

Study Guide Test 10 Data

Date: \_\_\_\_\_

1. Find the range, mean, median, and mode of the following data set.

5, 17, 21, 21, 7, 13, 1, 3

2. Find the range, mean, median, and mode of the following data set.

10, 3, 13, 7, 9, 8, 8, 20

3. Find the range, mean, median, and mode of the following data set.

14, 19, 19, 12, 2, 1, 15, 22, 22

4. Find the range, mean, median, and mode of the following data set.

25, 21, 13, 5, 4, 8, 14, 13

5. Find the range, mean, median, and mode of the following data set.

10, 8, 20, 16, 3, 4, 16

6. Find the range, mean, median, and mode of the following data set.

21, 7, 4, 11, 19, 7, 18, 3

7. Find the range, mean, median, and mode of the following data set.

7, 21, 12, 3, 21, 10, 21

8. Find the range, mean, median, and mode of the following data set.

7, 19, 8, 3, 12, 4, 21

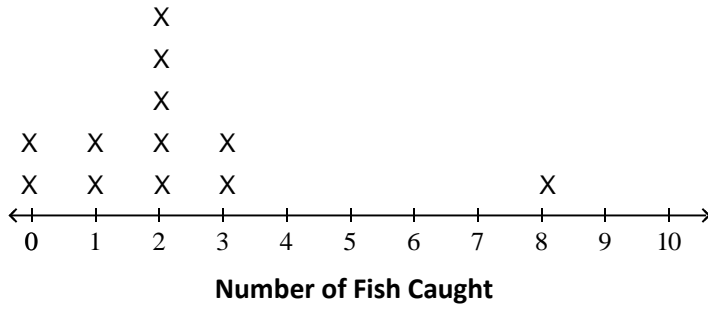
9. Find the range, mean, median, and mode of the following data set.

18, 14, 3, 24, 15, 21, 22, 3, 18

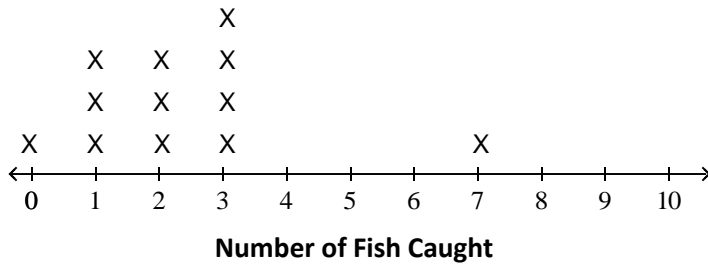
10. Find the range, mean, median, and mode of the following data set.

15, 22, 14, 1, 19, 22, 14, 22

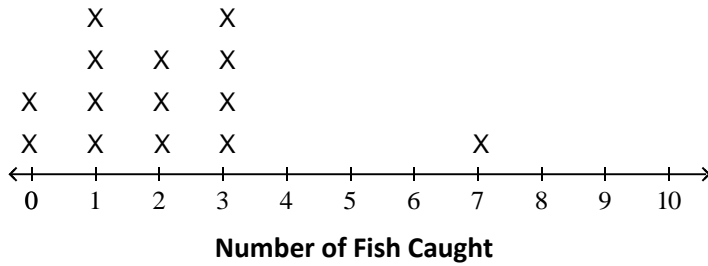
11. Name the cluster in the data shown in the line plot?



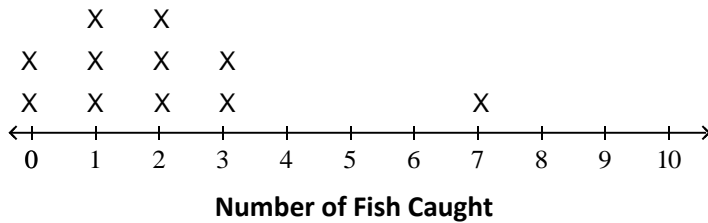
12. Name the cluster in the data shown in the line plot?



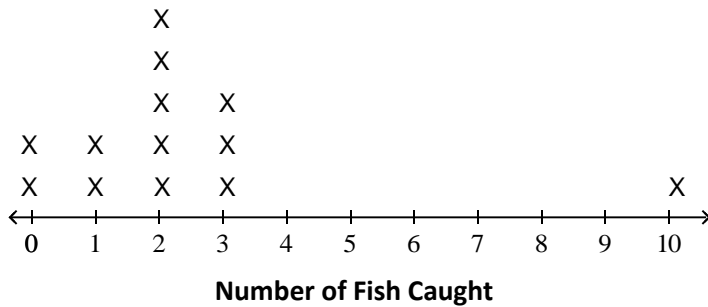
13. Name the cluster in the data shown in the line plot?



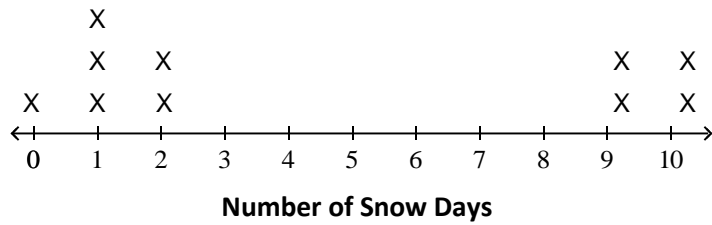
14. Name the cluster in the data shown in the line plot?



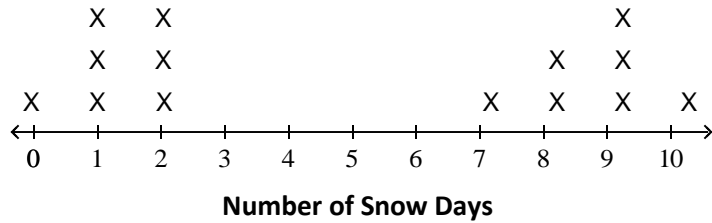
15. Name the cluster in the data shown in the line plot?



