

CUMULATIVE REVIEW

Find the mean, median, mode and range of each of the following sets of data.

1. 30, 29, 35, 30, 29, 30, 34
2. 55, 47, 43, 26, 24, 23, 21, 22, 18, 17, 13
3. \$380, \$306, \$340, \$404, \$310
\$405, \$380, \$410
4. 52, 59, 75, 49, 80

Solve.

5. Monica bowled four games and averaged 138 per game. She scored 125, 147, and 119 on the first three games. What did she score on her fourth game?
6. The Cinema Theaters brought in \$1140, \$1350, \$975, \$1450 and \$1780 during a five-day span. What was the average receipt total during these five days?

Use the information given to answer the following.

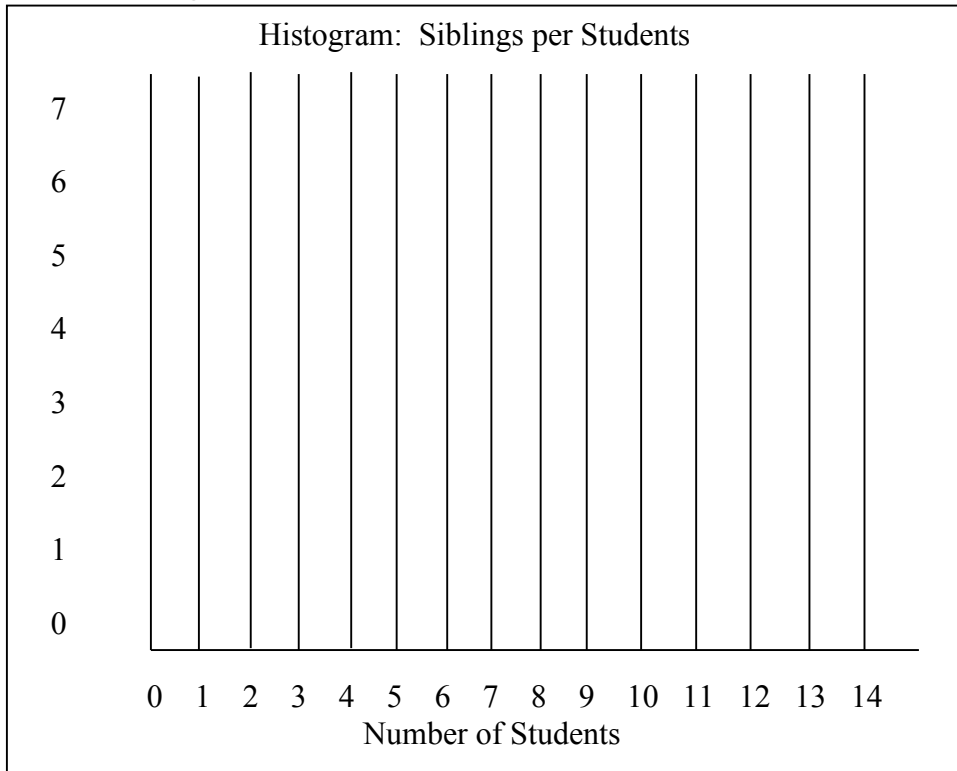
A survey of Mrs. Hanna's eighth grade English class gave an account of the number of siblings each student had.

Number of Siblings per Student																					
1	3	7	3	2	1	5	3	4	4	1	3	4	6	2	5	3	1	5	3	4	4
6	2	3	4	3	3	6	3	4	5	4	1	2	5	2	3	5	6	0	7	2	0

