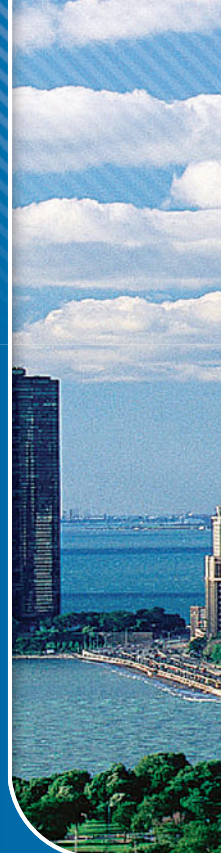


Slopes and Lines



Contents

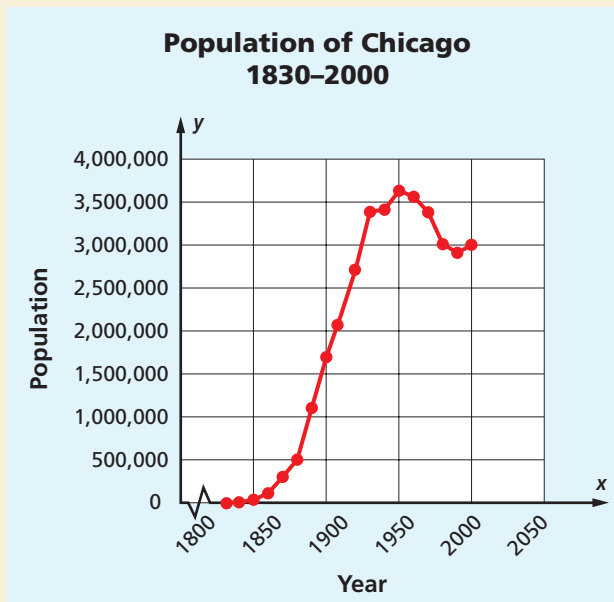
- 6-1** Rate of Change
- 6-2** The Slope of a Line
- 6-3** Properties of Slope
- 6-4** Slope-Intercept Equations for Lines
- 6-5** Equations for Lines with a Given Point and Slope
- 6-6** Equations for Lines through Two Points
- 6-7** Fitting a Line to Data
- 6-8** Standard Form of the Equation of a Line
- 6-9** Graphing Linear Inequalities

On the next page is a table of the population of Chicago from 1830 to 2000 according to the United States census. The ordered pairs (year, population that year) are also graphed.

The slopes of the line segments connecting the points indicate how fast the population increased or decreased in each decade. In this chapter, you will study many examples of lines and slopes.



Year	Population
1830	100
1840	4,470
1850	29,963
1860	112,172
1870	298,977
1880	503,185
1890	1,099,850
1900	1,698,575
1910	2,185,283
1920	2,701,705
1930	3,376,438
1940	3,396,808
1950	3,620,962
1960	3,550,404
1970	3,369,357
1980	3,005,072
1990	2,783,726
2000	2,896,016



Source: U.S. Census Bureau