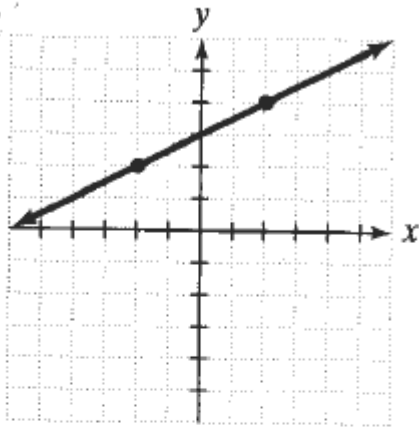


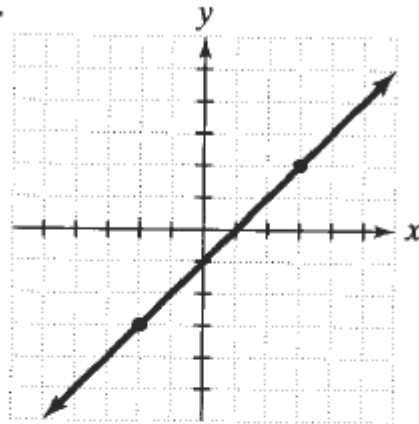
In Exercises 11–22, find the slope of each line, or state that the slope is undefined.

11.



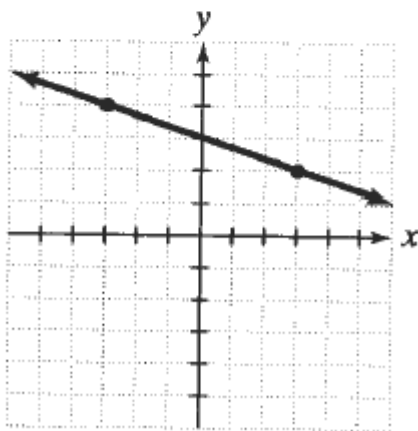
$$m = \frac{1}{2}$$

12.



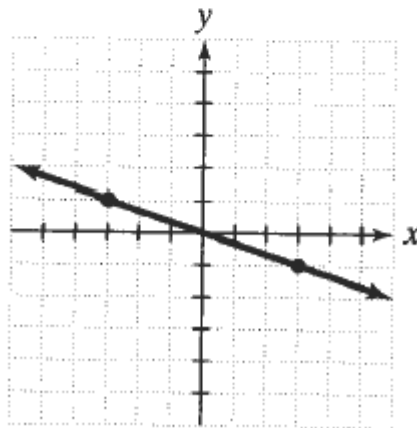
$$m = 1$$

13.



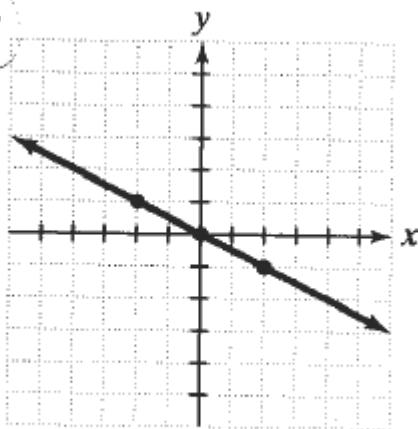
$$m = -\frac{1}{3}$$

14.



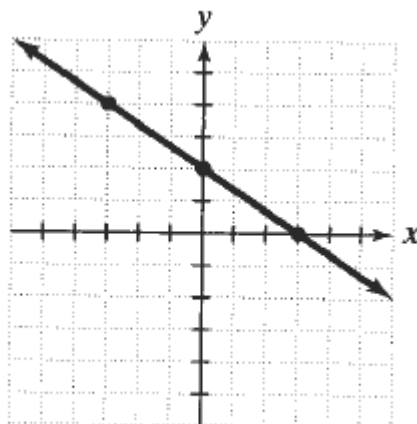
$$m = -\frac{1}{3}$$

15.