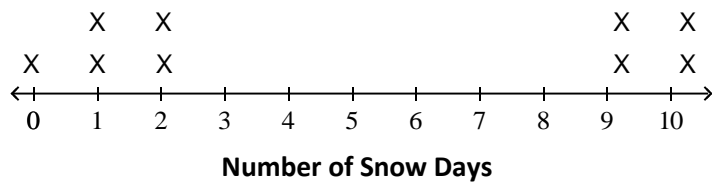
16. Name the cluster in the data shown in the line plot?



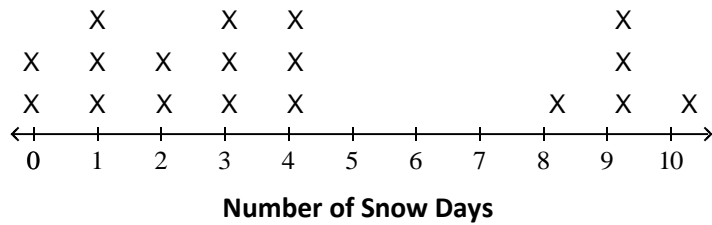
17. Name the cluster in the data shown in the line plot?



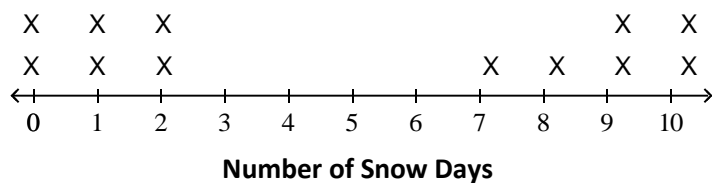
18. Name the cluster in the data shown in the line plot?



19. Name the cluster in the data shown in the line plot?



20. Name the cluster in the data shown in the line plot?



21. Organize the data in a line plot.

Quiz Scores	
Score	Frequency
1	0
2	2
3	4
4	8
5	3

22. Organize the data in a line plot.

Quiz Scores	
Score	Frequency
1	0
2	3
3	4
4	7
5	3

23. Organize the data in a line plot.

Quiz Scores	
Score	Frequency
1	1
2	4
3	4
4	8
5	4

24. Organize the data in a line plot.

Quiz Scores	
Score	Frequency
1	1
2	2
3	5
4	6
5	4

25. Organize the data in a line plot.

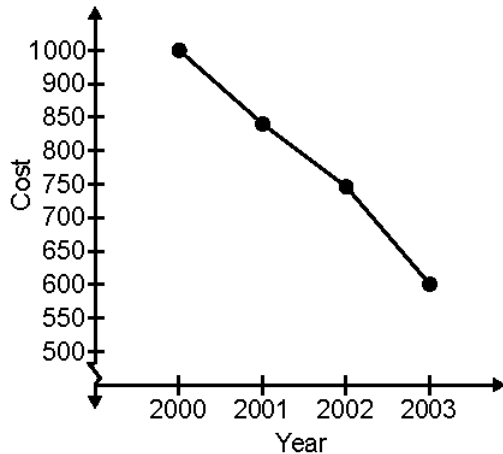
Quiz Scores	
Score	Frequency
1	2
2	2
3	4
4	5
5	6

26. Organize the data in a line plot.

Quiz Scores	
Score	Frequency
1	0
2	4
3	5
4	8
5	5

**Graph 6-7.2**

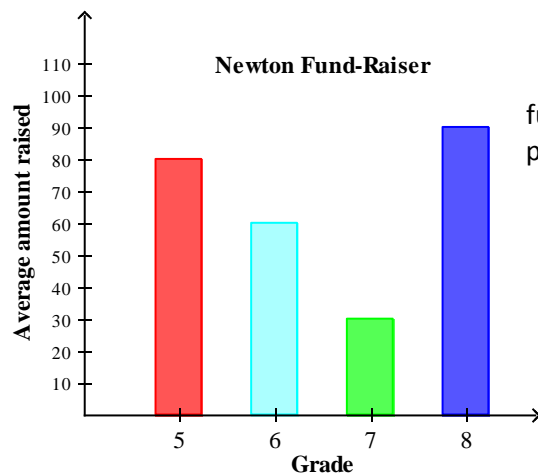
**Average Cost of Computers**



27. According to Graph 6-7.2, which year has been the most expensive for computers so far?

28. According to Graph 6-7.2, how much did the total price of computers drop from 2002 to 2003?

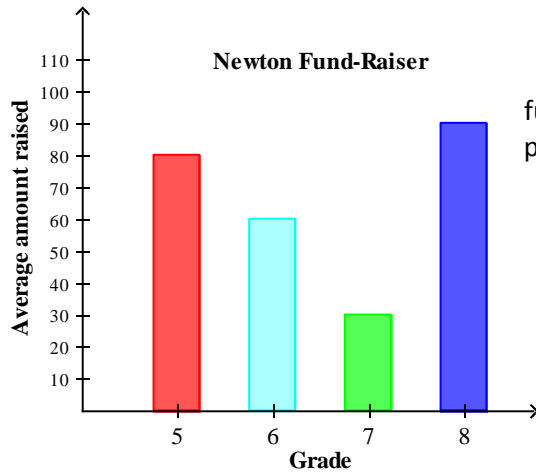
29. According to Graph 6-7.2, what was the average price of a computer in 2001?



30. Newton School district sold candy in grades 5 – 8 as a fund-raiser. The bar graph shows the average amount of money raised per student in each grade.

a. Which grade raised the most money?

b. Which grade raised the least money?

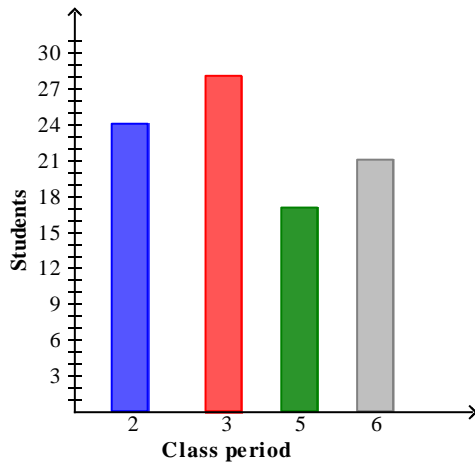


31. Newton School district sold candy in grades 5 – 8 as a fund-raiser. The bar graph shows the average amount of money raised per student in each grade.

