Chapter 2 - Statistics and Graphs - Mid-Chapter Quiz: Lessons 2-1 through 2-5

1. SKATEBOARDS Make a frequency table of the data below. How many skateboards cost between $50 and $69?

Cost ($) of Various Skateboards				
99	67	139	63	75
59	89	59	70	78
99	55	125	64	110

Explore: We need to find how many skateboards cost between $50 and $69.
Plan: Make a frequency table of the data.
Solve: Draw a table with three columns. In the first column, list equal intervals of skateboard costs. Then complete the table by indicating the frequency or number of times each cost falls within each interval.

Cost ($) of Various Skateboards		
Cost	Tally	Frequency
50-69	IIII I	6
70-89	IIII	4
90-109	II	2
110-129	II	2
130-149	I	1

6 skateboards cost between $50 and $69.
Check: If you go back to the list, there should be 6 skateboard costs that fall between 50 and 69.

Cost ($) of Various Skateboards		
Cost	Tally	Frequency
50-69	IIII I	6
70-89	IIII	4
90-109	II	2
110-129	II	2
130-149	I	1

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2.

PLANTS Make a bar graph of the data shown at the right. Compare the number of vegetables to the number of herbs.

| Greenhouse Plants	
Type	Frequency
Vegetables	38
Flowers	27
Herbs	13
Other	9

Step 1: Decide on a scale and interval. The data includes numbers from 9 to 38. So a scale from 0 to 40 and an interval of 5 is reasonable.
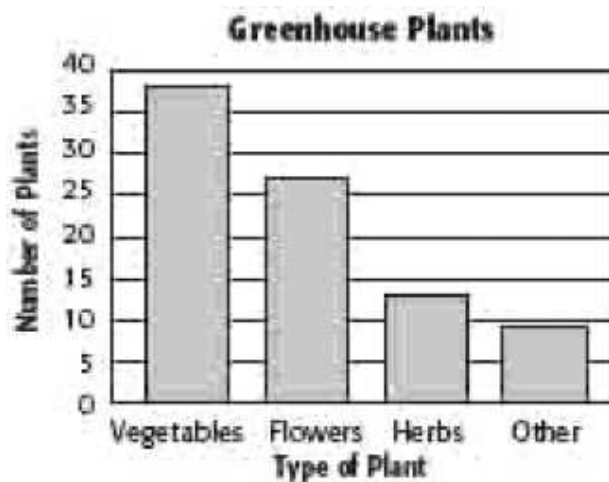Step 2: Label the horizontal and vertical axes.
Step 3: Draw bars for each color. The height of each bar shows the frequency of greenhouse plants.
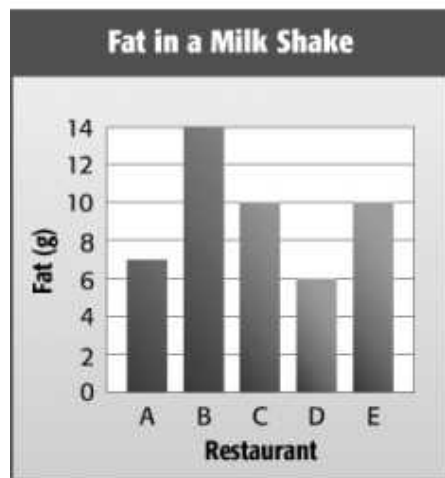Step 4: Label the graph with a title.
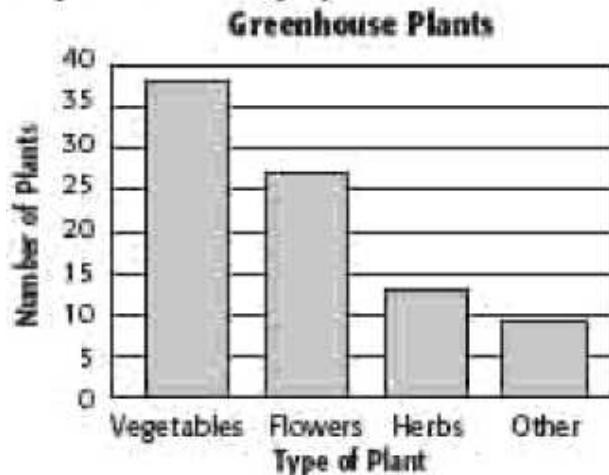
Sample answer: The number of vegetables is almost three times the number of herbs.

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3.

MULTIPLE CHOICE Solana collected the following data from five local restaurants.

Fat in a Milk Shake

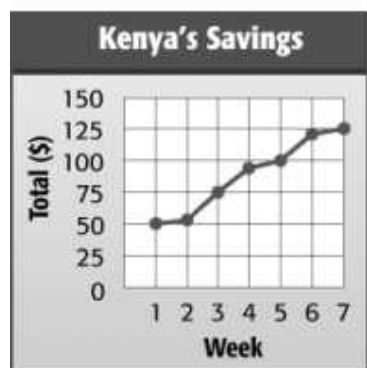

Which statement is supported by the graph?
A Restaurant E's milkshake contains the most fat.
B Restaurant D's milkshake contains half as many grams of fat as Restaurant C's.
C Restaurant A's milkshake contains 8 grams of fat.
D Restaurant B's milkshake contains twice as many fat grams as Restaurant A's.

From the graph, Restaurant B's milkshake contains about 14 grams of fat, and Restaurant A's milkshake contains about 7 grams of fat. 14 is twice as much as 7. So, Restaurant B's milkshake contains twice as many fat grams as Restaurant A's.
The correct answer is D.

D

4. MULTIPLE CHOICE Kenya's total savings for seven weeks is shown in the graph.

Kenya's Savings

Which statement is supported by the graph?
F Kenya's total savings decreased from Week 2 to Week 5.
G By the end of Week 7, Kenya's total savings was $125.
H The total amount saved by the end of Week 8 should be about $200.
J Kenya saved more money from Week 6 to Week 7 than any other week.

The correct answer is G; by the end of Week 7, Kenya's total savings was $125.

G

5. SPORTS Use the stem-and-leaf plot below to determine how many times the National League leader hit 50 or more home runs.

Home Runs by the National League Leaders, 1990-2006	
Stem	Leaf
3	5 8
4	0 0 3 6 7 7 8 9 9
5	0 1 8
6	5
7	0 3 4│3 = 43 home runs
Source: Major League Baseball	

6

6

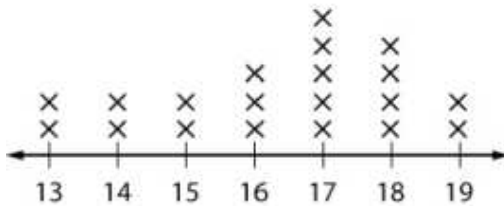6. MUSICIANS The ages in years of the youngest solo singers with a #1 U.S. single are listed below.
15, 17, 18, 15, 17, 16, 18, 17, 17, 18
14, 16, 16, 18, 13, 13, 14, 17, 19, 19

Make a line plot of these data.

Step 1 Draw a number line. The data includes numbers from 13 to 19. So a scale from 13 to 19 is reasonable.
Step 2 Put an × above the number that represents each age. Add a title.

Ages of Youngest Singers

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