

Practice 8

FOR USE WITH SECTION 2.2

State the slope and y -intercept of each line with the given equation.

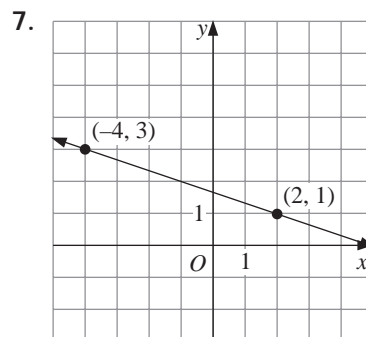
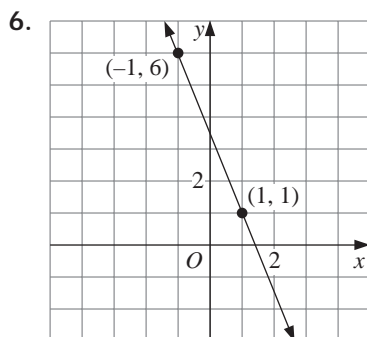
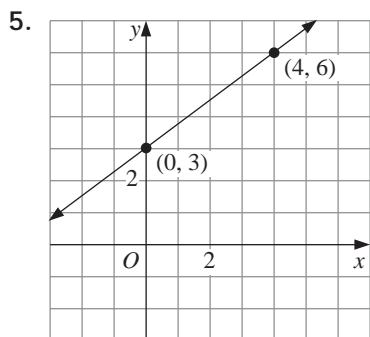
1. $y = -2x + 9$

2. $y = 5$

3. $y = 8 + \frac{2}{3}x$

4. $y = -\frac{3}{2}x - 10$

Find the slope-intercept equation of each line.



Graph each equation.

8. $y = \frac{3}{2}x + 5$

9. $y = -3 + 2x$

10. $y = 7 - \frac{5}{3}x$

11. $y = 3$

12. $y = 4 + 3x$

13. $y = -\frac{2}{5}x - 1$

For Exercises 14–17, model each situation with an equation and a graph. Be sure to identify the independent and dependent variables.

14. An on-line computer service charges users a monthly fee of \$12 plus \$3 per hour of connect time.
15. A hiking trail begins at an altitude of 6500 ft and gains 400 ft for each mile of horizontal distance.
16. A record store begins the month with 25 copies of a particular CD and sells 4 copies per week.
17. A computer printer takes 10 s to download a document and 15 s to print each page of the document.
18. In the Kelvin temperature scale, water freezes at 273°, which is 32°F, and boils at 373°, which is 212°F. Write an equation that relates Kelvin temperature K to Fahrenheit temperature F .
19. **Open-ended Problem** In the Celsius temperature scale, water freezes at 0°C and boils at 100°C. Make up several of your own temperature scales by specifying the freezing and boiling temperatures of water in each scale. Then write equations relating your scale to the Celsius scale.