- How much more money was raised by the 5th grade than the 7th grade?
- How much more money was raised by the 8th grade than the 6th grade?

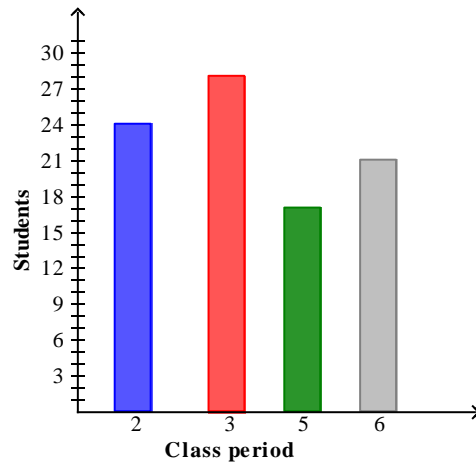
32. Mr. Gleeson teaches 4 math classes. According to the graph below, which class period has the most students?

Mr. Gleeson's Math Classes

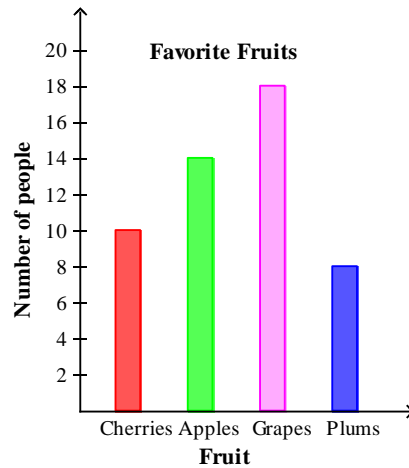


33. Mr. Gleeson teaches 4 math classes. According to the graph below, which class period has the least students?

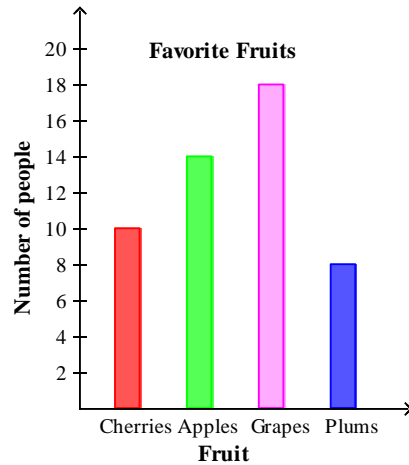
Mr. Gleeson's Math Classes



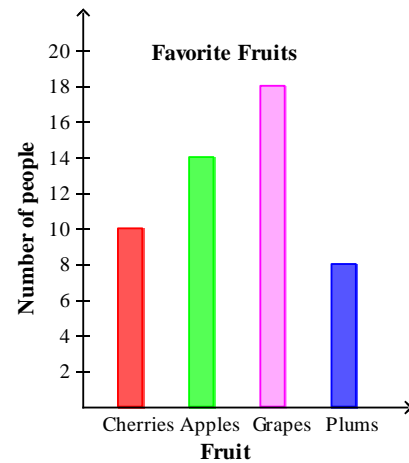
34. In a recent food study, 50 people were asked what fruit they like the best. The graph on the right shows the results. How many people prefer grapes?



35. In a recent food study, 50 people were asked what fruit they like the best. The graph on the right shows the results. How many more people prefer apples than cherries?



36. In a recent food study, 50 people were asked what fruit they like the best. The graph on the right shows the results. How many more people prefer grapes than plums?



37. George comes from a large family. He also has four friends with large families. Below is the number of people in each family. Use the data in the table to create a bar graph.

Person	Number in Family
George	8
David	7
Fred	12
Bobby	9
Juan	11

38. The results of a survey on people's favorite type of media are shown in the table. Use the data to create a bar graph.

Type of Media	Number of People (hundreds)
Newspapers	3
Radio	2
Television	6
Books	3
Magazines	2.5

39. The results of a survey on people's favorite type of media are shown in the table. Use the data to create a bar graph.

Type of Media	Number of People (hundreds)
Newspapers	2
Radio	2
Television	6
Books	3
Magazines	2.5

40. The results of a survey on people's favorite type of media are shown in the table. Use the data to create a bar graph.

Type of Media	Number of People (hundreds)
Newspapers	3
Radio	2
Television	6
Books	2.5
Magazines	3

41. Use the data in the table below to make a line graph.

Number of Games Won by Sixth Grade Boys Basketball				
Year	2000	2001	2002	2003
Games	16	12	19	25

42. Use the data in the table below to make a line graph.

High School Play Attendance				
Grade	9	10	11	12
Number of Students	135	165	115	140

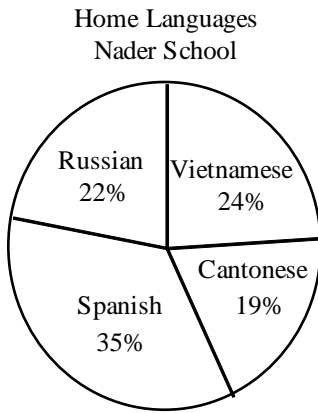
43. Use the data about the city of Johnsonville and their blizzard of 1996 to make a line graph.

Date	Snowfall
December 18	7 in.
December 19	14 in.
December 20	18 in.
December 21	14 in.
December 22	8 in.

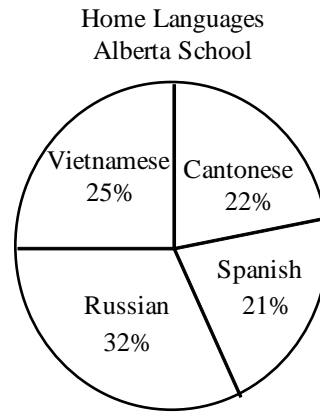
44. Use the data in the paragraph below to make a line graph showing the number of tires reported in the warehouse during the week.

