Lesson 1.1.3

1-17. a. A dot plot is difficult to create for the given data.

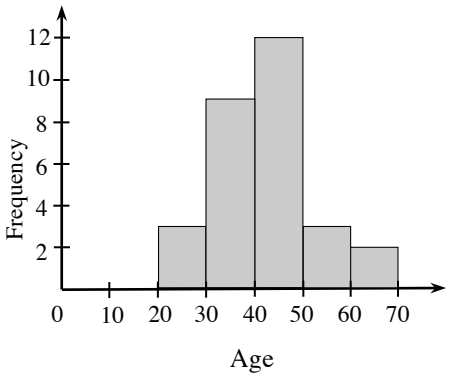
b. See plot above right.

c. See histogram below right.

d. There are too many different values to make an effective dot plot. Both the stem plot and the histogram show information like shape, spread, center, and outliers

e. The golfers are between 30 and 50 years old. There are no obvious outliers.

2	**5 8 9**	**2|8 = 28**
3	**0 2 3 4 4 5 5 7 8**	
4	**0 2 3 3 3 4 4 5 5 6 7 8**	
5	**0 1 7**	
6	**0 3**	



1-18. a. 220 and 230 inches

b. 210 and 240 inches

c. Yes, one short jump between 180 and 190 inches, and one long jump over 250 inches.

d. 16

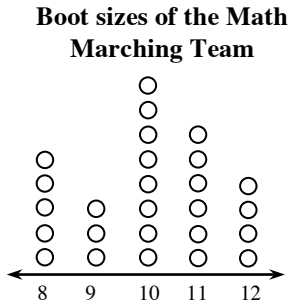
e. 230 inches

1-19. a. See diagram at right. A Venn diagram would also be appropriate.

b. Because there are more males than females in the club and more students without cars than with cars it looks like there is some kind of relationship, however a closer look at the ratios of the frequencies shows that the proportion of males with cars 0.48 is very close to the ratio of females with cars 0.50. If there is a relationship, it is very weak.

	Male	**Female**
Has Car	**10**	**3**
No Car	**21**	**6**

1-20. Dot plot, the data is numeric, discrete, and has an order to it. See dot plot at right.



1-21. a. $27 + 18 + 14 + 31 + d = 113,\ d = 23$

b. Answers may vary. Appliances cannot be averaged any more than you can average languages, favorite colors, or religions.

c. If appliance sales were random and 113 were sold in a month, the typical number sold for each type would be 22.6.

1-22. a. 20 to 25 inches

b. Yes, one year had less than 5 inches of snowfall.

c. 15 to 20 inches

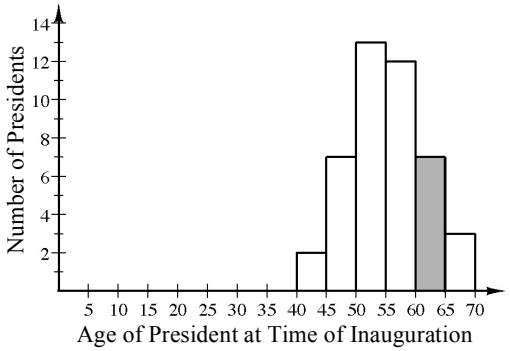
1-23. a. 69

b. 42

1-24. a. Missing bar size is 7. See graph at right. Count how many presidents were inaugurated at the age of 60 to 64.

b. 9

c. 44



1-25. a. Tigers. Panthers. Explanations will vary.

b. Panthers, because the data is spread out more in the different bins.

c. Tigers, because it has a bin with the highest frequency.