

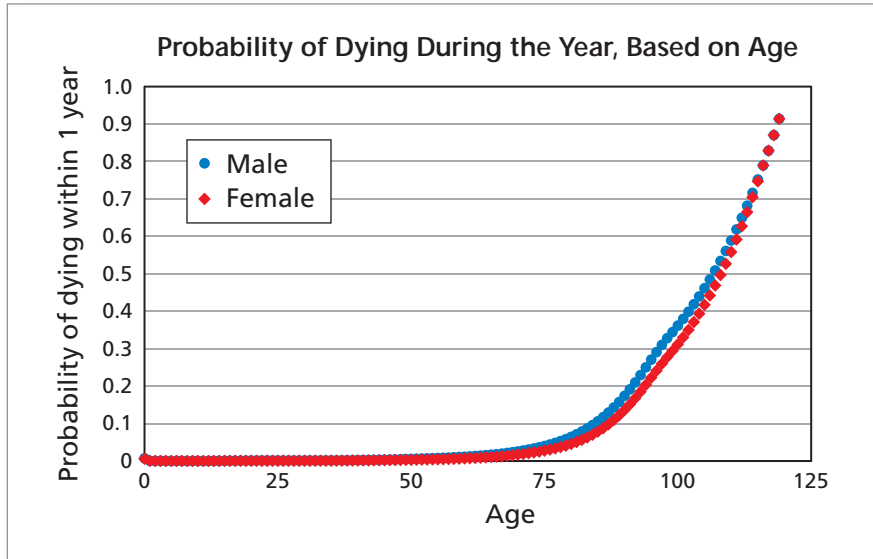
**EXAMPLE 6** Analyzing an Actuarial Graph

Discuss the actuarial graph. Does it seem reasonable for life expectancy in America today?

World Life Expectancies



Over 80	60–65
77.5–80	55–60
75–77.5	50–55
72.5–75	45–50
70–72.5	40–45
67.5–70	Under 40
65–67.5	Not available



**SOLUTION**

The graph shows several things.

- As a person gets older, the probability that the person will die during the year increases.
- Males have a slightly greater probability of dying than females. For instance, at age 90, a male has a 17% chance of dying during the year, while a female has only a 14% chance of dying during the year.

The graph seems reasonable for life expectancy in America today.

**✓ Checkpoint**

Help at [Math.andYOU.com](http://Math.andYOU.com)

- Discuss the actuarial graph.
- How would an actuary use the data?
- Does the graph seem reasonable? Explain your reasoning.