Day of Week	Number of Tires
Monday	38
Tuesday	63
Wednesday	112
Thursday	64
Friday	57

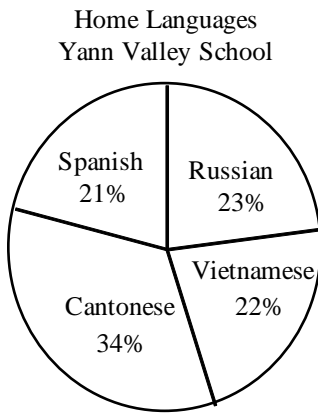
45. The circle graph below shows the percentages of main languages spoken at home by the students at Nader Newcomer School. Use the graph to find out what percent of students do *not* speak Spanish as their main home language.



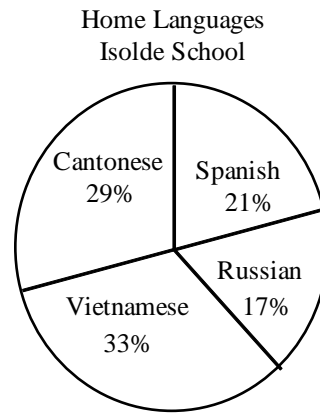
46. The circle graph below shows the percentages of main languages spoken at home by the students at Alberta Newcomer School. Use the graph to find out which language is most commonly spoken in students' homes.



47. The circle graph below shows the percentages of main languages spoken at home by the students at Yann Valley Newcomer School. Use the graph to find out which language is most commonly spoken in students' homes.

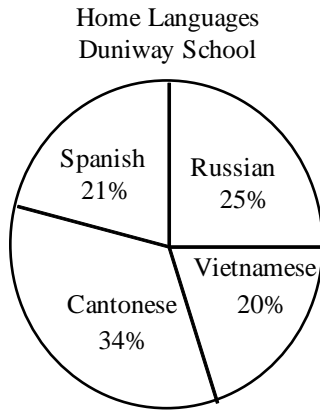


48. The circle graph below shows the percentages of main languages spoken at home by the students at Isolde Newcomer School. Use the graph to find out what percent of students do *not* speak Spanish as their main home language.

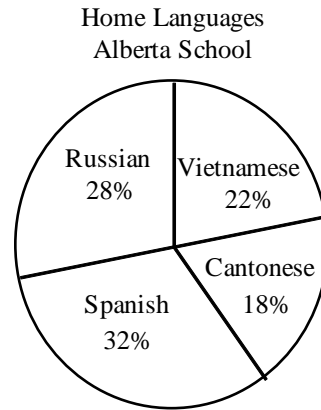




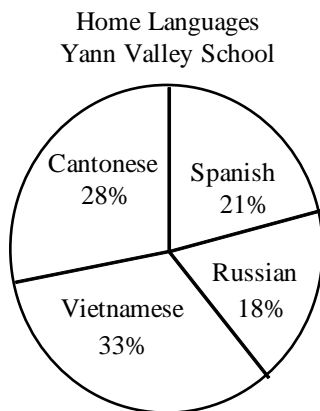
49. The circle graph below shows the percentages of main languages spoken at home by the students at Duniway Newcomer School. Use the graph to find out which language is most commonly spoken in students' homes.



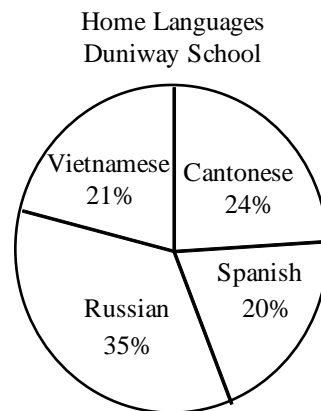
50. The circle graph below shows the percentages of main languages spoken at home by the students at Alberta Newcomer School. Use the graph to find out what percent of students do *not* speak Spanish as their main home language.



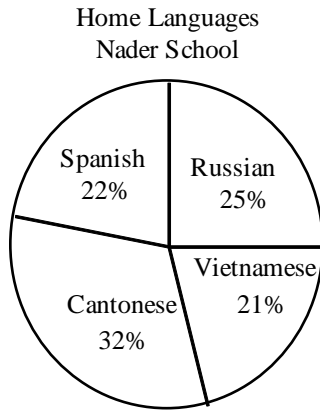
51. The circle graph below shows the percentages of main languages spoken at home by the students at Yann Valley Newcomer School. Use the graph to find out what percent of students do *not* speak Spanish as their main home language.



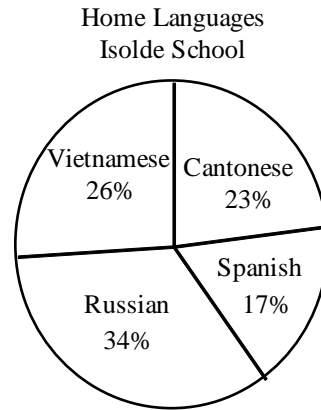
52. The circle graph below shows the percentages of main languages spoken at home by the students at Duniway Newcomer School. Use the graph to find out which language is most commonly spoken in students' homes.



53. The circle graph below shows the percentages of main languages spoken at home by the students at Nader Newcomer School. Use the graph to find out which language is most commonly spoken in students' homes.

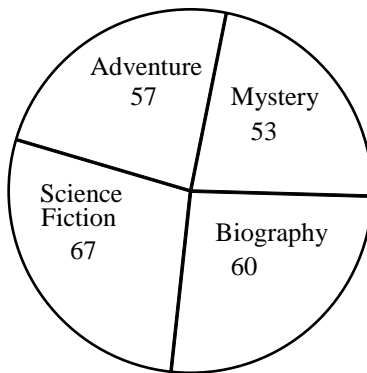


54. The circle graph below shows the percentages of main languages spoken at home by the students at Isolde Newcomer School. Use the graph to find out what percent of students do *not* speak Vietnamese as their main home language.



