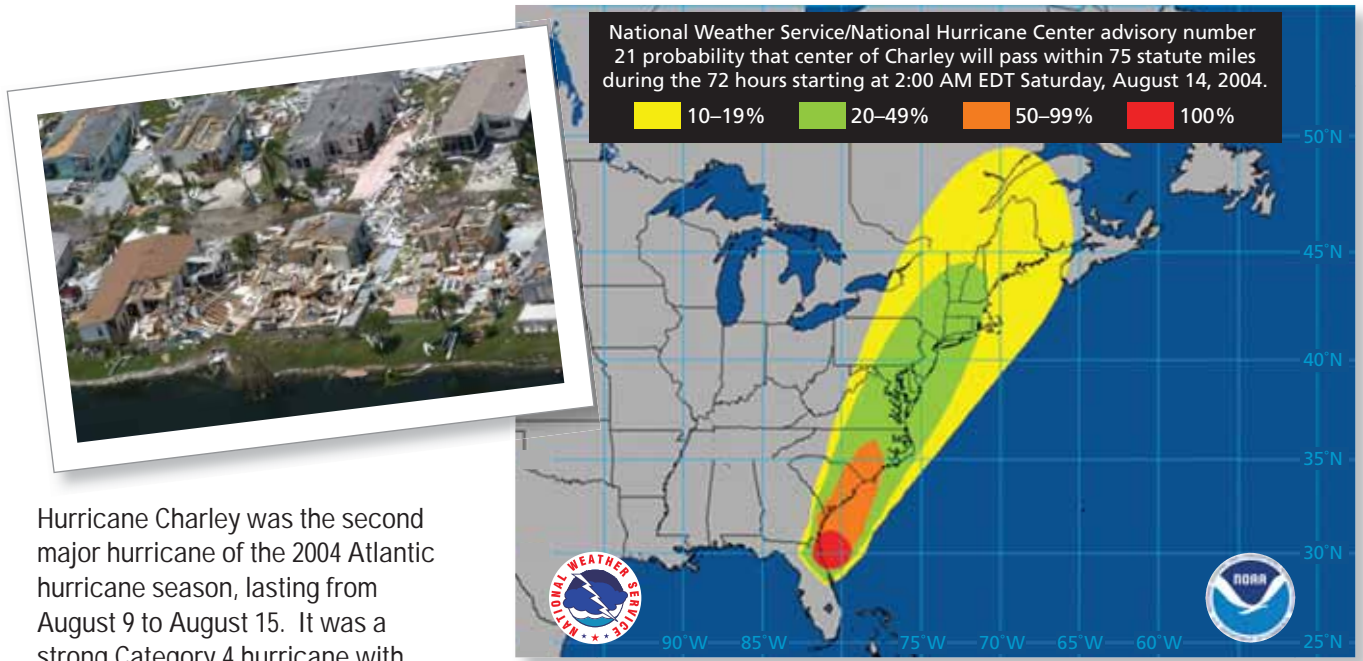EXAMPLE 2   **Putting Probability into Words**

The map is a hurricane strike probability map for Hurricane Charley from August 2004. It maps the probability that the center of the storm passes within 75 miles of a location during a 72-hour time interval.

Hurricane Strike Probability Map

National Weather Service/National Hurricane Center advisory number 21 probability that center of Charley will pass within 75 statute miles during the 72 hours starting at 2:00 AM EDT Saturday, August 14, 2004.

10–19%   20–49%   50–99%   100%

Hurricane Charley was the second major hurricane of the 2004 Atlantic hurricane season, lasting from August 9 to August 15. It was a strong Category 4 hurricane with maximum winds near 150 miles per hour. It was the strongest hurricane to have hit Florida since 1992.

Describe the likelihood that Hurricane Charley passed within 75 miles of each of the 4 colored regions on the map.

SOLUTION

- **100%:** Hurricane Charley was *certain* to pass within 75 miles of the red region on the map.
- **50–99%:** Hurricane Charley was *very likely* to pass within 75 miles of the orange region on the map.
- **20–49%:** Hurricane Charley was *not very likely* to pass within 75 miles of the green region on the map.
- **10–19%:** Hurricane Charley was *unlikely* to pass within 75 miles of the yellow region on the map.

✓ **Checkpoint**   Help at *Math*.and*YOU*.com

Describe the likelihood that the next U.S. presidential election has the pattern in electoral college votes. If it does, who wins, red or blue?

a.

b.