

Extra Practice

Slope-Intercept Form

Example 1

Write an equation of a line in slope-intercept form with the given slope and y-intercept.

1. slope: 3, y-intercept: -5
2. slope: -4 , y-intercept: -1
3. slope: 0, y-intercept: 8
4. slope: 1, y-intercept: 6

Example 2

Write each equation in slope-intercept form.

5. $6x - 3y = 9$
6. $-2x + 4y = 12$
7. $5x + 20y = -20$
8. $4x + 6y = 24$
9. $x - 2y = 7$
10. $12x + 2y = -14$

Example 3

11. **EARNINGS** DeAndre earns \$15 per hour working at a restaurant. This month, he earned a one-time bonus of \$100 for being named employee of the month. Write an equation in slope-intercept form to represent DeAndre's total earnings y after working x hours this month.

Example 4

Graph a linear function with the given slope and y-intercept.

12. slope: 4, y-intercept: -1
13. slope: -2 , y-intercept: 2

Examples 5 and 6**Graph each function.**

14. $7x - 2y = 4$

15. $6 = 3y$

16. $6 = 2x + 3y$

17. $y = -3$

18. $10x + 2y = 16$

19. $3x - 8y = -32$

Example 7

20. SAVINGS Juanita opens a savings account with \$200. Each month, she deposits \$25 into her account and does not withdraw any money from it.

- a. Write an equation in slope-intercept form of the total amount y in Juanita's account after x months.

- b. Graph the function.

- c. How much money will Juanita have in her savings account after 5 months?