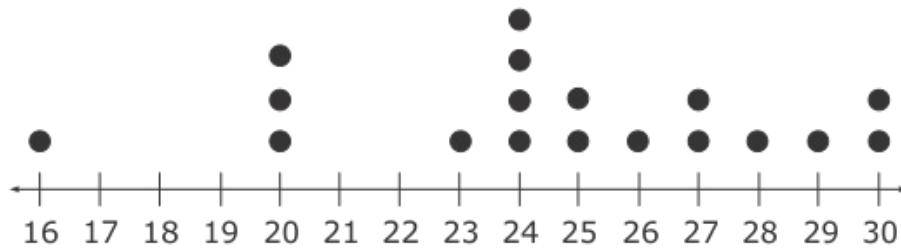
24, 20, 30, 25, 27, 26, 25, 20, 30, 24, 23, 29, 16, 24, 19, 25, 28, 27

Which dot plot represents these data?

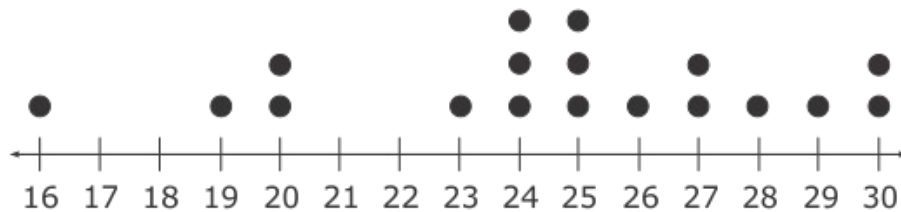
A.



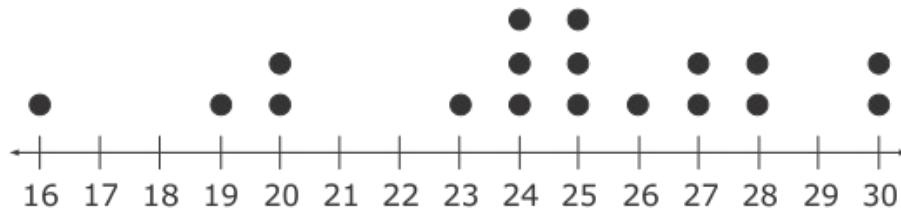
B.



C.



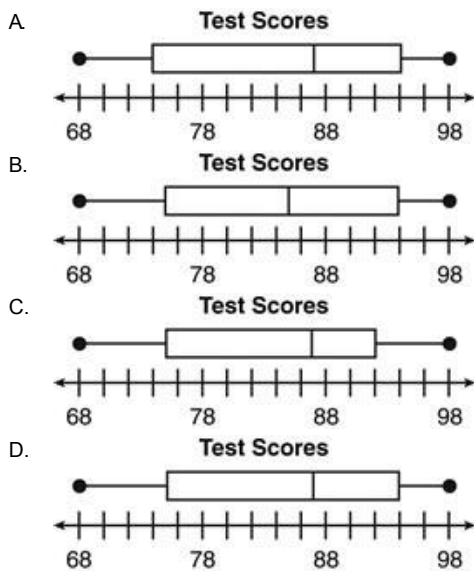
D.



4. The list below shows the most recent test scores for students in Mr. Garcia's study group.

78, 90, 94, 72, 80, 68, 72, 88, 94, 98, 86, 96

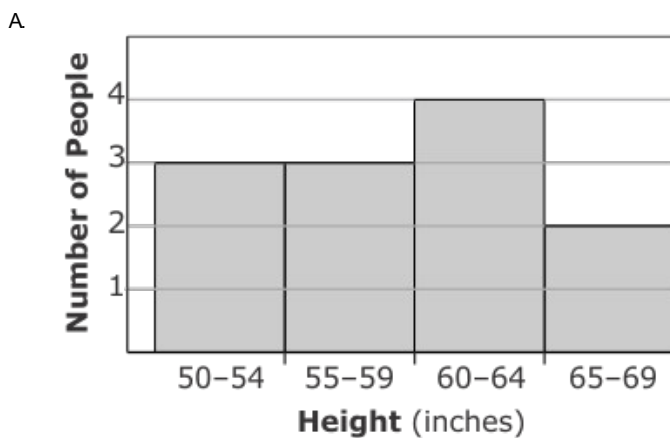
Which box-and-whisker plot correctly represents the data in the list?



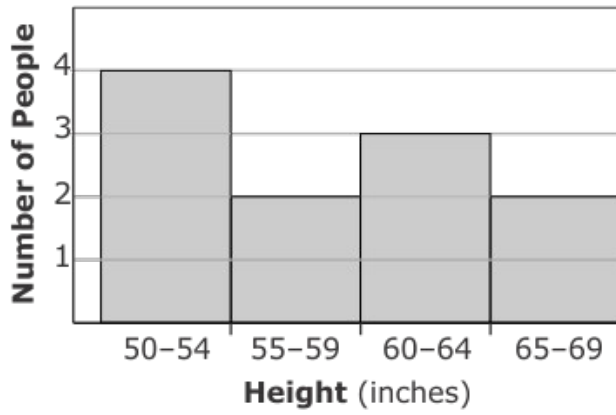
5. The heights of several students, in inches, are given below.

50, 52, 54, 56, 57, 60, 61, 64, 65, 67

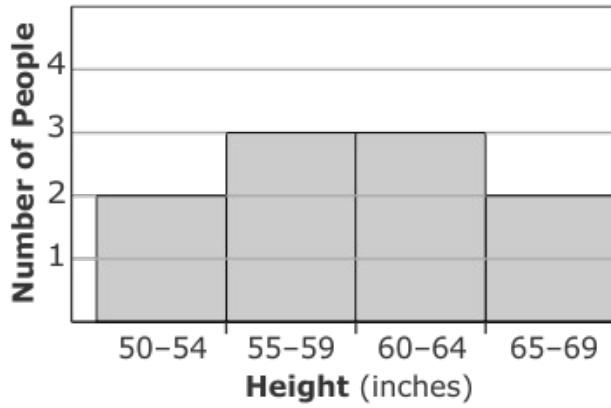
Which histogram correctly displays this data?



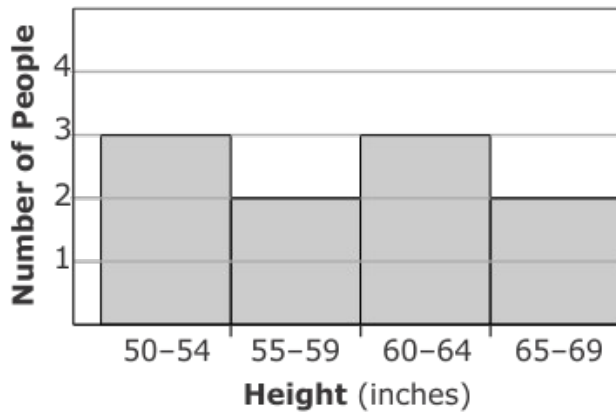
B.



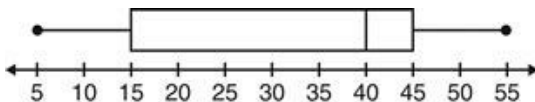
C.



D.



6. The distribution of the ages of the performers in a play is shown in the plot below.

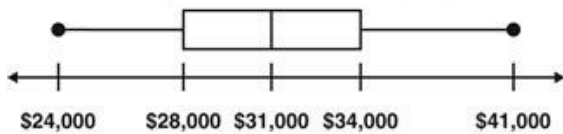


Which is true according to the plot?

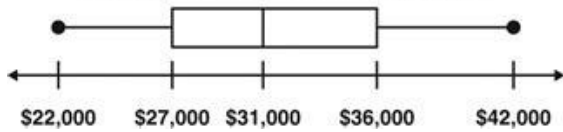
- A. The mean age is 30.
- B. The median age is 30.
- C. The mean age is 40.
- D. The median age is 40.

7. The box-and-whisker plots shown below represent the salaries of employees at two different companies.

Employee Salaries at Company A



Employee Salaries at Company B



What is the difference between the median salaries of the employees at the two companies?

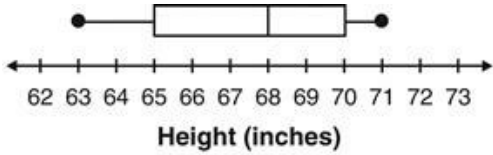
- A. \$0
- B. \$500
- C. \$1,000
- D. \$2,000

8. Which box plot represents the data set shown below?

{35, 47, 52, 66, 57, 28, 44, 50, 51, 51, 70, 61}

- A.
- B.
- C.
- D.

9. The box-and-whisker plot shows the heights of the boys on the middle school basketball team.



What is the median height of the players, in inches?

