

- 51 (a) Scatterplot the data in the table.
- (b) Start by picking a data point for the line to pass through. If we choose (1996, 9.7),  $f$  is represented by  $f(x) = m(x - 1996) + 9.7$ . Using trial and error, the slope  $m$  is between 0 and 1. Let  $m = 0.38$ . *Answers may vary.* Thus,  $f(x) = 0.38(x - 1996) + 9.7$ . The graph of  $f$  together with the data is shown in *Figure 51*.
- (c) The slope of  $m = 0.38$  means that Asian-American population is predicted to increase by approximately 0.38 million (380,000) people each year.
- (d) To predict the population in 2005, evaluate  $f(2005) = 0.38(2005 - 1996) + 9.7 = 13.12$  million.