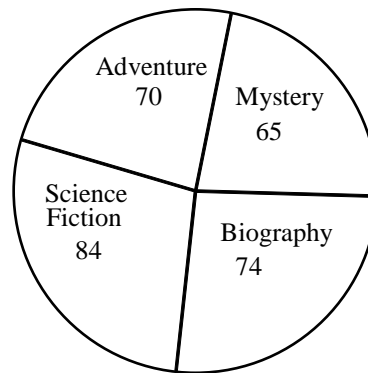
55. Use the circle graph below to find out how many more 5th graders would rather read science fiction novels than adventure books.

**Types of Books Preferred by 5th Graders  
at Creekside School**



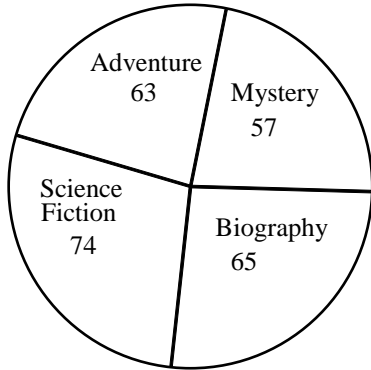
56. Use the circle graph below to find out how many 5th graders do not prefer science fiction novels.

**Types of Books Preferred by 5th Graders  
at Benson School**



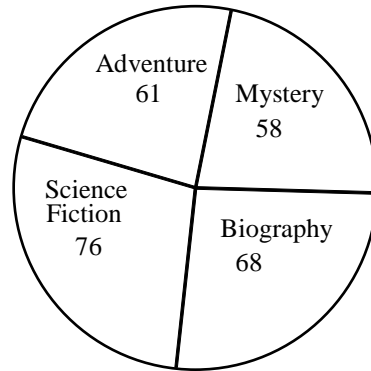
57. Use the circle graph below to find out how many 5th graders participated in the survey.

**Types of Books Preferred by 5th Graders at Anderson Elementary**



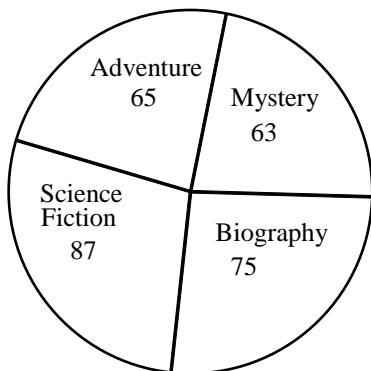
58. Use the circle graph below to find out how many more 5th graders would rather read science fiction novels than adventure books.

**Types of Books Preferred by 5th Graders at Lyndale School**

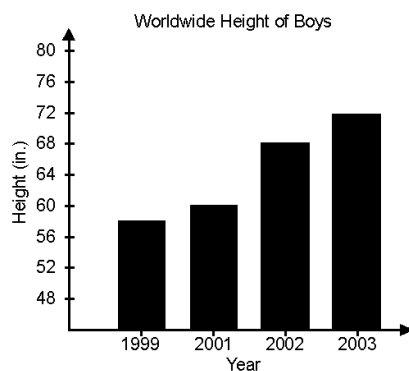


59. Use the circle graph below to find out how many 5th graders participated in the survey.

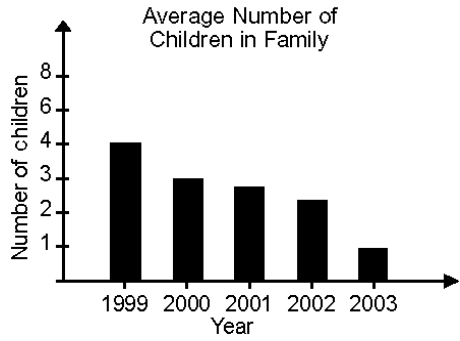
**Types of Books Preferred by 5th Graders at Robinson Elementary**



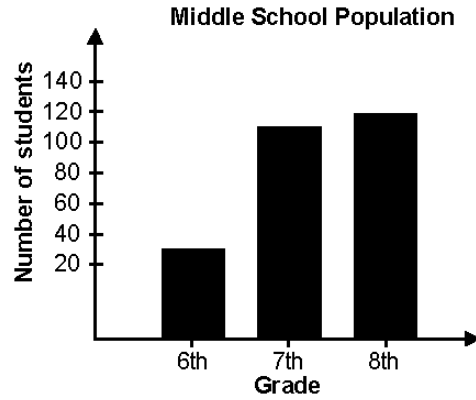
60. Explain why the bar graph below is misleading.



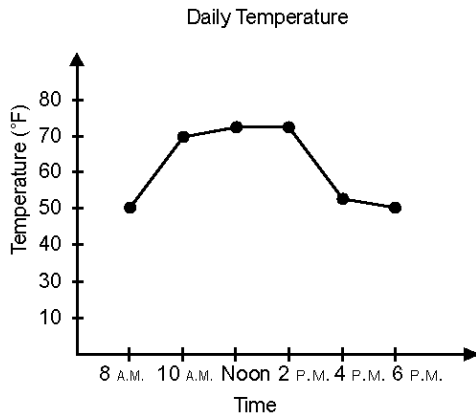
61. Explain why the bar graph below is misleading.



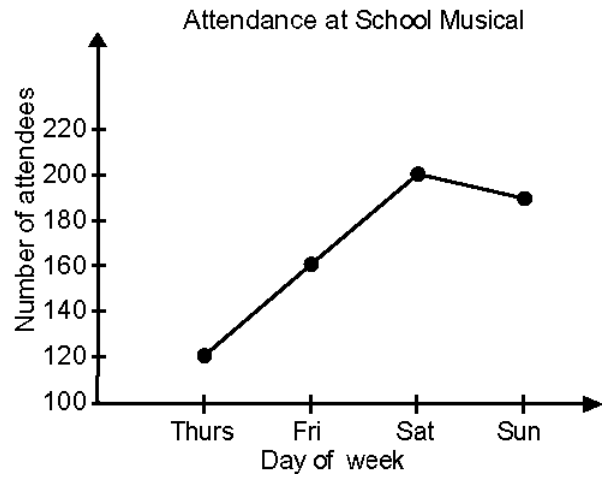
62. Explain why the bar graph below is misleading.