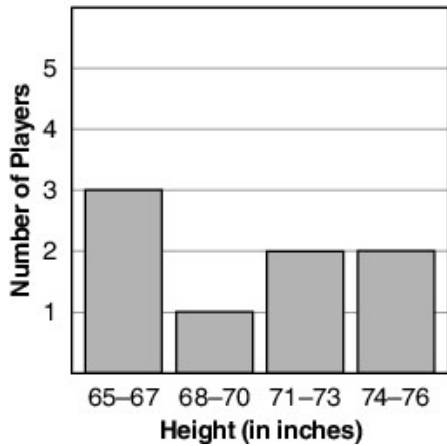
- A. 67
- B. $67\frac{1}{2}$
- C. $67\frac{2}{5}$
- D. 68

10. The heights in inches of a college women’s basketball team are listed below.

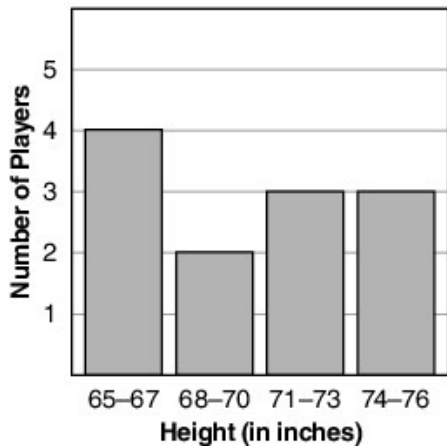
72, 65, 68, 75, 72, 74, 70, 66, 65, 75, 71, 66

Which histogram **correctly** represents these data?

A. HEIGHTS OF WOMEN'S BASKETBALL TEAM

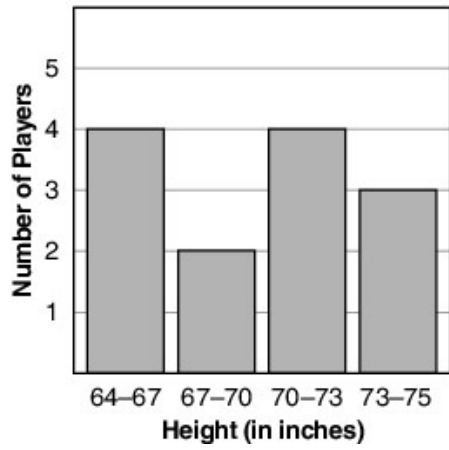


B. HEIGHTS OF WOMEN'S BASKETBALL TEAM



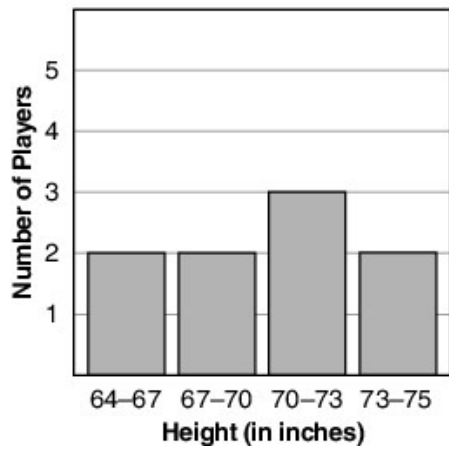
C.

**HEIGHTS OF WOMEN'S
BASKETBALL TEAM**

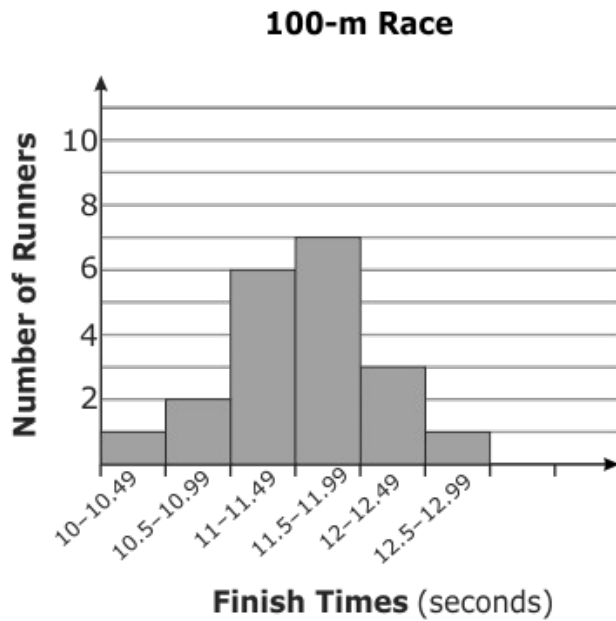


D.

**HEIGHTS OF WOMEN'S
BASKETBALL TEAM**



11. The graph displays the time (in seconds) that several students ran a 100-m race.



What percentage of students finished with a time less than 12 seconds?

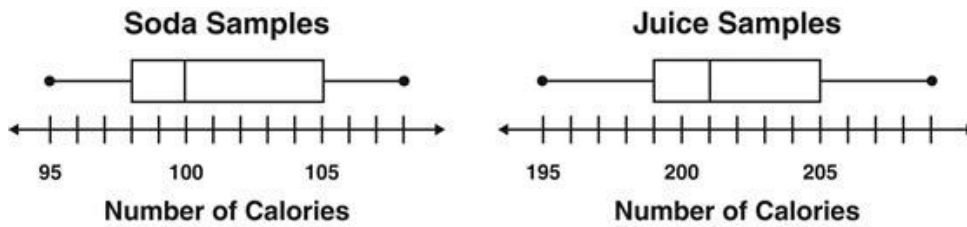
- A. 16%
- B. 35%
- C. 65%
- D. 80%

12. The number of calories in different 12-ounce samples of soda and juice are shown in the table below.

Calories in Samples

12-ounce Soda Samples	12-ounce Juice Samples
95	195
96	195
98	199
98	200
100	200
101	201
105	204
105	205
105	205
108	209
108	209

Erin constructed the box-and-whisker plots below based on the data in the table.



What error did Erin make in the construction of her box-and-whisker plots?

- A. The duplicate values were not used to calculate the juice samples' quartiles.
- B. There are errors in the quartile values for both plots.
- C. The median of the soda samples data is incorrect.
- D. The range of the juice samples data is incorrect.

13. The students in Ms. Rodriguez's 3rd period and 5th period classes worked on group projects. The tables below show the grade received by each group in both classes.

GROUP PROJECT GRADES

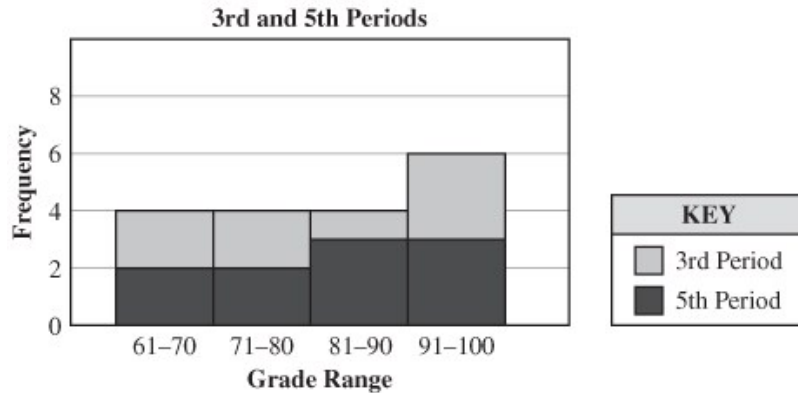
3rd Period		5th Period	
Group	Grade	Group	Grade
1	97	1	91
2	72	2	64
3	91	3	78
4	70	4	97
5	87	5	92
6	86	6	97
7	79	7	88
8	61	8	96
9	97	9	74
10	81	10	65

Ms. Rodriguez wants to compare the median of the 3rd period group project grades with the median of the 5th period group project grades. Which graph or graphs would be MOST appropriate for a comparison of the medians?

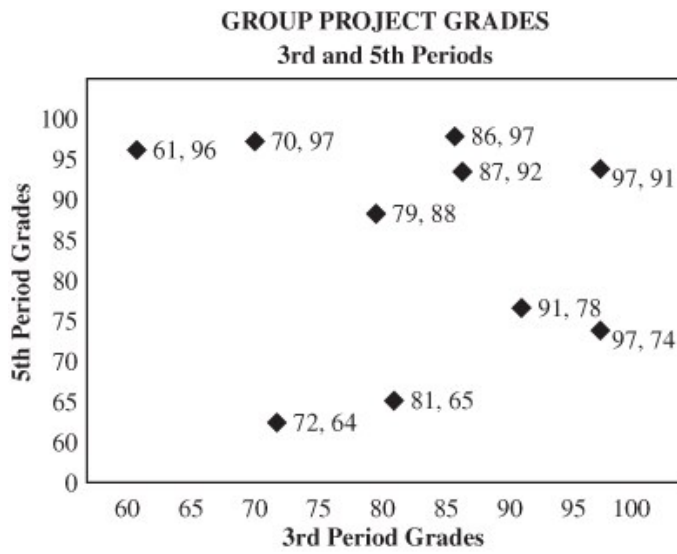
A. **GROUP PROJECT GRADES**



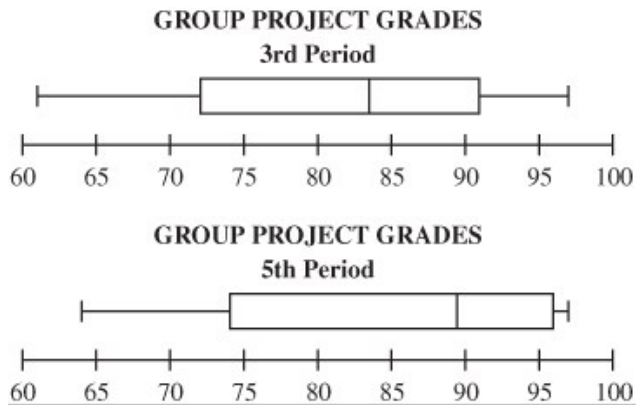
B. **GROUP PROJECT GRADES**



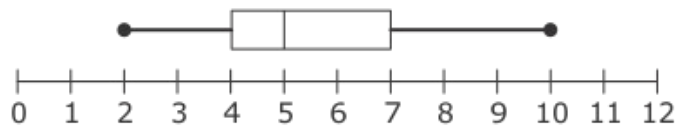
C.



