Name _____

Algebra 1 - Statistics: One Variable Review

Evaluate the expression.

1. $\frac{4+14+8+3+6}{5}$

2. $\frac{|6-4|+|5-4|+|9-4|+|2-4|}{4}$

Complete the statement.

3. The __?__ of a numerical set of data is the difference of the greatest value and the least value.

4. The __?__ of a numerical set of data is the middle number when the numbers are written in numerical order.

5. The __?__ of a numerical set of data is the value that occurs most frequently.

Find the mean, median, and mode(s) of the data.

6. 5, 3, 2, 6, 5, 2, 5

7. 24, 12, 10, 15, 10, 22, 12

8. 14, 9, 20, 5, 17, 13

9. 21, 15, 16, 25, 13, 18

10. 20, 17, 10, 31, 25, 18, 12

11. 48, 40, 53, 43, 52, 46

Find the range.

12. 9, 15, 28, 10, 8

13. 32, 33, 22, 85, 58

14. 24, 35, 18, 20, 17, 30

15. 116, 130, 120, 125, 140, 125

16. 105, 98, 95, 100, 95, 107

17. 36, 39, 58, 42, 106, 39, 48, 45

18. **Tomato Plants** The heights (in inches) of eight tomato plants are 36, 45, 52, 40, 38, 41, 50, and 48.
    a. What is the range of the tomato plant heights?
    b. Find the mean, median, and mode(s) of the tomato plant heights.
    c. Which measure of central tendency best represents the data? *Explain.*

19. **World Population** The populations (in millions) in 2000 on each of the six inhabited continents were 803, 487, 348, 3686, 730, and 31.
    a. What is the range of the populations?
    b. Find the mean, median, and mode(s) of the populations. Round your answers to the nearest tenth.
    c. Which measure of central tendency best represents the data? *Explain.*

List the data given by the stem-and-leaf plot.

1.

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

Key: 1 | 5 = 15

2.

1	0 1 1 2
2	3 5 7
3	2
4	8
5	2

Key: 2 | 3 = 2.3

Give two possible keys for the stem-and-leaf plot.

3.

6	6 7 9
7	0 3 4 6
8	2 4
9	5 8
10	0

4.

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

Make a stem-and-leaf plot of the data.

5. 21, 36, 51, 16, 22, 18, 22, 32, 47, 25, 48, 35, 33

6. 35, 26, 11, 7, 2, 34, 11, 25, 8, 13, 26, 9, 12, 11

7. 84, 71, 62, 50, 52, 65, 87, 51, 73, 80, 54, 64, 73, 59, 56

8. 82, 69, 73, 90, 77, 68, 91, 86, 84, 75, 79, 89, 78

Name the intervals you would use to create a histogram of the data.

9. 1, 5, 11, 13, 20, 4, 15, 9, 12, 8, 4, 5, 7, 10

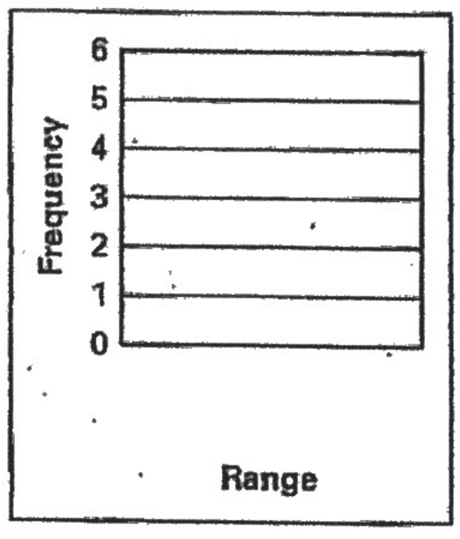
10. 53, 87, 98, 66, 69, 70, 75, 100, 88, 83, 77

