

12-4 Practice

Box-and-Whisker plots

Form K

Find the minimum, first quartile, median, third quartile, and maximum of each data set.

1. 99 88 77 85 62 93 71

2. 22 19 32 35 28 25 33 24 27

3. 45.5 52.7 41 49.8 59 72.1 51.7 53.2

4. 7 7 11 14 15 13 19 17

5. 175 198 225 179 182 185 201 215

6. 42 58 18 37 51 49 32 61 45

Make a box-and-whisker plot to represent each set of data.

7. fair attendance: 2515 2725 2972 3125 3195 3250 3555

8. fundraiser revenue: \$195 \$275 \$295 \$185 \$210 \$115 \$340 \$285 \$195

9. swimmers practicing: 17 22 19 17 25 9 14

10. games won: 97 55 78 86 77 68 92 81

11. admission prices: \$14 \$17 \$10 \$12.50 \$19.50 \$25 \$15 \$9 \$11.50

12. height (in.): 66 58 80 72 65 70 62 66 59 60

12-4 Practice (continued)

Box-and-Whisker plots

Form K

13. Of 350 runners competing in a race, 50 run the race in less than or equal to 20 minutes. What is the percentile rank of the runners who finish in under 20 minutes?
14. Of 50 babies born, 5 weigh more than 10 pounds. What is the percentile rank of a baby that weighs 10 pounds?
15. Ten students earned the following scores on a test: 92, 73, 81, 90, 79, 66, 94, 83, 61, and 99. Which score has a percentile rank of 90? Which score has a percentile rank of 10?

Make box-and-whisker plots to compare the data sets.

16. Earned commission:
Dale's: \$150 \$125 \$145 \$175 \$105 \$100 \$200 \$180
Juanita's: \$155 \$185 \$215 \$205 \$170 \$165 \$195 \$200

17. Weekly cars sold:
Kathy's: 5 8 3 12 7 11 9 4 8
Samuel's: 9 2 5 10 9 7 7 6 10

18. Video length (min):
Training 1: 78 62 45 65 50 59 67 62 51 70
Training 2: 60 67 50 58 62 71 69 54 60 64