D.



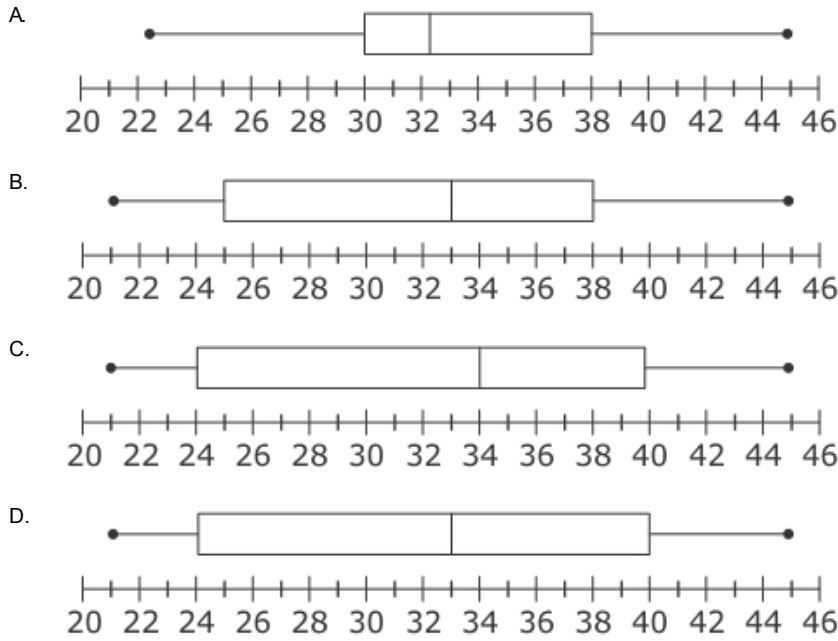
14. Which set of data is displayed in the box plot shown below?



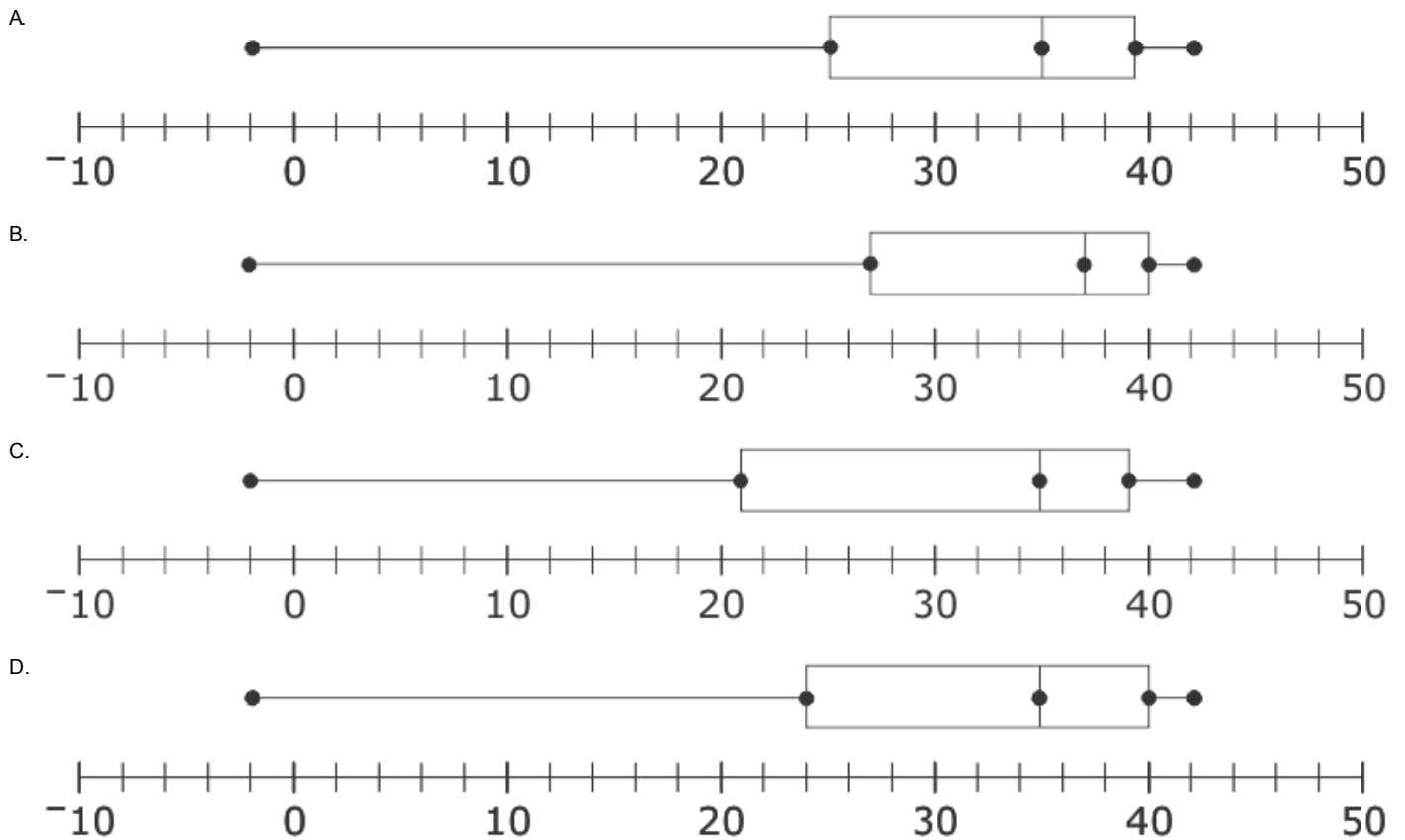
- A. 2, 3, 4, 5, 5, 6, 7, 7, 8, 10
- B. 2, 2, 3, 4, 4, 4, 5, 6, 8, 10
- C. 2, 3, 4, 5, 5, 6, 6, 6, 9, 10
- D. 2, 2, 4, 4, 5, 5, 7, 7, 8, 10

15. Which box plot represents the data set below?

22, 34, 25, 32, 41, 21, 23, 36, 37, 30, 38, 44, 32, 45



16. Which box plot **best** represents the temperatures 33, 41, 27, 42, 21, 39, 37, \bar{x} ?

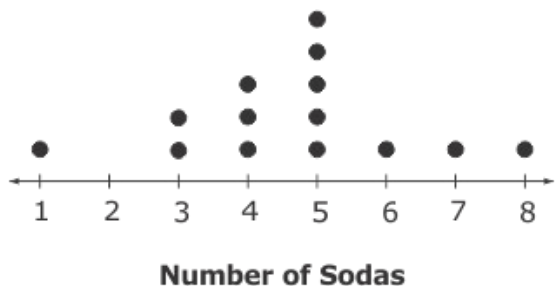


17. A group of teachers recorded the number of sodas they drank during one week.

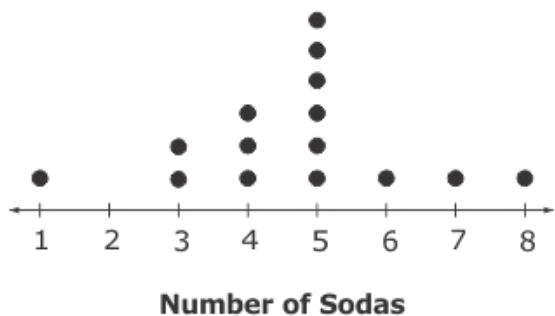
5, 5, 1, 8, 7, 5, 6, 4, 3, 4, 3, 5, 5, 4, 5

Which dot plot represents the data?

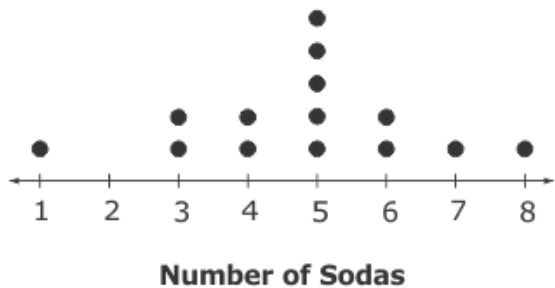
A.



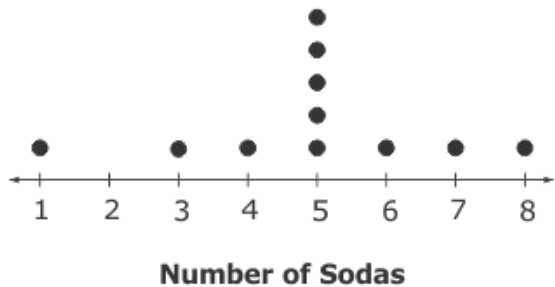
B.



C.