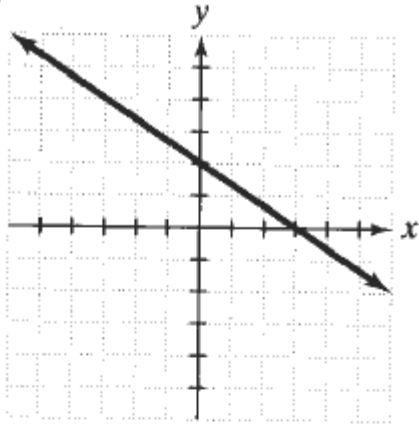
$$m = -\frac{1}{2}$$

16.



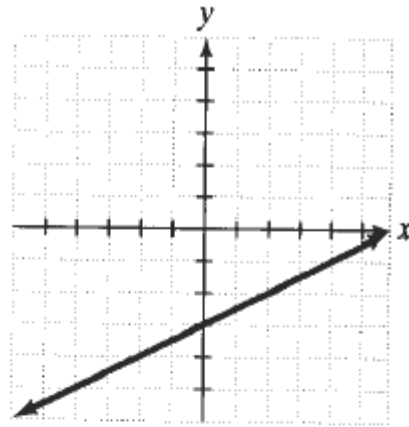
$$m = -\frac{2}{3}$$

17.



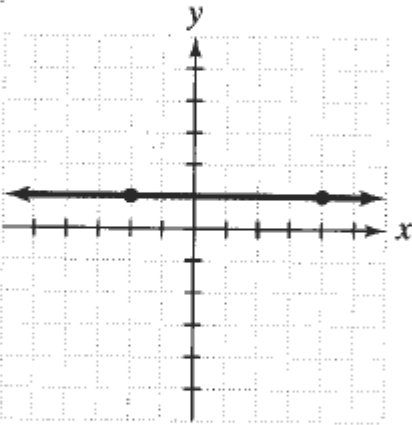
$$m = -\frac{2}{3}$$

18.



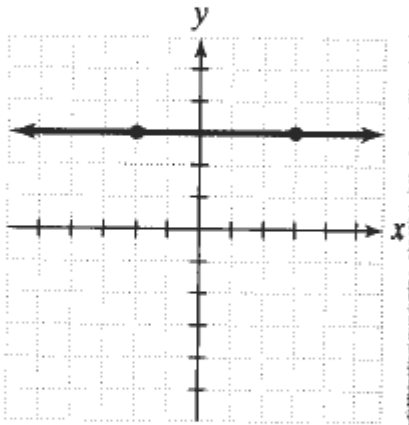
$$m = \frac{1}{2}$$

19.



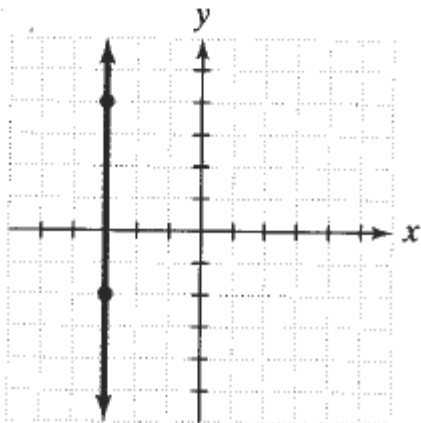
$$m = 0$$

20.



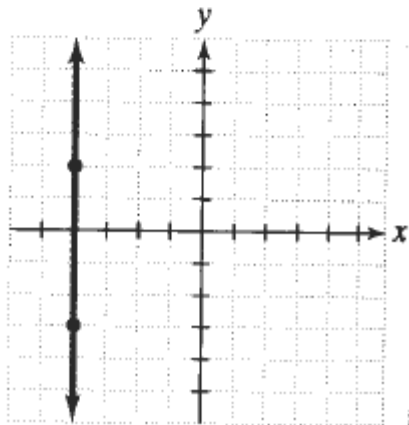
$$m = 0$$

21.



undefined slope

22.



undefined slope

p. 270 Directions:

Write the point-slope form of the equation of the line satisfying each of the conditions in Exercises 1-28. Then use the point-slope form of the equation to write the slope-intercept form of the equation.