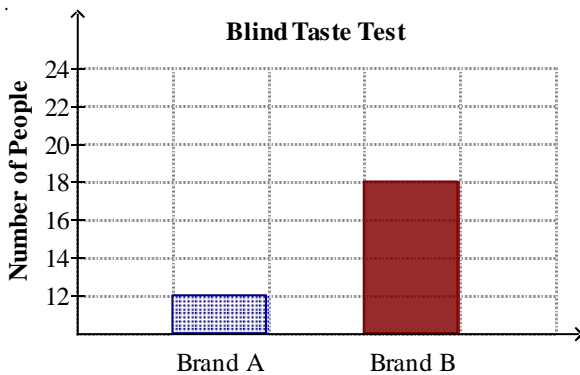
63. Explain why the line graph below is misleading.



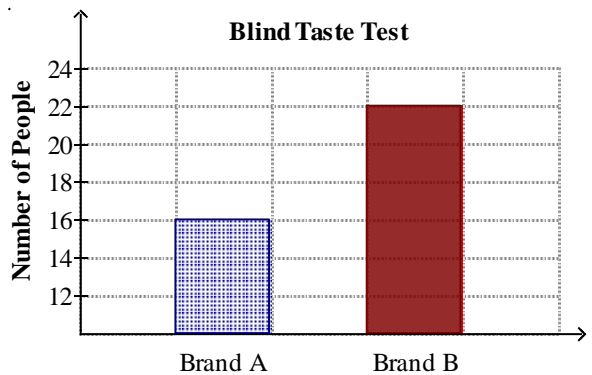
64. Explain why the line graph below is misleading.



65. Explain why the graph below is misleading.



66. Explain why the graph below is misleading.



**Answer Section**

1. Range 20  
Mean 11  
Median 10  
Mode 21

2. Range 17  
Mean 9.8  
Median 9  
Mode 8

3. Range 21  
Mean 14  
Median 15  
Mode none

4. Range 21  
Mean 12.9  
Median 13  
Mode 13

5. Range 17  
Mean 11  
Median 10  
Mode 16

6. Range 18  
Mean 11.3  
Median 9  
Mode 7

7. Range 18  
Mean 13.6  
Median 12

8. Range 18  
Mean 10.6  
Median 8  
Mode none

9. Range 21  
Mean 15.3  
Median 18  
Mode none

10. Range 21  
Mean 16.1  
Median 17  
Mode 22

11. 0-4

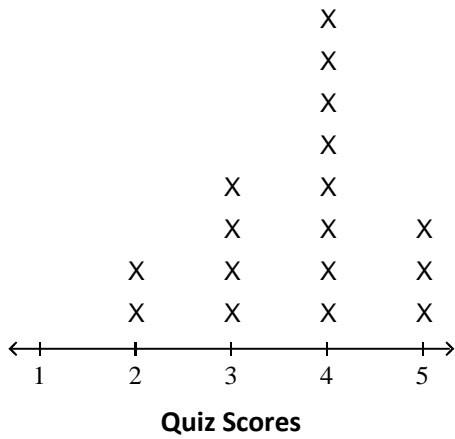
12. 1-3

13. 0-3

14. 0-3

15. 0-3

21.



16. 1-2

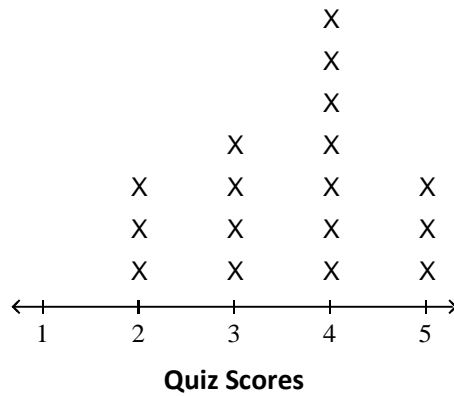
17. 1-2 & 8-9

18. 1-2 & 9-10

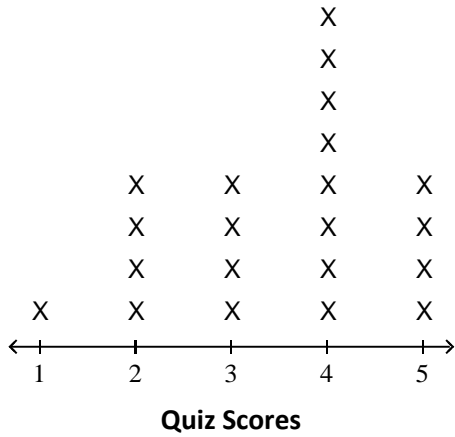
19. 0-4

20. 0-2

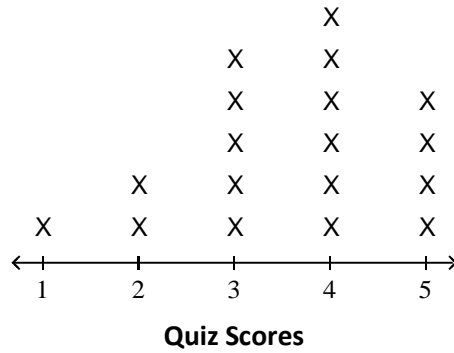
22.



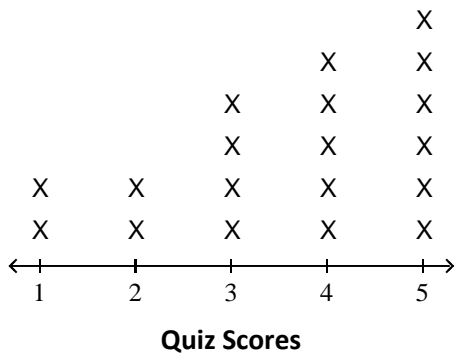
23.