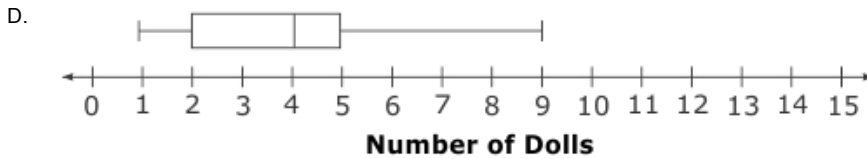
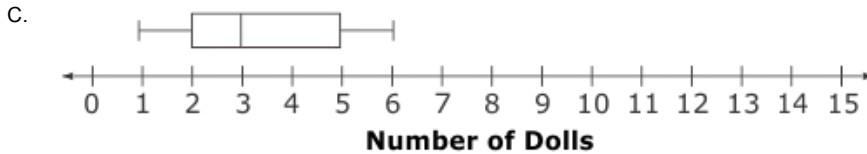
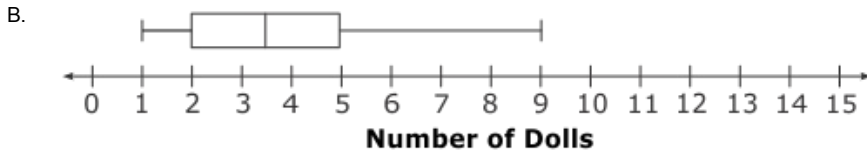
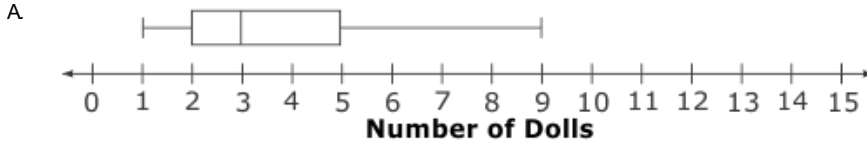
D.



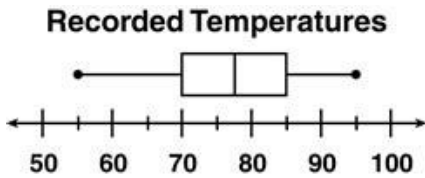
18. The data set below shows the number of dolls that 11 different children own.

$$\{1, 5, 3, 4, 9, 6, 2, 3, 3, 5, 2\}$$

Which box plot represents the data set?



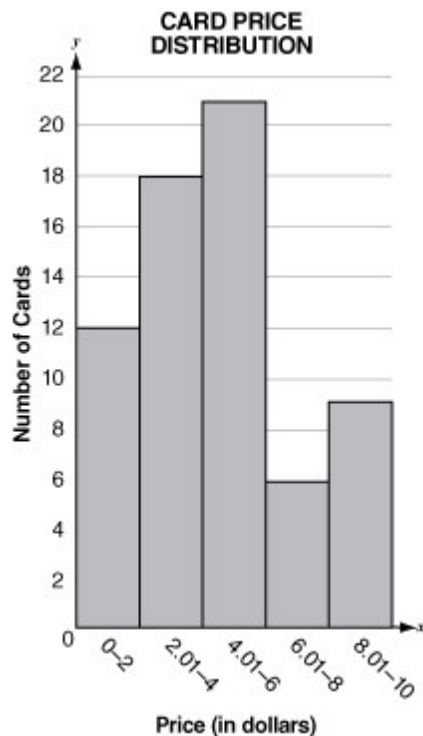
19. Jerry recorded the outdoor temperature at noon on the first day of each month for one year. He made the box-and-whisker plot below to display his data.



What is the range of temperatures?

- A. 40
- B. 55
- C. 70
- D. 95

20. A card store sells greeting cards that range from less than \$1 to \$10. The histogram below shows the distribution of cards throughout several price ranges and was determined to be the most accurate way of representing these data.



Which of these **most likely** describes the data shown in the histogram?

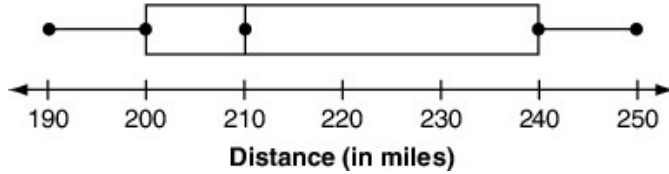
- A. The cards are grouped into five intervals according to price. The prices of the cards vary within each interval, and the highest frequency is 21.
- B. The cards are grouped into twenty-two intervals according to price. The prices of the cards vary within each interval, and the highest frequency is 10.
- C. The cards are grouped into five intervals according to price. The prices of the cards are limited to a few whole number values, and the highest frequency is 21.
- D. The cards are grouped into twenty-two intervals according to price. The prices of the cards are limited to a few whole number values, and the highest frequency is 10.

21. The data below show the distance, in miles, traveled by a taxicab each day over a period of 7 days.

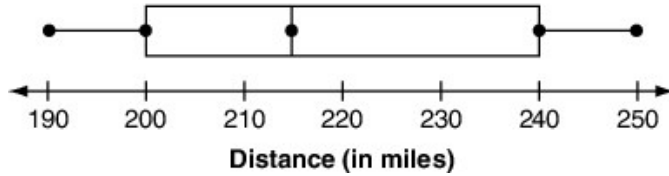
190, 200, 200, 220, 210, 240, 250

Which box plot **best** represents the data?

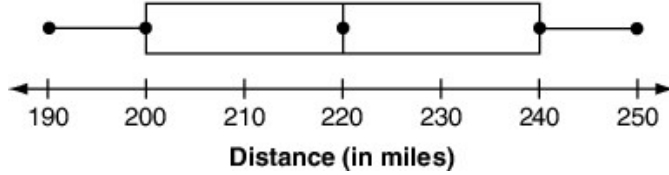
A. **DISTANCES TRAVELED BY TAXICAB OVER 7 DAYS**



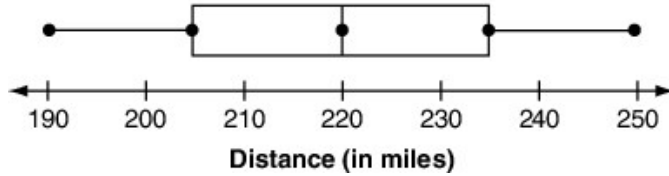
B. **DISTANCES TRAVELED BY TAXICAB OVER 7 DAYS**



C. **DISTANCES TRAVELED BY TAXICAB OVER 7 DAYS**



D. **DISTANCES TRAVELED BY TAXICAB OVER 7 DAYS**



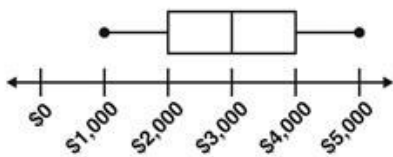
22. Ace Clothing Store's daily sales figures over a 12-day period are recorded in the table below. The amounts are rounded to the nearest thousand dollars.

Ace Clothing Store
Sales for 12 Days

Day	Sales (dollars)
1	2,000
2	5,000
3	4,000
4	1,000
5	3,000
6	4,000
7	1,000
8	1,000
9	3,000
10	4,000
11	4,000
12	4,000

The box-and-whisker plot below inaccurately represents the data in the table because of several errors.

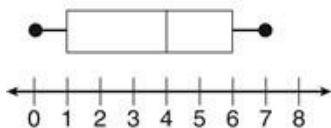
Ace Clothing Store Sales for 12 Days



What part of the box-and-whisker plot accurately represents the data in the table?

- A. the median
 - B. the lower quartile
 - C. the middle 50% range
 - D. the minimum and maximum amounts
23. The box-and-whisker plot below shows the number of points each member of the middle school basketball team made during the game on Saturday.

Number of Points Scored



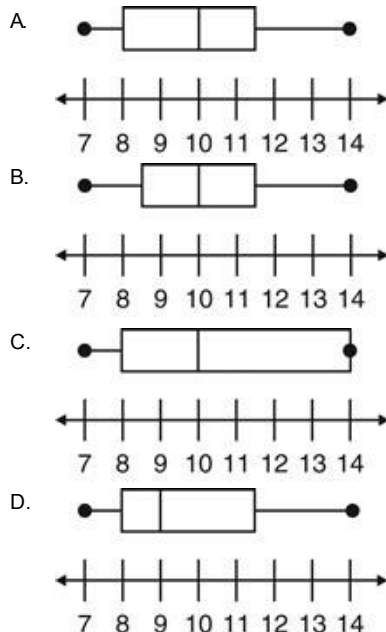
What was the greatest number of points scored by a basketball player during the game on Saturday?

- A. 4
- B. 6
- C. 7
- D. 8

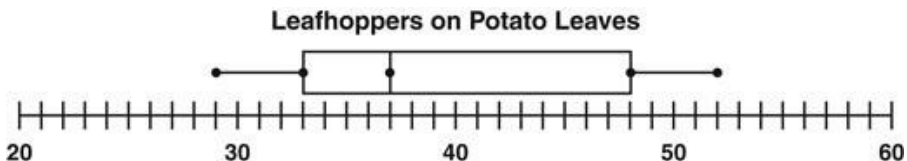
24. The shoe sizes for members of the track team at a high school are shown in the set below.

$$\left\{7, 7\frac{1}{2}, 8, 8, 8\frac{1}{2}, 9, 10, 10\frac{1}{2}, 10\frac{1}{2}, 11\frac{1}{2}, 11\frac{1}{2}, 13, 14\right\}$$

Which box-and-whisker plot best represents the data set?