#4 Slope = 7, passing through $(-4, 9)$ Ans.

$$y - 9 = 7(x + 4); \quad y = 7x + 37$$

#6 Slope = -4, passing through $(-5, -2)$ Ans. $y + 2 = -4(x + 5); \quad y = -4x - 22$

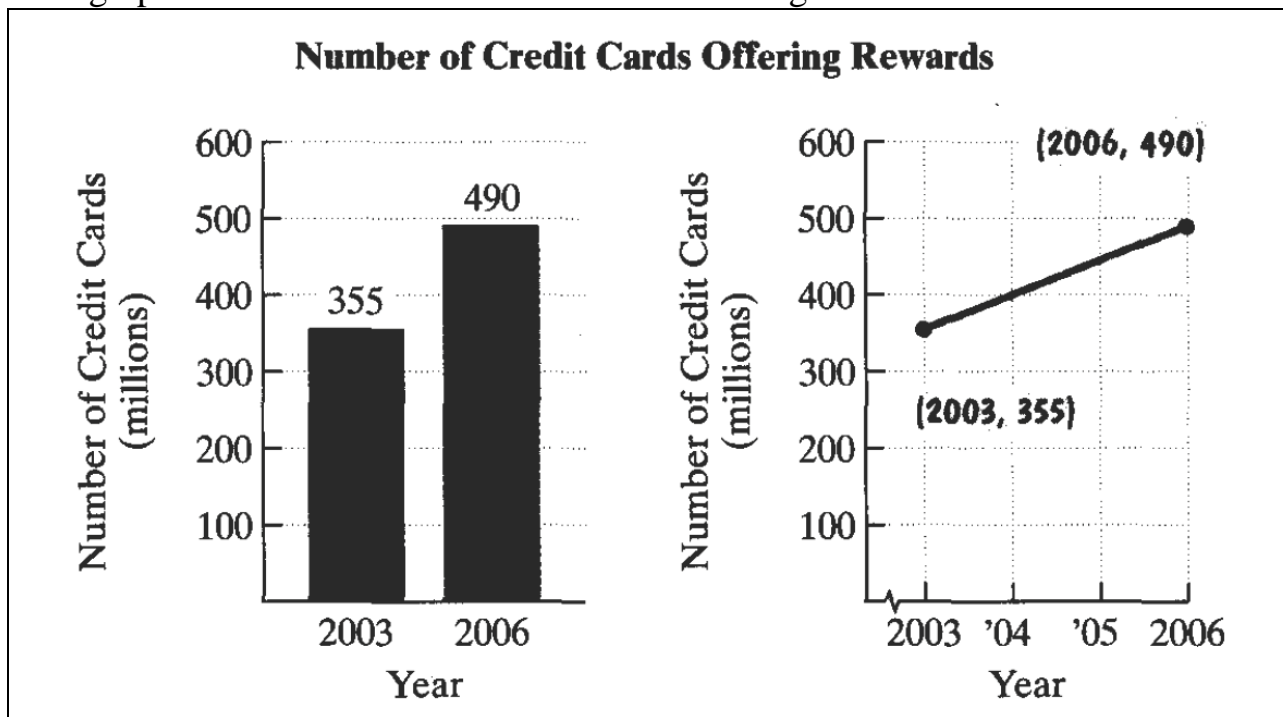
#14 Slope = $-\frac{3}{5}$, passing through $(10, -4)$

Ans. $y + 4 = -\frac{3}{5}(x - 10); \quad y = -\frac{3}{5}x + 2$

#15 Passing through $(1, 2)$ and $(5, 10)$

Ans. $y - 2 = 2(x - 1)$ or $y - 10 = 2(x - 5); \quad y = 2x$

p. 255 #46 With offers for everybody, including 5% cash back on bookstore purchases for college students, credit cards and their rewards can leave you dizzy. (Check out the interest rates and annual fees before you grab the next glitzy offer.) The graphs show the number of credit cards offering rewards in 2003 and 2006.