11. Fill out the frequency table.

Number of Siblings	Tally	Frequency

12. Complete the histogram.

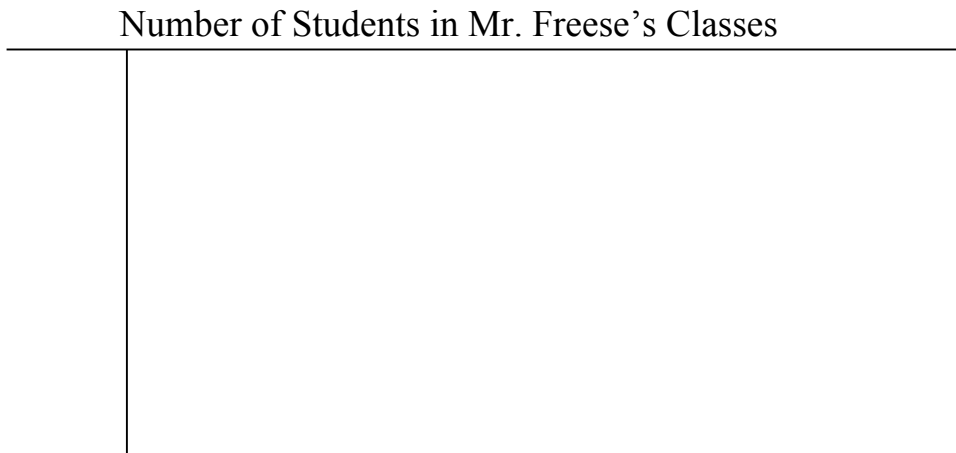


13. What number of siblings per student is the mode?

Mr. Freese has kept track of the number of students in his classes the last five years.

12 15 18 19 22 22 24 25 25 25 27 29 30 31
 32 32 33 35 37 37 38 39 39 40 40 40 43 44 47

14. Make a stem-and-leaf plot for this information.



15. What is the median of the data?

16. What is the mode of the data?

17. What is the range of the data?

18. Make a box-and – whisker plot for the data.



1.) Fred's test scores this quarter are 79, 86, 52, 95, and 75. His average score is ?.

- A. between 50 and 60
- B. between 60 and 70
- C. between 70 and 80
- D. over 80
- E. None of these

2.) Alma's exam scores for history are listed below. What is her average score for the tests?

Test 1	85
Test 2	75
Test 3	77

- A. 80
- B. 79
- C. 78
- D. 77
- E. 75

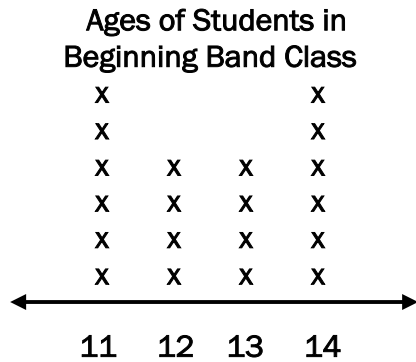
3.) The ages of the members of a family are 46, 48, 21, 12, 15, and 8. What is the mean age?

- A. 18
- B. 21
- C. 25
- D. 150
- E. There is no mean

4.) Vanessa's scores on her biology tests for the semester were 93, 68, 45, 86, and 88. What was her average score?

- A. 45
- B. 76
- C. 80
- D. 86
- E. 380

5.) Using the data in the plot line below, what is the mean of the data?



- A. 11 B. 12 C. 12.125 D. 12.5 E. 13

6.) If Anyika had an average on 3 tests of 75%, what will be her average if she scores a 95% on her next test?

- A. 75%
- B. 80%
- C. 85%
- D. 87%
- E. 90%

7.) A student has an average score of 73 on five tests this semester. It is later discovered that one of the tests was graded incorrectly and the score should have been 91 instead of 81. What is the correct average of the five tests?

- A. 74
- B. 75
- C. 76
- D. 83

8.) What is the median of this set? {13, 10, 15, 16, 21, 9, 16, 12, 10, 16}

- A. 16
- B. 14
- C. 13.8
- D. 12
- E. 10

9.) Find the median for the following set of scores: {72, 83, 85, 89, 90, 91, 95}

- A. 23
- B. 72
- C. 85
- D. $86\frac{3}{7}$
- E. 89

10.) Find the median length of a day in our solar system (in hours).

