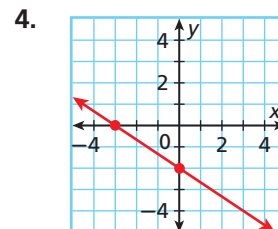
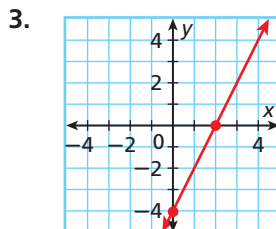
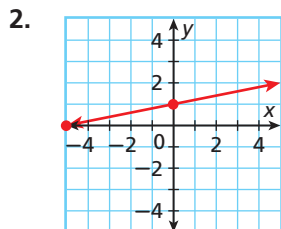




GUIDED PRACTICE

1. **Vocabulary** The ____? ____ is the y -coordinate of the point where a graph crosses the y -axis. (x -intercept or y -intercept)

SEE EXAMPLE 1 Find the x - and y -intercepts.



5. $2x - 4y = 4$

6. $-2y = 3x - 6$

7. $4y + 5x = 2y - 3x + 16$

SEE EXAMPLE 2

8. **Biology** To thaw a specimen stored at -25°C , the temperature of a refrigeration tank is raised 5°C every hour. The temperature in the tank after x hours can be described by the function $f(x) = -25 + 5x$.

- Graph the function and find its intercepts.
- What does each intercept represent?

SEE EXAMPLE 3 Use intercepts to graph the line described by each equation.

9. $4x - 5y = 20$

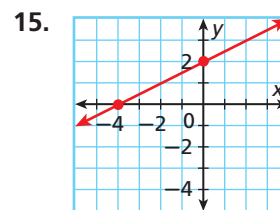
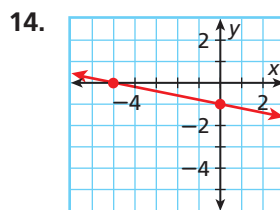
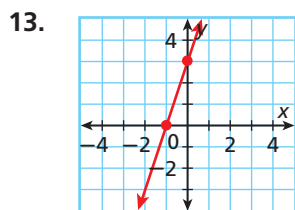
10. $y = 2x + 4$

11. $\frac{1}{3}x - \frac{1}{4}y = 2$

12. $-5y + 2x = -10$

PRACTICE AND PROBLEM SOLVING

Find the x - and y -intercepts.



16. $6x + 3y = 12$

17. $4y - 8 = 2x$

18. $-2y + x = 2y - 8$

19. $4x + y = 8$

20. $y - 3x = -15$

21. $2x + y = 10x - 1$

22. **Environmental Science** A fishing lake was stocked with 300 bass. Each year, the population decreases by 25. The population of bass in the lake after x years is represented by the function $f(x) = 300 - 25x$.

- Graph the function and find its intercepts.
- What does each intercept represent?

23. **Sports** Julie is running a 5-kilometer race. She runs 1 kilometer every 5 minutes. Julie's distance from the finish line after x minutes is represented by the function $f(x) = 5 - \frac{1}{5}x$.

- Graph the function and find its intercepts.
- What does each intercept represent?

Independent Practice

For Exercises	See Example
13–21	1
22–23	2
24–29	3



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Online Extra Practice