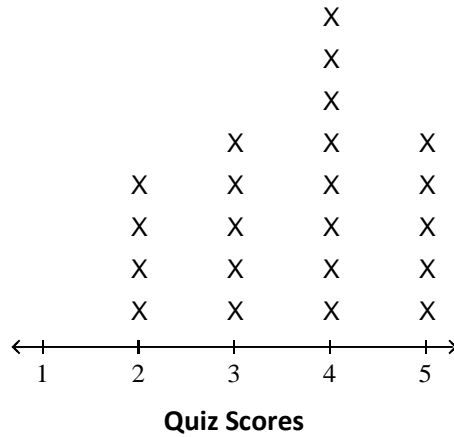
24.



25.



26.



27. 2000

28. \$150

29. \$845

30. a. The grade that sold the most is the 8<sup>th</sup> grade.  
 b. The grade that sold the least is the 7<sup>th</sup> grade.

31. a. 50 dollars  
 b. 30 dollars

32. Period 3

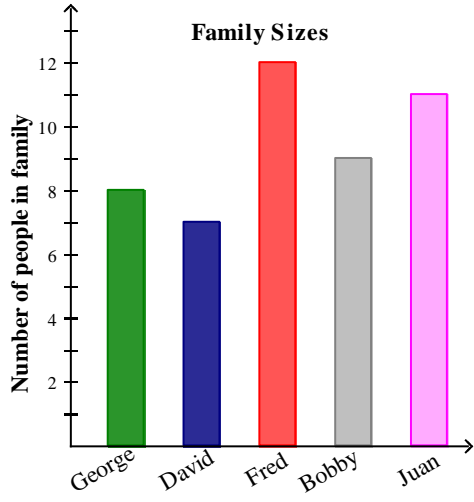
33. Period 5

34. 18 people

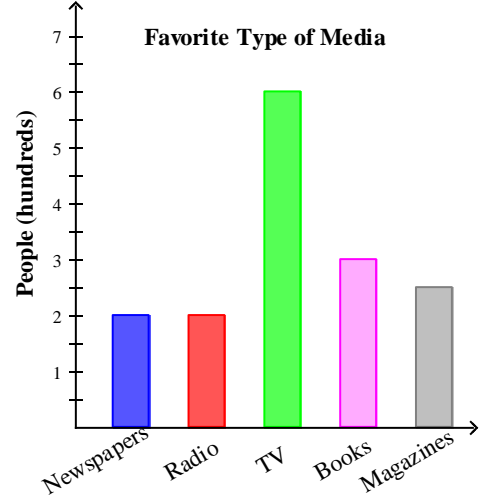
35. 4 people

36. 10 people

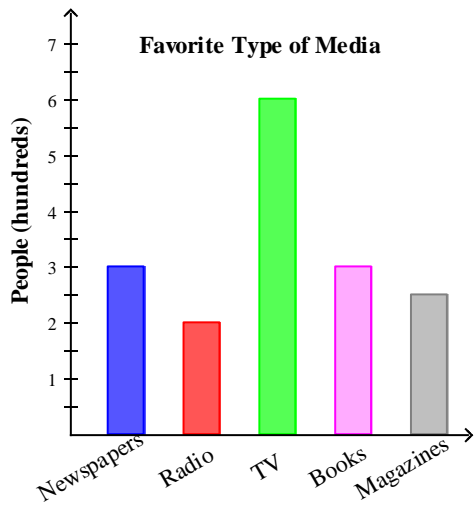
37.



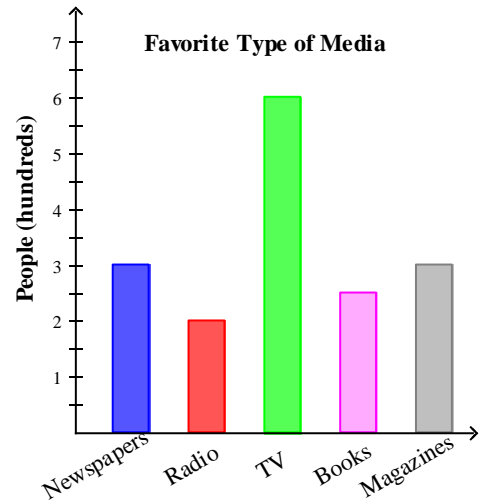
38.



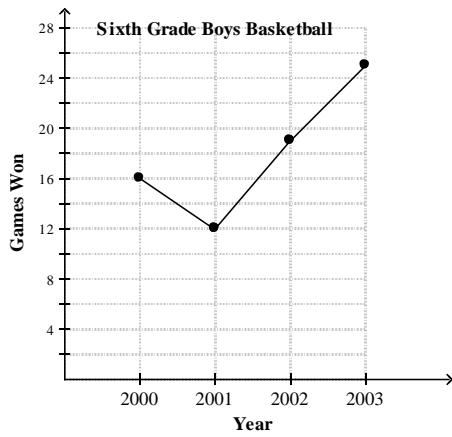
39.



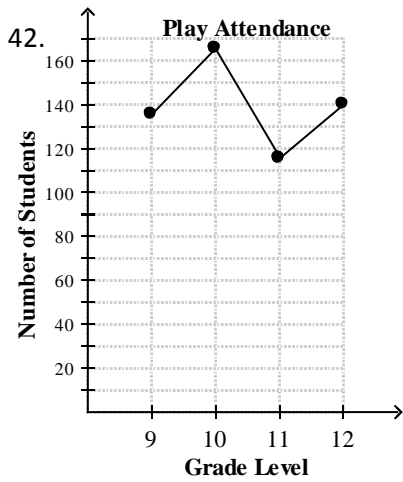
40.



