12-3 **Practice**

Form K

Measures of Central Tendency and Dispersion

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

1. price per item:
$12 $8 $15 $20 $15

2. average rate (rev/sec):
75 81 79 68 79

3. distance from the park (km):
2.2 3 4.1 3.5 3 2.5

4. extra points kicked:
3 5 3 2 4

Find the value of x so that the data set has the given mean.

5. 14, 10, 17, 9, x; mean 14

6. 101, 92, 76, 88, x; mean 93

7. 2.5, 6.1, 7.8, 3.7, x; mean 5.04

8. 22.6, 32.9, 29.7, 19.8, x; mean 26.5

9. 0.9, 1.6, 3.4, 0.5, x; mean 1.4

10. 77, 100, 92, 84, x; mean 88

11. One runner's times in the first six races of the year were 18.5, 18.2, 19, 18.75, 19.1, and 19 minutes. Another runner's times were 17.2, 18, 17.5, 18.75, 19, and 18.2 minutes. What are the range and mean of each runner's scores? Use your results to compare the runners' skills.

Find the range and mean of each data set. Use your results to compare the two data sets.

12. Set A: 17 13 21 10 14
Set B: 12 16 15 11 13

13. Set C: 5.6 4.8 3.7 7.1 9.2
Set D: 10 5.2 3.8 2.9 6.8

14. The lengths of some pieces of lumber are 6 ft, 12 ft, 9 ft, 11 ft, and 8 ft. What are the mean, median, mode, and range of the lengths?

12-3 **Practice** (continued)

Form K

Measures of Central Tendency and Dispersion

Find the mean, median, mode, and range of each data set after you perform the given operation on each data value. Round your answer to the nearest tenth.

15. 8, 12, 10, 7, 4, 7; subtract 1

16. 37, 32, 35, 41, 48, 36; add 3

17. 16.2, 16.7, 16.1, 16, 16.9, 16; add 3.5

18. 19, 12, 15, 14, 21, 9; divide by 3

19. 7.5, 14.2, 11.8, 19.6, 4.8, 11.8; multiply by 2

20. 2.1, 3.2, 4.5, 4.2, 3.2, 5.6; add −2

21. The lengths of George's last five road trips were 6 hr, 4 hr, 8 hr, 12 hr, and 10 hr. Jenny's last five trips were 6 hr, 9 hr, 2 hr, 15 hr, and 4 hr. Find the mean, median, mode, and range of George's trips and Jenny's trips. Use your results to compare each person's travels.

22. The goalkeeper had 7 saves, 4 saves, 9 saves, 12 saves, 2 saves, 7 saves, and 5 saves in the first seven games of the season. How many saves must the goalkeeper make in the next game to achieve an average of 8 saves per game?

23. Over six months, a phone bill averaged $35 per month. The bills for the first five months were $32, $35, $48, $29, and $31. What was the phone bill in the sixth month? Find the median, mode, and range of the six electric bills.