25. The numbers of leafhoppers found on potato leaves that were 3 to 6 inches in length are displayed in the box-and-whisker plot below.



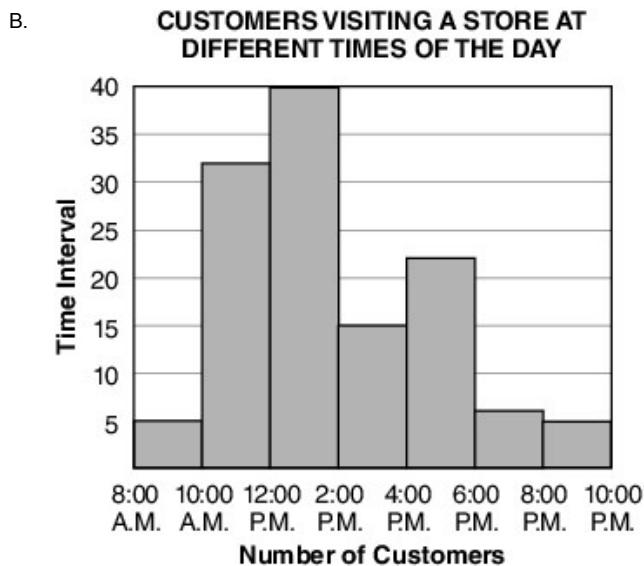
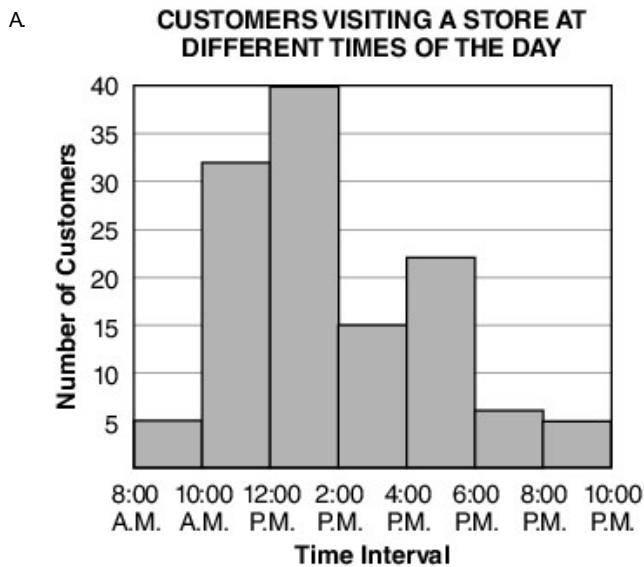
Which statement about the information presented in the graph is correct?

- A. The greatest number of leafhoppers found was 63.
- B. The greatest number of leafhoppers found was 50.
- C. The median number of leafhoppers found was 48.
- D. The median number of leafhoppers found was 37.

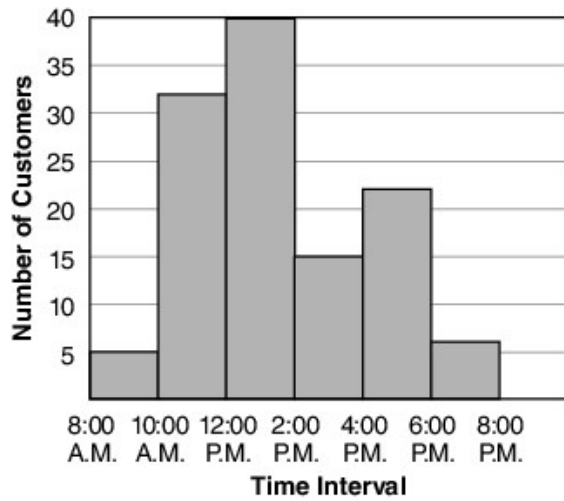
26. The table below shows the number of customers that visits a store at different times of the day.

Time Interval	Number of Customers
8:00 A.M.–9:00 A.M.	3
9:01 A.M.–10:00 A.M.	2
10:01 A.M.–11:00 A.M.	17
11:01 A.M.–12:00 P.M.	15
12:01 P.M.–1:00 P.M.	19
1:01 P.M.–2:00 P.M.	21
2:01 P.M.–3:00 P.M.	8
3:01 P.M.–4:00 P.M.	7
4:01 P.M.–5:00 P.M.	8
5:01 P.M.–6:00 P.M.	14
6:01 P.M.–7:00 P.M.	4
7:01 P.M.–8:00 P.M.	2
8:01 P.M.–9:00 P.M.	3
9:01 P.M.–10:00 P.M.	2

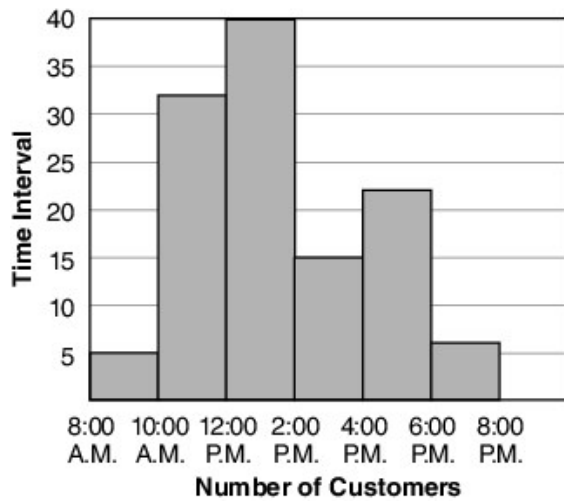
Which histogram **correctly** displays the given data?



C. **CUSTOMERS VISITING A STORE AT DIFFERENT TIMES OF THE DAY**



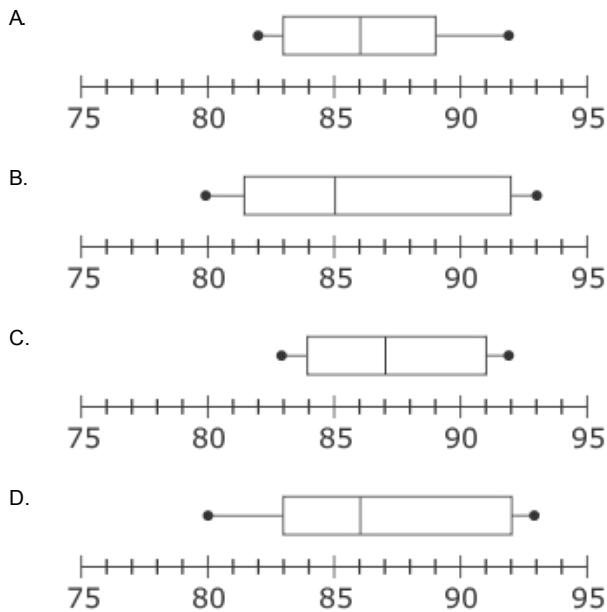
D. **CUSTOMERS VISITING A STORE AT DIFFERENT TIMES OF THE DAY**



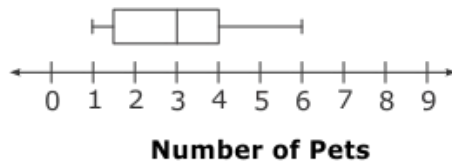
27. The ages of 11 senior citizens taking an art class are shown below.

{86, 92, 86, 80, 83, 80, 93, 92, 93, 84, 83}

Which box plot represents the ages of the senior citizens?



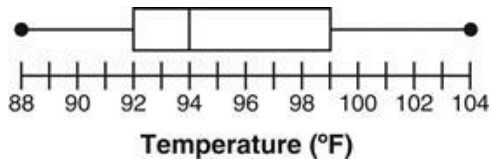
28. The box plot below represents the number of pets 9 different families own.



Which set of data could represent the number of pets these families own?

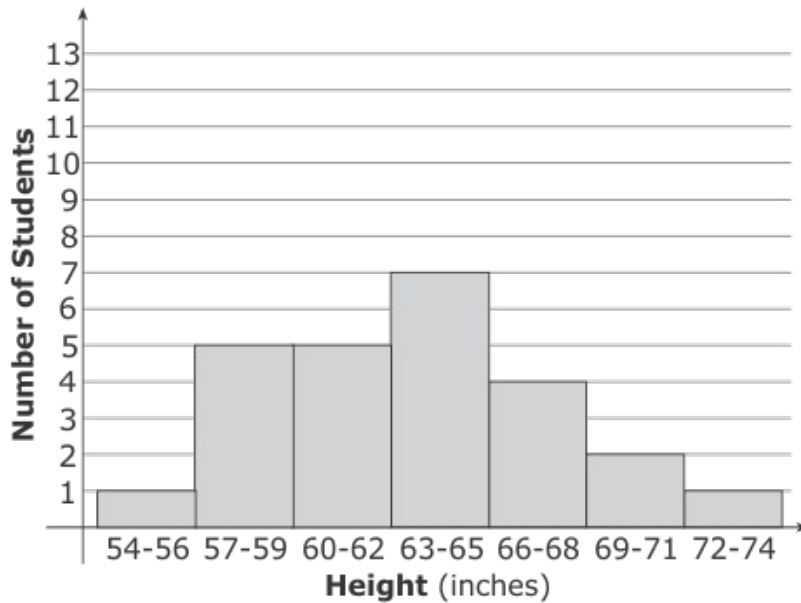
- A. {1, 1, 1, 2, 3, 4, 4, 4, 5}
- B. {1, 1, 2, 3, 3, 4, 4, 4, 6}
- C. {1, 1, 1, 2, 4, 4, 4, 4, 6}
- D. {2, 2, 3, 3, 4, 4, 4, 4, 6}

29. Sarita recorded the high temperatures in her town for the month of July and used her data to make this box-and-whisker plot.