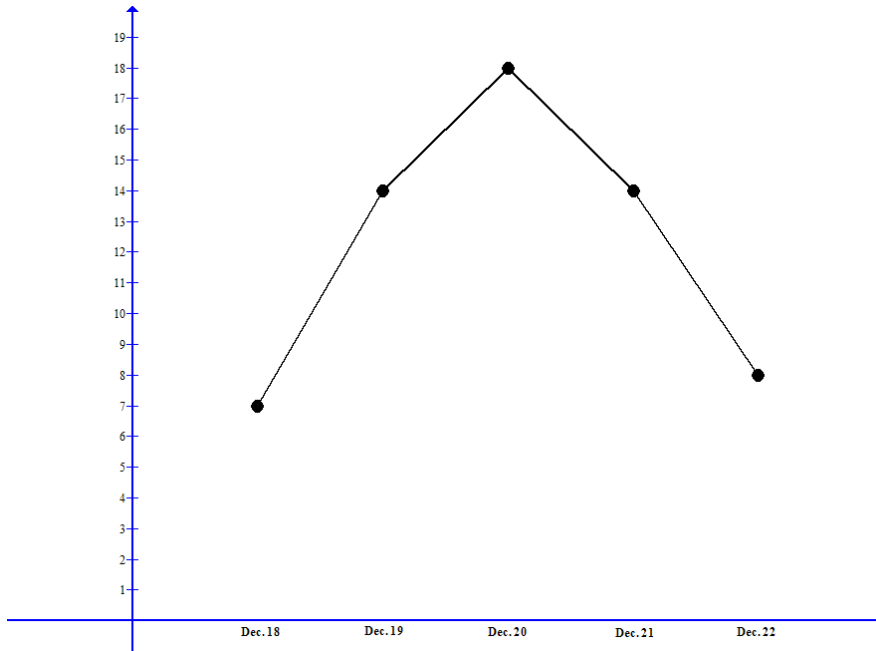
41.



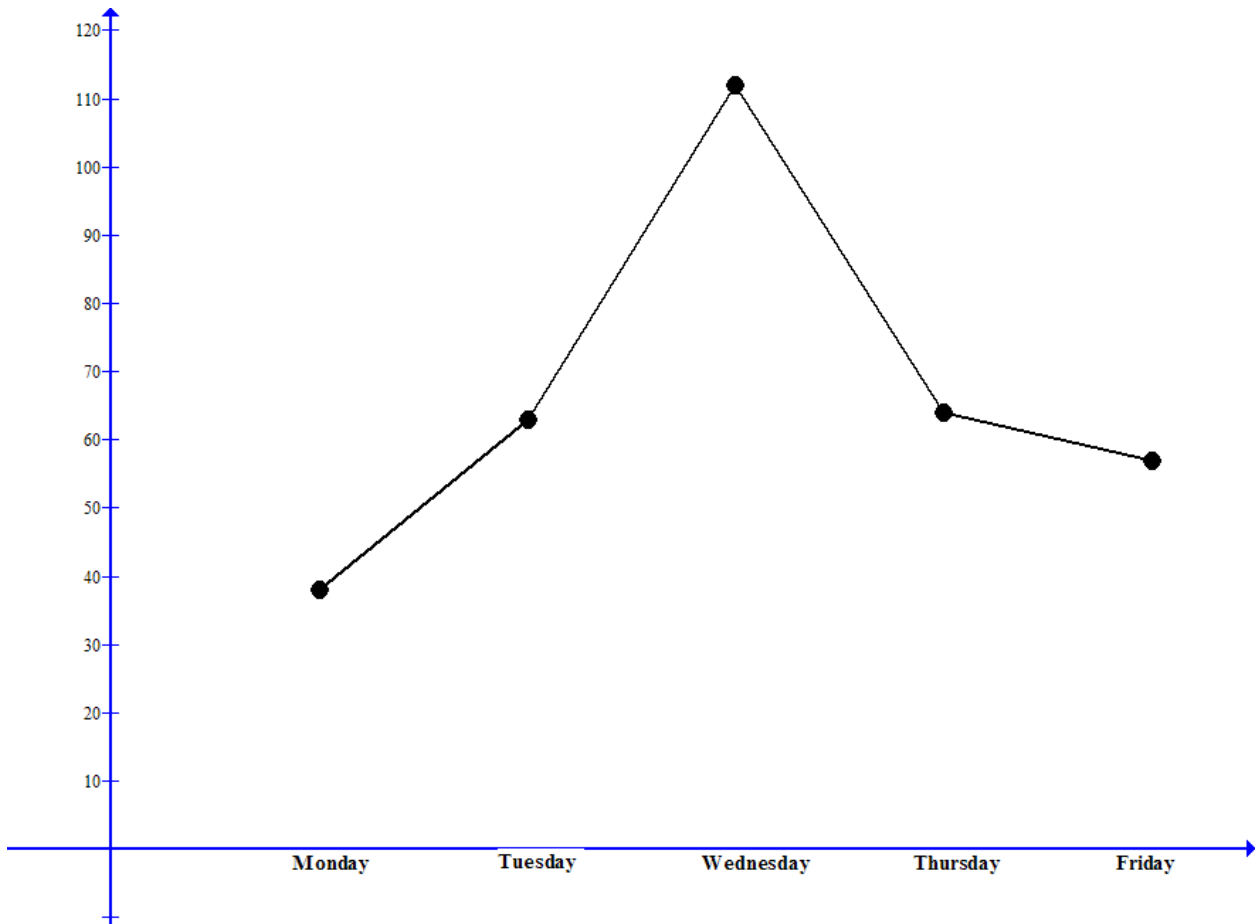
42.



43.



44.





45. 65%

46. Russian

47. Cantonese

48. 79%

49. Cantonese

50. 79%

51. 68%

52. Russian

53. Cantonese

54. 74%

55. 10

56. 209

57. 259

58. 15

59. 290

60. The bar graph is misleading because the lower half of the vertical scale is missing. The differences in height are exaggerated. The graph also does not have a break shown with the vertical scale.

61. The bar graph is misleading because the vertical scale is not shown in equal intervals. The interval on the scale begins as one unit and then increases to two units.

62. The bar graph is misleading because the scale is not accurately drawn. It appears as though the number of sixth-graders is nearly half the number of seventh-graders..

63. The line graph is misleading because the vertical scale is not shown in equal intervals. The interval on the scale begins as 10 units and then increases to 20 units then decreases again to 10 units.

64. The line graph is misleading because the lower part of the vertical scale is missing, so the differences in attendance are greatly exaggerated.

65. The vertical scale makes it appear that Brand B is four times as popular as Brand A.

66. The vertical scale makes it appear that Brand B is twice as popular as Brand A.