<u>Planet</u>	<u>Approximate Hours in a Day</u>
Mercury	1416
Venus	5832
Earth	24
Mars	25
Jupiter	10
Saturn	11
Uranus	22
Neptune	16
Pluto	153

- A. 22
- B. 24
- C. 25
- D. 10
- E. 834

11.) If Josh has test scores of 70% and 85%, what will happen to his average if he scores 100% on the next test?

- A. It will go down less than 5%.
- B. It will go down more than 5%.
- C. It will stay the same.
- D. It will go up less than 5%.
- E. It will go up more than 5%.

12.) If Anyika had an average on 3 tests of 75%, what will be her average if she scores a 95% on the next test?

- A. 75%
- B. 80%
- C. 85%
- D. 87%
- E. 90%

13.) Find the mode for the following set of data: {5, 7, 9, 7, 5, 9, 7}

- A. 5
- B. 6
- C. 7
- D. 8
- E. 9

14.) Jeri tabulated the number of customers coming into the flower shop for two weeks. What is the mode of her data?

- A. 8
- B. 14
- C. 15
- D. 22
- E. There is no mode.

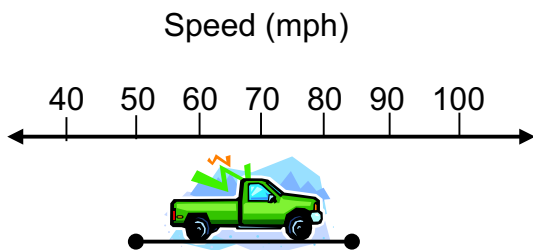
Number of Customers – 2 weeks 15, 18, 14, 22, 12, 14, 8 21, 10, 15, 14, 11, 16, 9

15.) What is the mode of this set of numbers?

{ 8, 7, 9, 9, 8, 10, 11, 12, 7, 7, 7, 10, 9, 10, 8, 10, 11, 9, 12, 9 }

- A. 5
- B. 9
- C. 9.2
- D. 12
- E. 20

16.) The speed for a sample of twenty-five cars is shown in miles per hour (mph) in the box-and-whiskers graph below.



If an officer is writing speeding tickets to each driver in the sample whose speed is more than 70 mph, about what percentage of the drivers will be ticketed?

- A. 25%
- B. 40%
- C. 75%
- D. cannot be determined

17.) What is the median of the data below?

Cost of Flower Arrangements

1	1, 1, 5, 8
2	0, 5
3	2, 5, 5, 7, 9
4	1, 3
5	0, 2, 5, 5
6	2, 5

- A. 39 B. 35 C. 32 D. 5 E. 3

18.) Four samples of a product are taken from the production line every two hours and weighed to ensure conformance with the product's specifications. The table below shows the results of the samples taken for one day.

SAMPLE RESULTS (in ounces)

9:00 A.M.	11:00 A.M.	1:00 P.M.	3:00P.M.
15.93	15.89	15.94	15.91
15.97	15.93	15.93	15.94
15.85	15.96	15.92	15.92
15.91	15.89	15.94	15.92

Which time had samples with a mean closest to the specification weight of 15.93 ounces?

- A. 9:00 A.M B. 11:00 A.M. C. 1:00 P.M. D. 3:00 P.M.

19.) The librarian kept track of books checked out each day. The data was recorded in the stem-leaf plot below. On how many days were fewer than 55 books checked out?

Number of Book
checked out

0	2	0 2 represents 2 books
3	3	
4	4 8	
5	2 3 5 5	
6	0 1 4 6	

- A. 4 days
B. 5 days
C. 6 days
D. 7 days
E. 8 days

20.) The weekly wages of 10 students working part time are as follows:

\$15, \$40, \$33, \$75, \$36, \$43, \$35, \$42, \$37

Which of the following best represents the typical wage?

- A. mean
- B. median
- C. mode
- D. range
- E. none of these

21.) An electronics store has five different types of car stereos available. The prices are \$65, \$95, \$95, \$80, and \$75. The store advertised the typical price of a stereo as \$80. What measure of central tendency was used in the advertisement?

- A. mean
- B. mode
- C. median
- D. range
- E. none of these