


Write an equation in slope-intercept form for the line described.

2. passes through $(-2, 3)$ and $(0, 1)$

4. passes through $(-8, -2)$; $m = \frac{5}{2}$

 **PERSEVERANCE** Write an equation in slope-intercept form for the line that satisfies each set of conditions.

6. passes through $(-9, -3)$, perpendicular to $y = -\frac{5}{3}x - 8$

Write an equation in slope-intercept form for the line described.

8. slope 3, passes through $(0, -2)$
10. slope $-\frac{6}{5}$, passes through $(0, 8)$
12. slope -2 , passes through $(-3, 14)$
14. slope $\frac{3}{5}$, passes through $(-6, -8)$
16. **PART-TIME JOB** Each week, Carmen earns a base pay of \$15 plus \$0.17 for every pamphlet that she delivers. Write an equation that can be used to find how much Carmen earns each week. How much will she earn the week that she delivers 300 pamphlets?

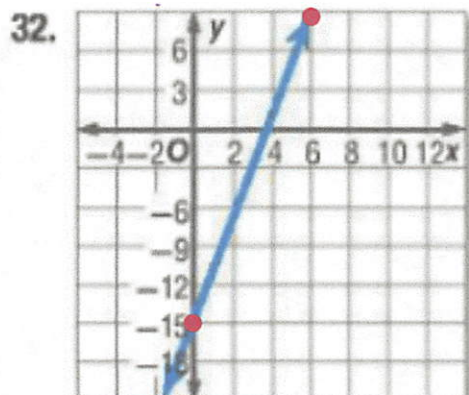
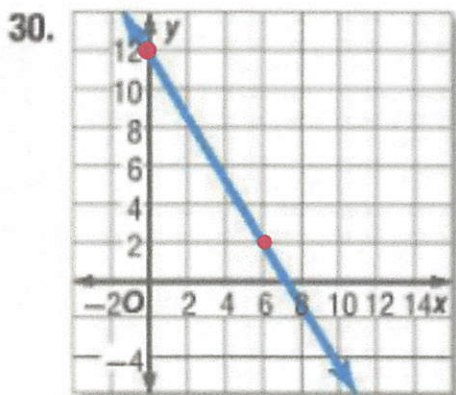
Write an equation of the line passing through each pair of points.

18. $(-8, -5), (-3, 10)$
20. $(4.6, 3.4), (2.2, 2.8)$
22. $(-25, -16), (-29, 12)$

CCSS PERSEVERANCE Write an equation in slope-intercept form for the line that satisfies each set of conditions.

24. passes through $(-6, -6)$, parallel to $y = \frac{4}{3}x + 8$
26. passes through $(10, 2)$, perpendicular to $y = 4x + 6$
28. **DELI** The sales of a sandwich store increased approximately linearly from \$52,000 to \$116,000 during the first five years of business. Write an equation that models the sales y after x years. Determine what the sales will be at the end of 12 years if the pattern continues.

Write an equation in slope-intercept form for each graph.



34. **TYPING** The equation $y = 55(23 - x)$ can be used to model the number of words y you have left to type after x minutes.
- Write this equation in slope-intercept form.
 - Identify the slope and y -intercept.
 - Find the number of words you have left to type after 20 minutes.

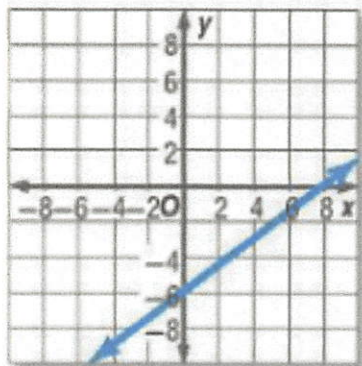
36. **CS MODELING** Refer to the table at the right.

Miles	Kilometers
100	161
50	80.5

- Write and graph the linear equation that gives the distance y in kilometers in terms of the number x in miles.
- What distance in kilometers corresponds to 20 miles?
- What number is the same in kilometers and miles? Explain your reasoning.

Determine the rate of change of each graph. (Lesson 2-3)

48.



50. **RECREATION** Scott is currently on page 210 of an epic novel that is 980 pages long. He plans to read 30 pages per day until he finishes the novel. Write and solve a linear equation to determine how many days it will take Scott to complete the novel. (Lesson 2-2)