Which statement must be true?

- A. The mean temperature of the month was 94°.
 - B. At least half of the temperatures were 94° or greater.
 - C. There were fewer temperatures between 92° and 94° than between 94° and 99°.
 - D. There were more temperatures between 99° and 104° than between 88° and 92°.
30. The histogram displays the heights of several students at a school.



Based on the graph, how many students are 65 inches or shorter?

- A. 11
- B. 16
- C. 18
- D. 21

31. Mrs. Jones surveyed the class for the number of letters in their given first name. The data is recorded below.

$\{5, 8, 6, 5, 4, 9, 8, 7, 6, 3, 8, 7, 5, 6, 7, 8\}$

What is the interquartile range of the data?

- A. 2
- B. 3
- C. 7
- D. 8

32. The data listed gives the number of hours several students spend playing video games in one week.

7, 4, 7, 5, 6, 8, 5, 5, 5.5, 4, 6

Which dot plot represents the data?

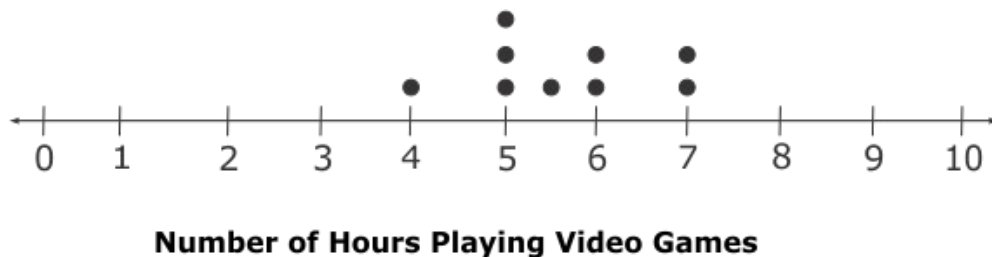
A.



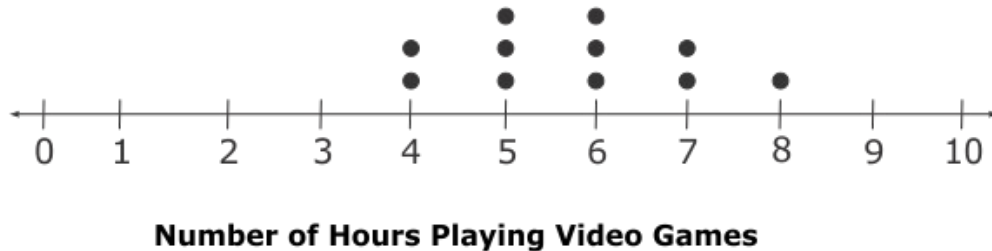
B.



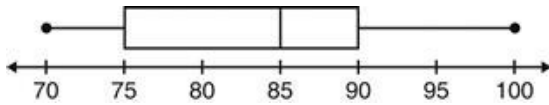
C.



D.



33. The plot below shows the distribution of grades for a test.

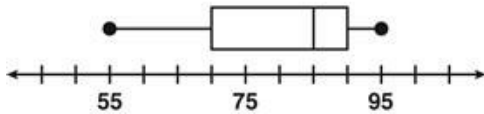


If Jeff earned a score of 91 on the test, in which quartile does his test score fall?

- A. first
- B. second
- C. third
- D. fourth

34. Karen constructed the box-and-whisker plot below to show information about her first-semester test scores.

Karen's Test Scores

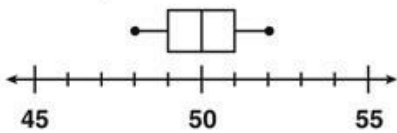


What was Karen's median test score?

- A. 70
- B. 85
- C. 90
- D. 95

35. Judy recorded the low temperatures at Clear Lake for ten days in May. She made the box-and-whisker plot to display her data.

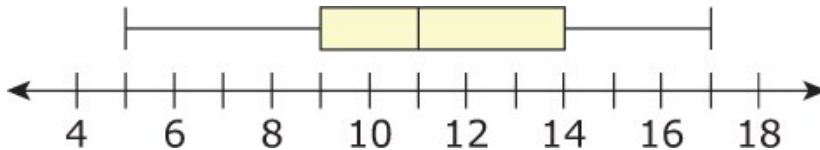
Low Temperatures at Clear Lake



Which value defines the upper quartile of the temperatures?

- A. 49
- B. 50
- C. 51
- D. 52

36. Which set of data can be represented by the box plot shown in the diagram below?

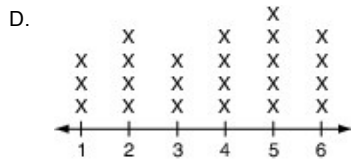
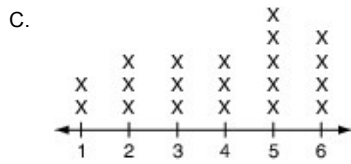
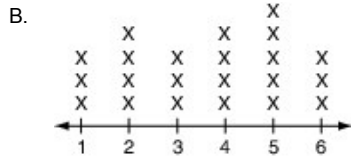
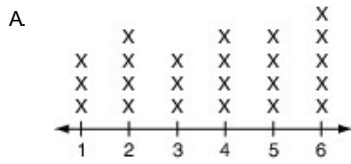


- A. 5, 5, 10, 11, 11, 12, 16, 17
- B. 5, 8, 10, 10, 12, 13, 13, 17
- C. 5, 9, 9, 10, 11, 14, 14, 17
- D. 5, 9, 9, 9, 13, 13, 15, 17

37. Janelia rolled a fair number cube numbered 1 through 6 a total of 23 times. The list shows her outcomes.

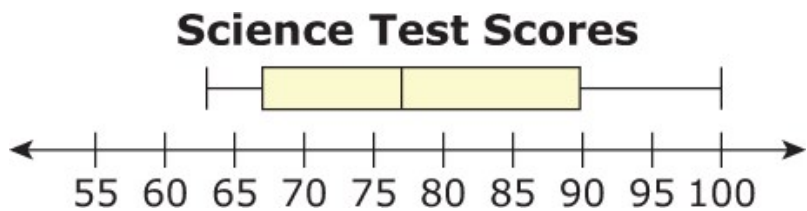
5, 6, 1, 1, 2, 4, 4, 5, 6, 3, 5, 4, 1, 2, 2, 3, 5, 2, 4, 6, 3, 5, 6

Which line plot represents Janelia's outcomes?

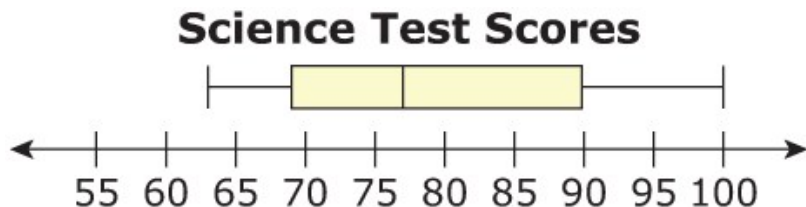


38. Nine students took a science test. Their scores were 63, 65, 69, 73, 77, 84, 85, 95, and 100. Which box plot correctly displays the scores data?

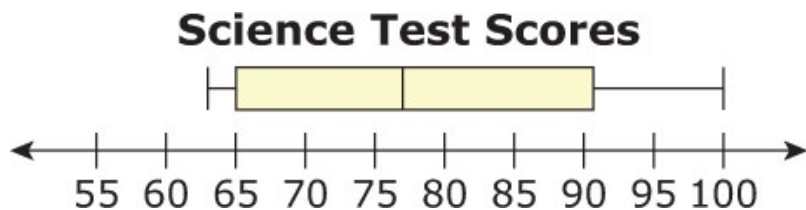
A.



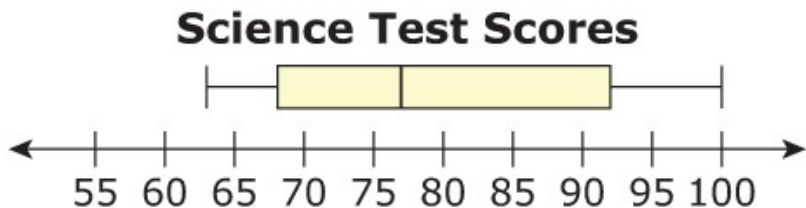
B.



