

Stem-and-Leaf Plots (pages 108–111)

You can use a **stem-and-leaf** plot to display data. In a stem-and-leaf plot, the last digit in each data item is the **leaf**. The digits in front of the leaf become the **stem**.

EXAMPLES

Create stem-and-leaf plots with the following data.

- A** Gladys has four dogs. They weigh 42, 58, 53, and 61 pounds.

Use the tens digits to form the stems, and the ones digits to form the leaves. So $4|2 = 42$.

There are two values, 53 and 58, that have a five in the tens place. This causes the 5 stem to have leaves of 3 and 8, to represent 53 and 58.

Stem	Leaf
4	2
5	3 8
6	1

$4|2 = 42$

- B** Gladys also has three cats. They weigh 10, 13, and 9 pounds.

Use a **back-to-back stem-and-leaf plot** to compare the weights of Gladys's dogs and cats.

For dogs, $2|4 = 42$ pounds.

For cats $0|9 = 9$ pounds.

Dogs	Stem	Cats
	0	9
	1	0 3
	2	
	3	
2	4	
8 3	5	
1	6	

$2|4 = 42$ $0|9 = 9$

Try These Together

Make a stem-and-leaf plot for each data set.

1. 11, 5, 6, 12, 23, 24, 28, 21, 18, 17

2. 36, 41, 25, 28, 30, 45, 45, 40, 26, 29

PRACTICE

Make a stem-and-leaf plot for each data set.

3. 15, 13, 26, 12, 14, 23, 26, 21, 15

4. 92, 86, 85, 66, 73, 72, 64, 75, 84, 81

5. 2, 6, 3, 5, 11, 15, 16, 18, 7, 9, 19

6. 56, 54, 28, 41, 33, 26, 58, 64, 24, 45

7. **Music** The data table lists prices of compact discs (CDs) in two different music categories at Annie's Music Shop. Make a back-to-back stem-and-leaf plot of the prices of classical music compact discs and country music compact discs. Which category of music CDs is priced lower at Annie's Music Shop?

Type of Music CD	Prices
Classical	8, 7, 15, 13, 13, 12, 10, 14, 16, 11, 13, 15, 9
Country	12, 9, 14, 15, 16, 16, 17, 14, 15, 12, 11, 9, 9



8. **Standardized Test Practice** Look at the stem-and-leaf plot of prices of tickets to a play. In which interval do the greatest number of prices fall?

A 1–10

B 32–38

C 11–19

D 20–29

Stem	Leaf
1	1 3 5 7 9
2	0 5 7 9
3	2 4 6

$3|2 = 32$

Answers 1–7. See Answer Key. 8. C