

- 49.** Express the area of an equilateral triangle as a function of the length of a side.

**50.** Express the surface area of a cube as a function of its volume.

54. A taxi company charges two dollars for the first mile (or part of a mile) and 20 cents for each succeeding tenth of a mile (or part). Express the cost  $C$  (in dollars) of a ride as a function of the distance  $x$  traveled (in miles) for  $0 < x < 2$ , and sketch the graph of this function.

- 19.** The world population was approximately 6 billion in 2000. Assume that the population grows at a rate of 1.3% per year.
- Write an equation to represent the population of the world.
  - When will the population reach at least 10 billion?