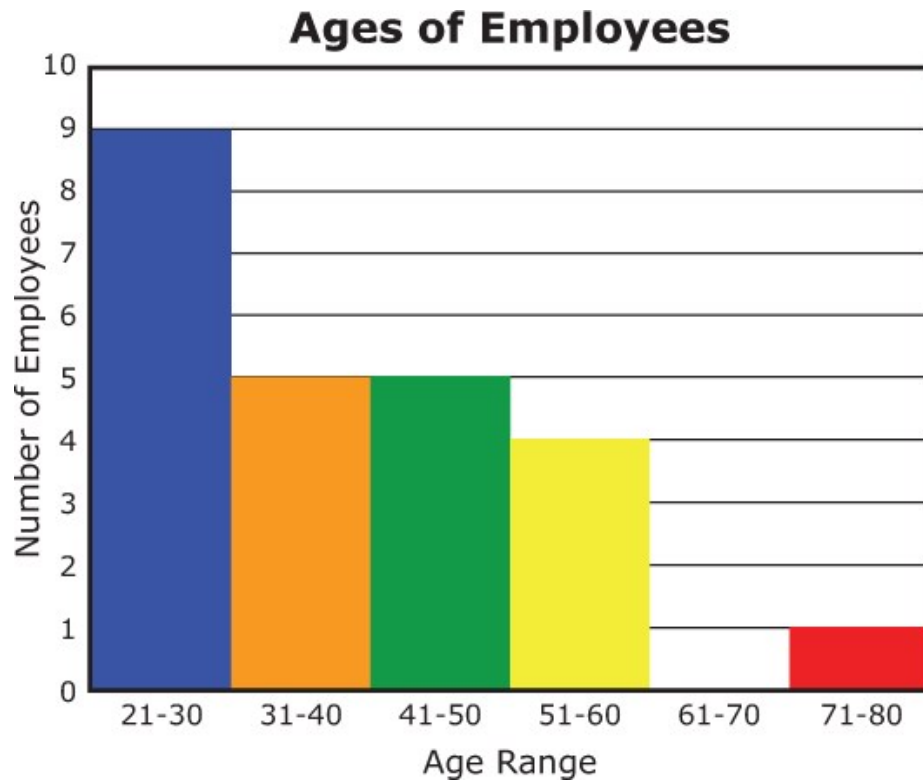
C.



D.



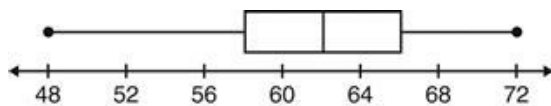
39. The histogram below displays the ages of a company's employees.



The company hires 7 new employees. The ages of the new employees are 48, 51, 60, 61, 63, 70, and 71. What should the height of the bar for age range 61-70 be to represent the ages of the new employees?

- A. 2
- B. 3
- C. 4
- D. 5

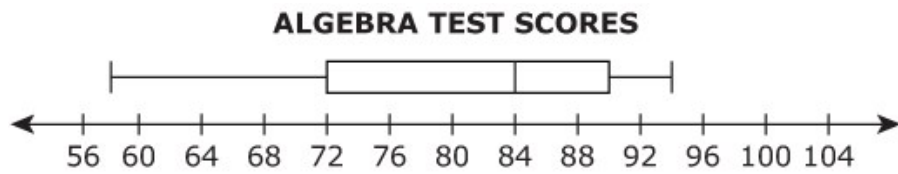
40. The plot shows the distribution of the heights of students in a class.



If Nora is 55 inches tall, in which quartile is her height?

- A. first
- B. second
- C. third
- D. fourth

41. Mrs. Garcia decides to organize her students' algebra test scores into a box plot to analyze the results, as shown below.



What is the median score of the class?

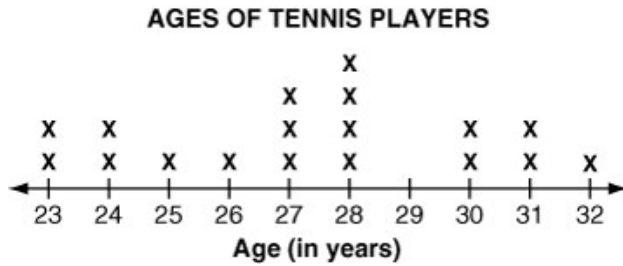
- A. 76
- B. 80
- C. 82
- D. 84

42. Andy made a list of the ages of the players selected for a tennis tournament. The ages of the players are listed below.

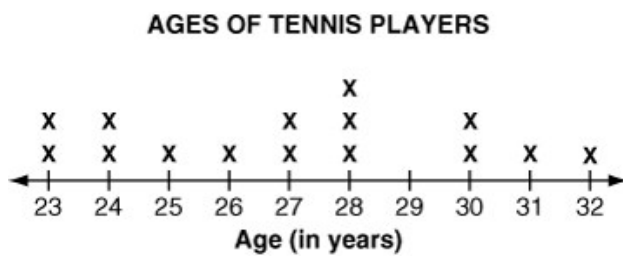
25, 26, 28, 28, 31, 31, 30, 23, 24, 27, 27, 24, 28, 30, 23, 32, 27, 28

Which of these line plots is a correct representation of these data?

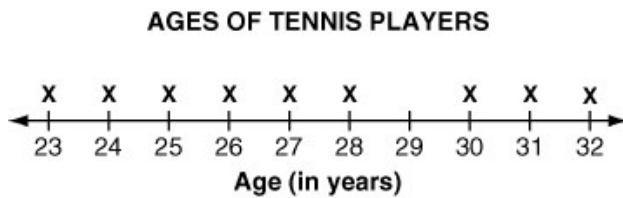
A.



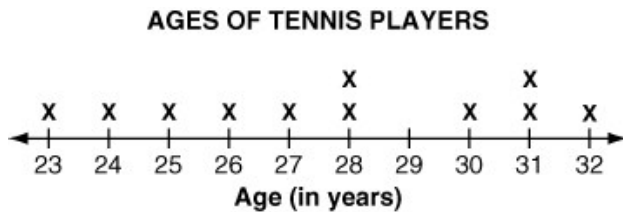
B.



C.



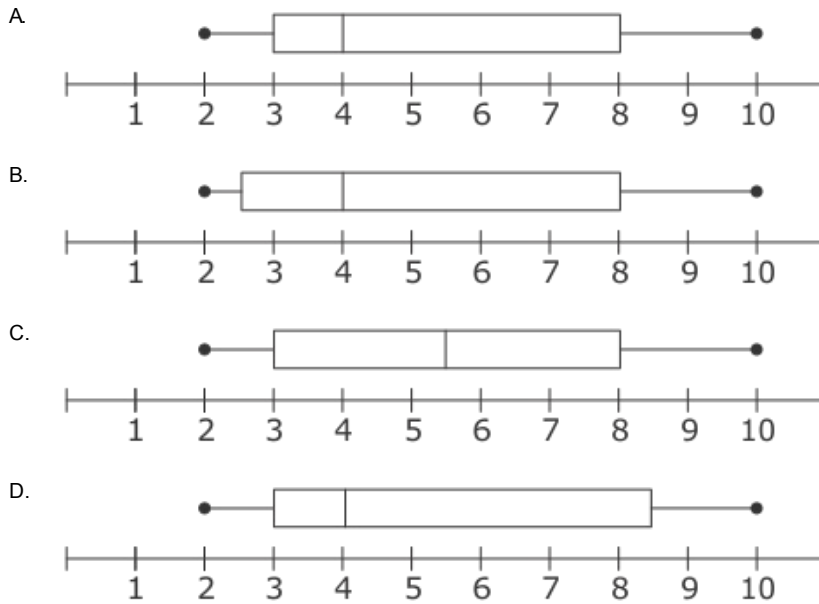
D.



43. The data set below shows the number of rooms that were not occupied at a hotel each day during a week.

2, 3, 4, 4, 7, 8, 10

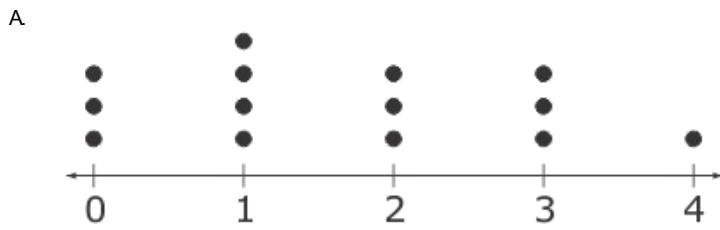
Which box plot represents the data?



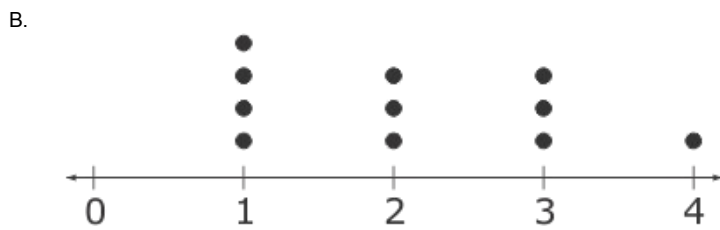
44. The number of siblings that each student in a class has is listed.

3, 1, 1, 0, 2, 2, 3, 4, 1, 3, 2, 1, 0, 0

Which dot plot displays this data?



