

✓ **GUIDED PRACTICE** for Example 1

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1. **U.S. HISTORY** The years in which each of the first 20 states were admitted to the Union are listed below. Make a stem-and-leaf plot of the years.

1788, 1787, 1788, 1816, 1792, 1812, 1788, 1788, 1817, 1788,
1787, 1788, 1789, 1803, 1787, 1790, 1788, 1796, 1791, 1788

Years First 20 States Joined the Union

Stem	Leaf
178	7 7 7 8 8 8 8 8 8 8 9
179	0 1 2 6
180	3
181	2 6 7

Key: 178 | 7 = 1787

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2. **REASONING** In Example 1, describe the distribution of the data on the intervals represented by the stems. Are the data clustered together in a noticeable way? *Explain.*

Home Runs

Stem	Leaves
0	3 4 7 7 8 8
1	2 4 4 8 9 9
2	1 3 5
3	2 7 9
4	1 2

Most of the data is between 3 and 19.

Key: 1 | 4 = 14 home runs

✓ **GUIDED PRACTICE** for Examples 2 and 3

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3. **TELEVISION** The back-to-back stem-and-leaf plot shows the percents of students in 24 countries who report watching television for 4 or more hours each day. *Compare* the data for female and male students.

Female		Stem	Male	
9 9 9 8 8 8 6 6 5 4	1	7 8 9		
6 6 5 4 3 3 0 0	2	0 1 2 2 4 5 5 6 6 7 7 8		
8 3 2 2 1	3	4 6 6 8 8 9		
	4	0 6 6		

Key: 4 | 1 | 7 = 14%, 17%

Most of the female data is between 10% and 30%, while most of the male data is between 20% and 40%. There is some overlap, but in general, male students watch more tv than female students.

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4. **PRECIPITATION** The average number of days each month with precipitation of 0.01 inch or more in Buffalo, New York, are 20, 17, 16, 14, 13, 11, 10, 10, 11, 12, 16, and 19. Make a histogram of the data.

EXAMPLE 3 Make a histogram

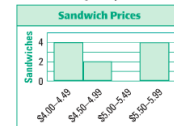
SANDWICH PRICES The prices (in dollars) of sandwiches at a restaurant are listed below. Make a histogram of the data.
4.00, 4.00, 4.25, 4.50, 4.75, 4.25, 5.95, 5.50, 5.50, 5.75

Solution

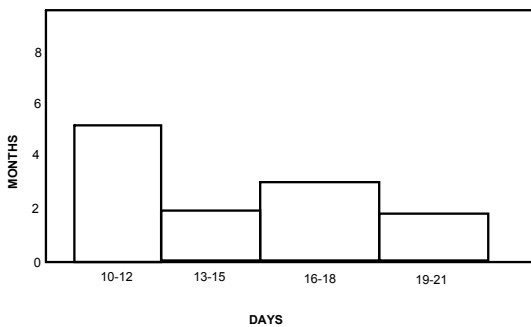
STEP 1 Choose intervals of equal size that cover all of the data values. Organize the data using a frequency table.

Prices	Sandwiches
\$4.00–4.49	
\$4.50–4.99	
\$5.00–5.49	
\$5.50–5.99	

STEP 2 Draw the bars of the histogram using the intervals from the frequency table.



Rainy Days in Buffalo, NY



Homework

Pages 883-885 #2-20 even

To be consistent, complete the following:

#12- Histogram- go by: 0-9, 10-19, etc.

#14- Histogram- go by: 100-199, 200-299, etc.

#18- Histogram- go by: 0-1, 2-3, etc.