Find the mean, median, and mode. Which measure of central tendency best describes the data?

1. weights of textbooks in ounces
   12 10 9 15 16 10

2. ages of students on math team
   14 14 15 15 16 15 15 16

3. time spent on Internet in min/day
   75 38 43 120 65 48 52

4. weights of channel catfish in pounds
   4.8 5 2.3 4.5 4.8 5.2

Write and solve an equation to find the value of x.

5. $3.8, 4.2, 5.3, x$; mean 4.8

6. $99, 86, 76, 95, x$; mean 91

7. $100, 121, 105, 113, 108, x$; mean 112

8. $31.7, 42.8, 26.4, x$; mean 35

Find the range.

9. 12 15 17 28 30

10. 5.3 6.2 3.1 4.8 7.3

11. -12 -15 5 3 -2 0 -7

12. $2\frac{1}{2}$ $3\frac{1}{3}$ $-5\frac{3}{4}$ $\frac{3}{8}$ $3\frac{5}{8}$

13. For each list of data, find the range and the mean.
    Use the range to compare the spread of the data.

List 1	List 2
64 43 55 28 71	48 53 61 47 52

Make a stem-and-leaf plot for each set of data.

14. 18 35 28 15 36 10 25 22 15

16. 785 776 788 761 768 768 785

15. 18.6 18.4 17.6 15.7 15.3 17.5

17. 0.8 0.2 1.4 3.5 4.3 4.5 2.6 2.2

Find the mean, median, mode, and range of each side of the stem-and-leaf plot.

18.

**Time Spent on
Homework
(minutes/day)**

Class A		Class B
6643	4	11457
986444	5	02224
5210	6	4589
876642	7	367999

means 43 ← 3 | 4 | 1 → means 41

19.

**Growth of Two Varieties
of Tulip Plants
(inches/day)**

Type A		Type B
633	2	
3211	3	112
1	4	358
	5	24

means 0.33 ← 3 | 3 | 1 → means 0.31

Find the mean, median, mode, and range.

20. 9.8 7.2 6.3 8.7 5.8 9.4 5.1 6.2

21. 3 −12 −1 −7 −2 0 −5 −1 −4 −2

22. 42.1 46.4 58.2 67.3 49.1 40.2 22.3 46.6

23. **Critical Thinking** The mean of a set of data is 7.8, the mode is 6.6, and the median is 6.8. What is the least possible number of data values? Explain.

24. **Wildlife Management** A wildlife manager working at the Everglades National Park in Florida measured and tagged adult male crocodiles. The data he collected are at the right.
    a. What are the mean and median lengths of the crocodiles?
    b. The wildlife manager captured another crocodile. Its length was 3.3 m. What is the mean with this new piece of data? What is the median? Round to the nearest tenth.

**Crocodile Lengths
(meters)**

2.4	2.5	2.5	2.3
2.8	2.4	2.3	2.4
2.1	2.2	2.5	2.7

25. **Manufacturing** Two manufacturing plants create sheets of steel for medical instruments. The back-to-back stem-and-leaf plot at the right shows data collected from the two plants.
    a. Find the mean, median, mode, and range of each set of data.
    b. Which measure of central tendency best describes each set of data? Explain.
    c. **Reasoning** Which plant has the better quality control? Explain.

**Width of Steel
(millimeters)**

Manufacturing Plant A		Manufacturing Plant B
	4	359
87442	5	27
431	6	34
	7	2

means 6.1 ← 1 | 6 | 3 → means 6.3

26. **Open-Ended** Give an example of a set of data for which the mode best represents the data. Explain.

27. **Sports** The median height of the 21 players on a girls' soccer team is 5 ft 7 in. What is the greatest possible number of girls who are less than 5 ft 7 in. tall?

28. **Writing** How does an outlier affect the mean of a set of data?