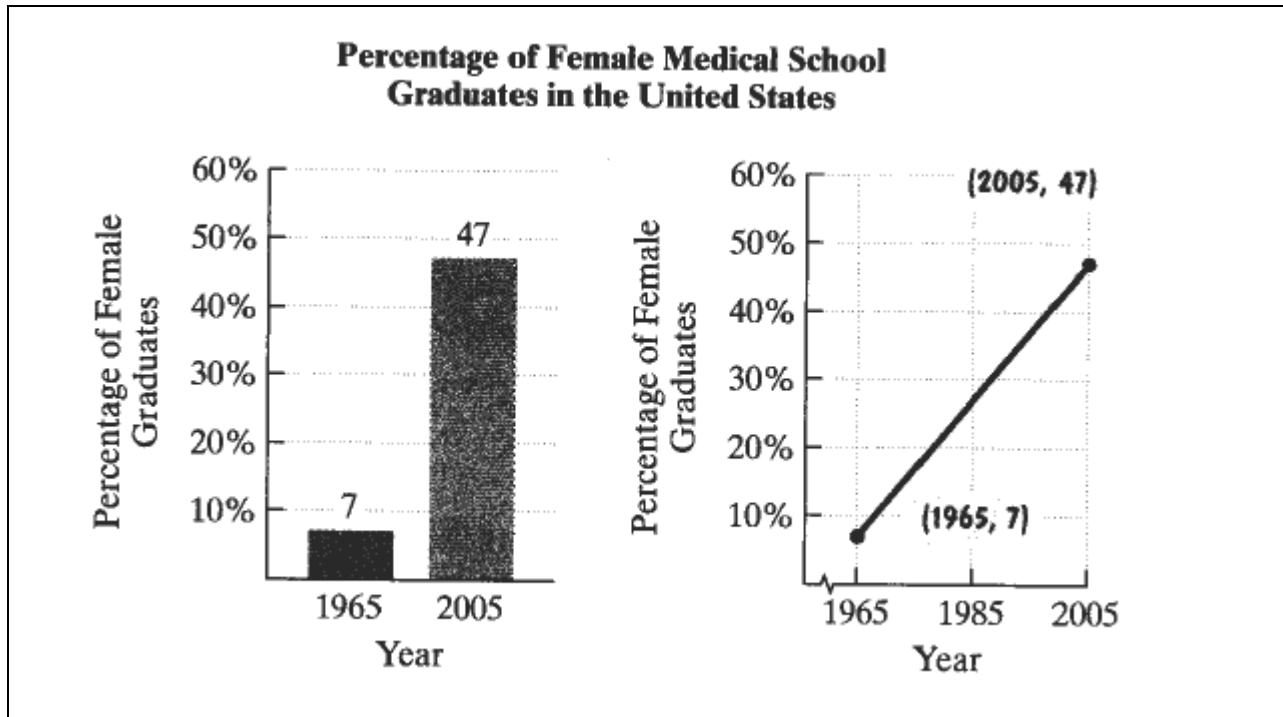
a. Find the slope of the line passing through the two points shown in the line graph on the right. Ans. 45

b. Use your answer from part (a) to complete this statement:

For each year from 2003 through 2006, the number of credit cards offering rewards increased by ____ (Ans. 45) million. The rate of change was _____

(Ans. 45 million) rewards cards per _____ (Ans. year).

p. 286 #33 The graphs show the percentage of female medical school graduates in the United States in 1965 and 2005.



- a. Find the slope of the line passing through the two points shown in the bar graph on the right. (Ans. 1)
- b. Use your answer from part (a) to complete this statement:
 For each year from 1965 through 2005, the percentage of female medical school graduates increased by ____ (Ans. 1%). The rate of change was ____ (Ans. 1%) per ____ (Ans. year).