Homework 15-4

## Another Look!

A school keeps track of the number of students that are absent each day. The records for a twoweek period are shown in the stem-and-leaf plot to the right.

How do you read a stem-and-leaf plot?

A stem-and-leaf plot is a convenient way to organize data.

Step 1 Read the key.
The key shows that each stem-leaf combination represents a two-digit number.

Step 2 Identify the stem for each data value.

The stems in this plot represent the tens digits: 10,20 , and 30.

Step 3 Identify the leaf for each data value.

The leaves in this plot represent the ones digits: $0,1,2,3,4,5,6,7,8$, and 9 .

In 1 through 4, use the stem-and-leaf plot at the right.
A small card shop records the number of birthday cards sold each day. The data is displayed in the stem-and-leaf plot to the right.

1. Using the key, what is the value of $3 \mid 0$ ?

| Birthday Cards Sold Each Day |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Stem | Leaf |  |  |  |  |  |  |
| 2 | 1 | 5 | 6 | 7 | 8 | 9 | 9 |
| 3 | 0 | 3 |  |  |  |  |  |
| 4 | 2 | 2 | 3 | 4 | 9 |  |  |
| KEY: 2 | 1 | 1 | 21 |  |  |  |  |

2. How many days are represented by the plot?
3. What is the least number of cards sold in one day?
4. What is the greatest number of cards sold in one day?
5. How many people are swimming during this time?
6. Analyze Information How many swimmers are younger than 30 ?
7. Which age group has the greatest number of swimmers?

| Ages of Swimmers from 6:00 A.M. to 7:00 A.M. (years) |  |
| :---: | :---: |
| Stem | Leaf |
| 0 | 9 |
| 1 | I |
| 2 | 39 |
| 3 |  |
| 4 | 7 |
| 5 | 5779 |
| 6 | 5566789 |
| 7 | 01 |
| KEY: $0 \mid 9=9$ |  |

8. Reason Look at the two 5 s as leaves next to the stem 6. What do they represent?
9. The key to a stem-and-leaf plot reads:

Key: $8 \mid 3=8.3$
What does $7 \mid 2$ mean in the same stem-and-leaf plot?

A 2.1
B 2.7
C 7.2
D 72
10. Extend Your Thinking How many different stems would be needed to list the following values in a stem-and-leaf plot? List the stems.

| 42 | 34 | 47 | 36 |
| :--- | :--- | :--- | :--- |
| 41 | 45 | 31 | 43 |
| 62 | 45 | 36 | 34 |

11. Analyze Information The heights of different seedlings are shown in the stem-and-leaf plot. What is the difference in height between the tallest seedling and the shortest seedling?
12. Connect What is the most common seedling height, in millimeters?

| Heights of Seedlings (centimeters) |  |
| :---: | :---: |
| Stem | Leaf |
| 1 | 559 |
| 2 | 233336 |
| 3 | 047 |
| 4 | 228 |
| 5 | 12 |
| KEY: 1 \| $5=1.5$ |  |

