

4.3 EXERCISES

HOMework KEY

 = **WORKED-OUT SOLUTIONS**
on p. WS1 for Exs. 21 and 47

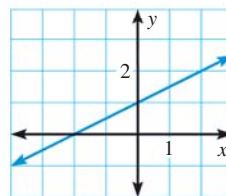
 = **TAKS PRACTICE AND REASONING**
Exs. 37, 49, 50, 51, and 52

 = **MULTIPLE REPRESENTATIONS**
Ex. 44

SKILL PRACTICE

- VOCABULARY** Copy and complete: The of the graph of an equation is the value of x when y is zero.
- WRITING** What are the x -intercept and the y -intercept of the line passing through the points $(0, 3)$ and $(-4, 0)$? *Explain.*
- ERROR ANALYSIS** Describe and correct the error in finding the intercepts of the line shown.

The x -intercept is 1,
and the y -intercept is -2 .



EXAMPLE 1

on p. 225
for Exs. 4–15

FINDING INTERCEPTS Find the x -intercept and the y -intercept of the graph of the equation.

- | | | |
|---------------------|--------------------------|-----------------------------|
| 4. $5x - y = 35$ | 5. $3x - 3y = 9$ | 6. $-3x + 9y = -18$ |
| 7. $4x + y = 4$ | 8. $2x + y = 10$ | 9. $2x - 8y = 24$ |
| 10. $3x + 0.5y = 6$ | 11. $0.2x + 3.2y = 12.8$ | 12. $y = 2x + 24$ |
| 13. $y = -14x + 7$ | 14. $y = -4.8x + 1.2$ | 15. $y = \frac{3}{5}x - 12$ |

EXAMPLE 2

on p. 226
for Exs. 16–27

GRAPHING LINES Graph the equation. Label the points where the line crosses the axes.

- | | | |
|---------------------|---------------------|--------------------------------------|
| 16. $y = x + 3$ | 17. $y = x - 2$ | 18. $y = 4x - 8$ |
| 19. $y = 5 + 10x$ | 20. $y = -2 + 8x$ | 21. $y = -4x + 3$ |
| 22. $3x + y = 15$ | 23. $x - 4y = 18$ | 24. $8x - 5y = 80$ |
| 25. $-2x + 5y = 15$ | 26. $0.5x + 3y = 9$ | 27. $y = \frac{1}{2}x + \frac{1}{4}$ |

EXAMPLE 3

on p. 226
for Exs. 28–30

USING GRAPHS TO FIND INTERCEPTS Identify the x -intercept and the y -intercept of the graph.