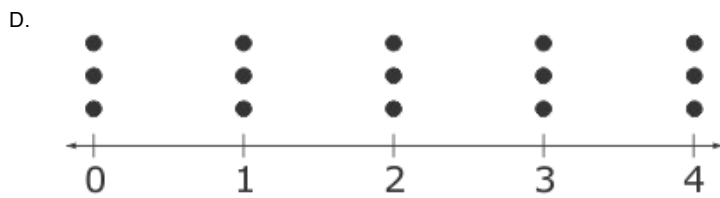
Number of Siblings



Number of Siblings



Number of Siblings

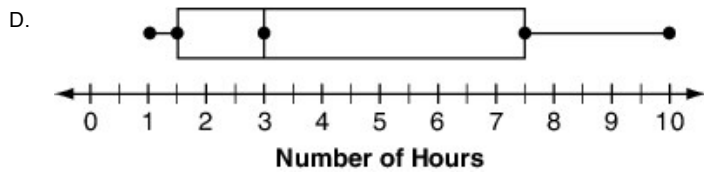
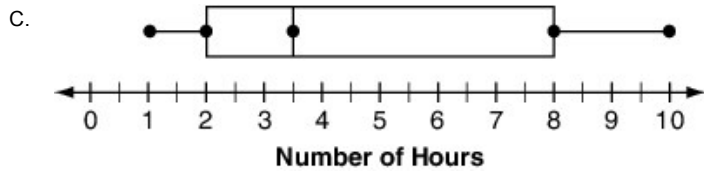
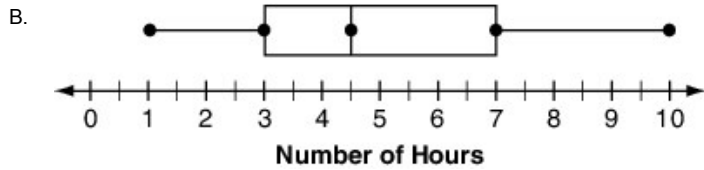
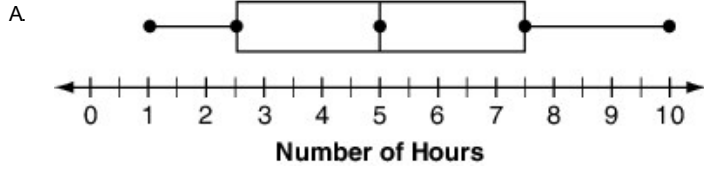


Number of Siblings

45. Dave records the number of hours he spent watching television each day for a period of 10 days as shown.

5, 1, 2, 6, 3, 4, 7, 8, 10, 4

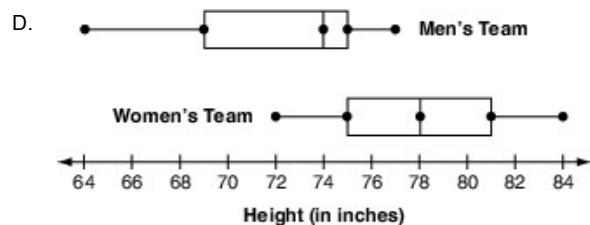
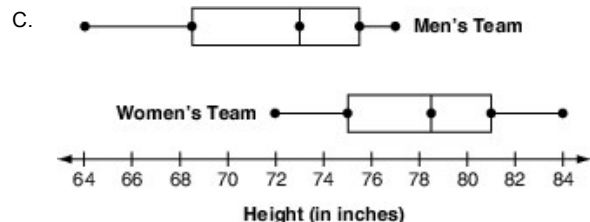
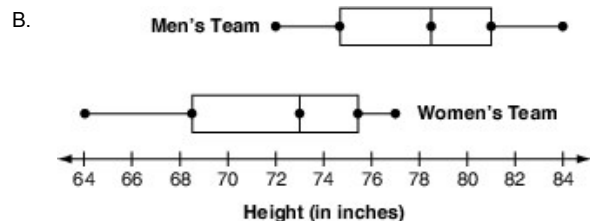
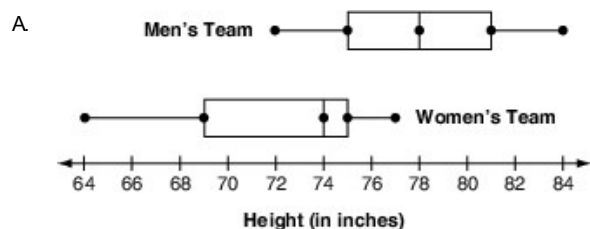
Which box-and-whisker plot represents the data he recorded?



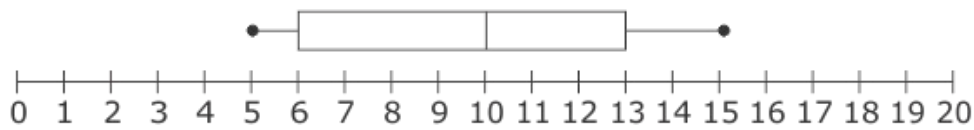
46. The table below shows the heights, in inches, of the players on a women's basketball team and the players on a men's basketball team.

Women's Team	Men's Team
64	72
68	80
69	74
72	76
74	74
74	78
77	78
76	82
75	79
74	76
75	82
69	84

Which image represents the given data correctly in a box-and-whisker plot?



47. Which set of data is displayed in the box plot shown below?

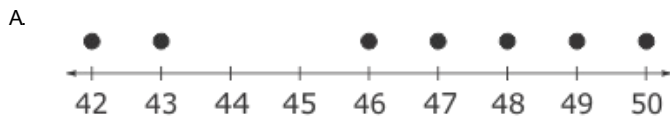


- A. 5, 15, 6, 12, 12, 6, 10, 8
- B. 11, 14, 5, 7, 5, 9, 12, 15
- C. 15, 10, 6, 8, 5, 8, 10, 12
- D. 5, 8, 8, 5, 15, 12, 14, 12

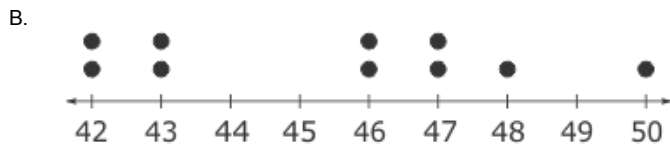
48. The numbers listed below are the ages of 10 different presidents at the time they were inaugurated.

42, 43, 46, 46, 47, 47, 49, 49, 48, 50

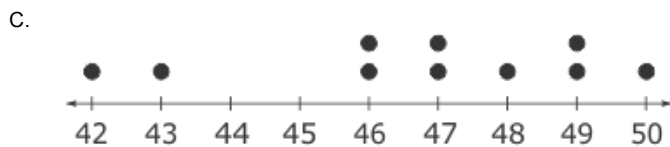
Which dot plot represents the data?



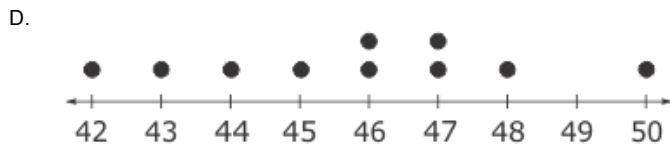
Age of Presidents When Inaugurated



Age of Presidents When Inaugurated

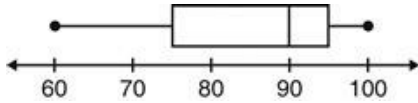


Age of Presidents When Inaugurated



Age of Presidents When Inaugurated

49. The distribution of Carol's homework grades is shown in the plot below.



What is true according to the plot?

- A. mean: 80
- B. median: 80
- C. mean: 90
- D. median: 90

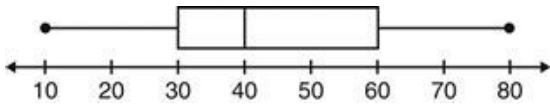
50. The data below show the donations, in dollars, a charity received from 8 of its donors at a fund-raising event.

640, 550, 480, 600, 720, 720, 800, 840

Which box plot **correctly** represents these data?

- A. **DONATIONS (IN DOLLARS)**
-
- B. **DONATIONS (IN DOLLARS)**
-
- C. **DONATIONS (IN DOLLARS)**
-
- D. **DONATIONS (IN DOLLARS)**
-

51. The plot shows the distribution of the number of classrooms for several middle schools.



If Eastward Middle School has 28 classrooms, in which quartile is the number of classrooms?

- A. first
- B. second
- C. third
- D. fourth

52. The data lists the number of minutes it took several students to complete a test.

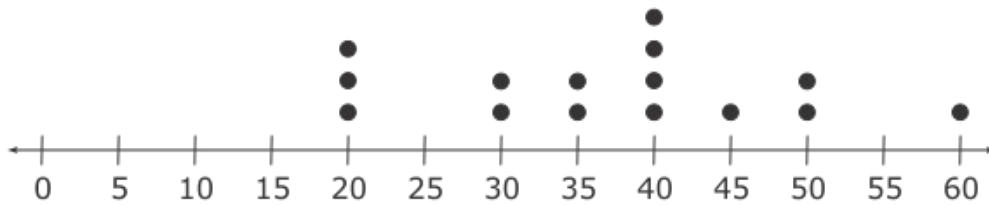
35, 50, 25, 20, 35, 40, 25, 30, 30, 60, 45, 40, 40, 40, 50

Which dot plot represents these data?

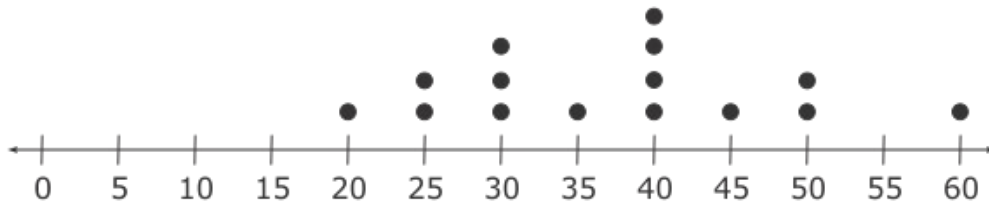
A.



B.



C.



D.

