## EXAMPLES

1 and 3
on pp. 887, 889
for Exs. 17-18

EXAMPLE.............. on p. 888 for Ex. 19
16. BASEBALL STATISTICS In 2004, Ichiro Suzuki scored 101 runs. The numbers of runs he scored against different opposing teams are listed below. Make a box-and-whisker plot of the numbers of runs scored.

Runs scored: $18,8,4,8,2,8,0,9,0,4,2,5,9,1,2,1,2,11,7$
TEXAS @HomeTutor for problem solving help at classzone.com
(17.) RETAIL SALES The retail sales (in billions of dollars) of the nine U.S. states with the highest retail sales in 2002 are listed below.

California: \$153.1
Illinois: \$52.4
Ohio: \$50.7

Florida: \$118.2
New Jersey: \$35.8
Pennsylvania: \$49.9

Georgia: \$38.4
New York: \$54.7
Texas: \$107.0
a. Make a box-and-whisker plot of the retail sales.
b. Which states, if any, had retail sales in 2002 that can be considered outliers?
18. TAKS REASONING The stem-and-leaf plot shows the ages of the first 43 presidents of the United States when they first took the oath of office.

| 4 | 2 | 3 | 6 | 6 | 7 | 8 | 9 | 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 8 |
| 6 | 0 | 1 | 1 | 1 | 2 | 4 | 4 | 5 | 8 | 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Key: $4 \mid 2=42$ years
a. Make a box-and-whisker plot of the ages.
b. Ronald Reagan was the oldest United States president, and Theodore Roosevelt was the youngest. Can either of these presidents' ages be considered outliers? Explain why or why not.
19. TAKS REASONING The box-and-whisker plots show the diameters (in kilometers) of craters on Jupiter's moons Callisto and Ganymede.

a. Compare the diameters of craters on Callisto with the diameters of craters on Ganymede.
b. The largest crater in the United States is the Chesapeake Bay in Virginia, with a diameter of 90 kilometers. Compare the diameter of the Chesapeake Bay with diameters of craters on Callisto and Ganymede.
c. The largest crater on Earth is Vredefort in South Africa, with a diameter of 300 kilometers. Compare the diameter of Vredefort with the diameter of craters on Callisto and Ganymede.