11. 2.4, 5.5, 3.2, 4, 5.7, 2.9, 3.6, 4.8, 2, 3.4, 5.2, 3

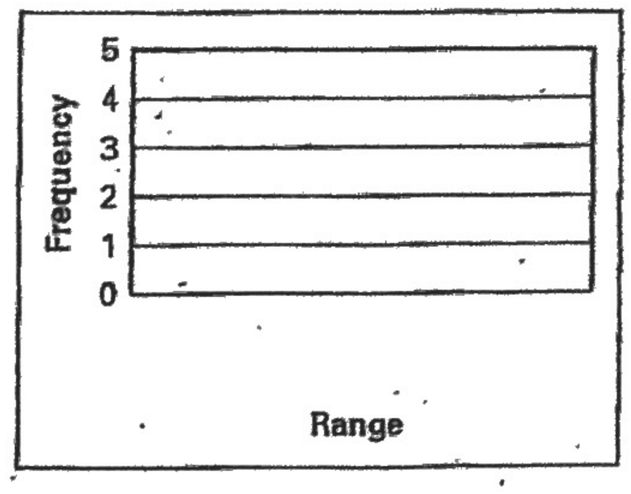
12. 112, 109, 124, 130, 126, 104, 115, 129, 117

Make a histogram of the data.

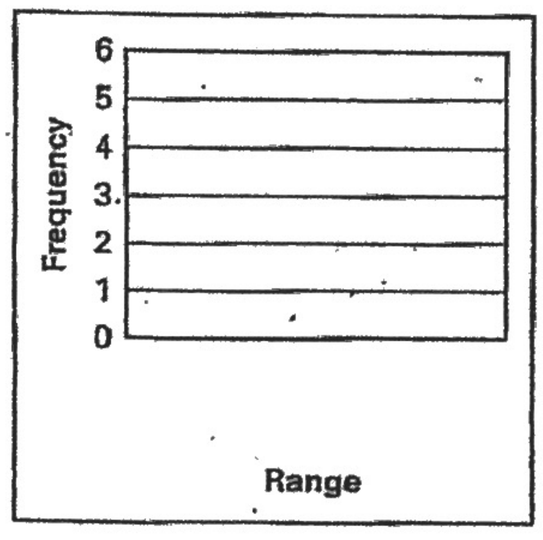
13. 7, 12, 29, 15, 8, 2, 0, 17, 22, 25, 28, 8, 11, 10



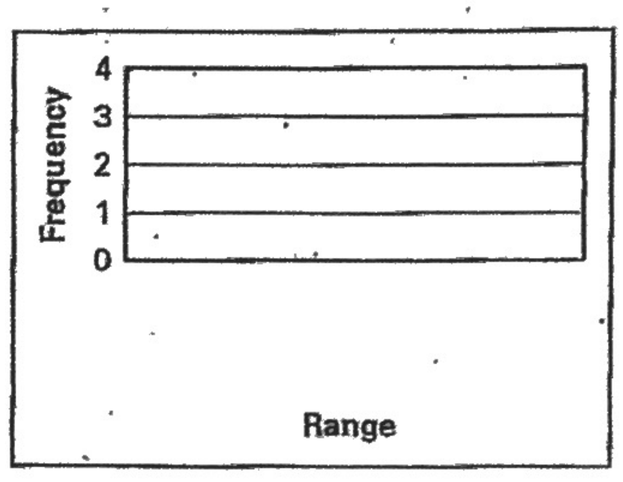
14. 43, 52, 40, 58, 45, 58, 60, 51, 43, 47, 54, 41



15. 2.4, 1.5, 4.1, 3, 5, 3.1, 4.5, 2.1, 2.6, 4.8, 3.7, 2.5



16. 20, 16.4, 18.5, 16, 17.5, 19.4, 18, 19.2, 18.8



17. **Snowfall** The number of inches of snow that fell on 14 towns in a 50-mile radius during a snowstorm are given below. Make a stem-and-leaf plot of the data.

10, 15, 13, 15, 14, 5, 12, 9, 13, 10, 22, 4, 5, 9