For Exercises 17 and 18, use the dot plots below.

△ Mean
⊥ Median

Name Lengths—Males

Number of Letters

Name Lengths—Females

Number of Letters
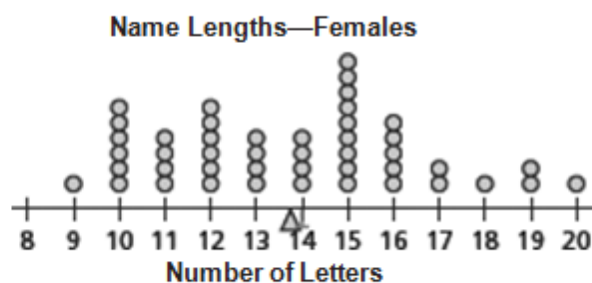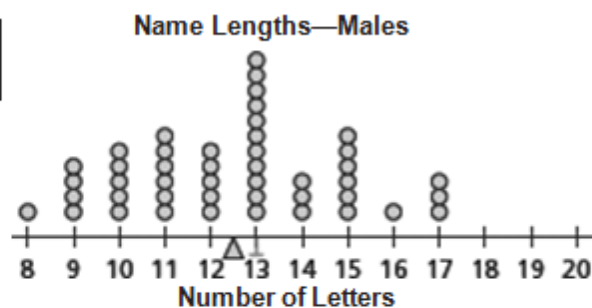
17. Compare the two sets of data. Which group has longer names? Explain.

18. Look at the distribution for females. Suppose that the data for four names with 18 or more letters changed. These students now have name lengths of ten or fewer letters.

   a. Draw a dot plot showing this change.

   b. Will the change affect the median name length for females? Explain.

   c. Will the change affect the mean name length for females? Explain.

19. Multiple Choice John's test scores were 100, 84, 88, 96, and 96. His teacher told him that his final grade is 96. Which measure of center did his teacher use to report John's final grade?

   A. Mean   **B.** Median

   C. Mode   **D.** Range

20. Multiple Choice Sal's Packages on the Go mails 6 packages with a mean weight of 7.1 pounds. Suppose the mean weight of five of these packages is 6.3 pounds. What is the weight of the sixth package?

   F. 4.26 lb   **G.** 6.7 lb

   H. 10.3 lb   **J.** 11.1 lb

Extensions

26. Mark has an easy way to find his mean test score: "Each math test is worth 100 points. Suppose I get 60 on my first test and 90 on my second. My average would be 75, because half of 60 is 30, half of 90 is 45, and 30 + 45 is 75. Now suppose I had three test scores: 60, 90, and 84. My average would be 78, because one third of 60 is 20, one third of 90 is 30, one third of 84 is 28, and 20 + 30 + 28 = 78."

Does Mark's method always work? Explain.