4.2 EXERCISES

SKILL PRACTICE

1. **VOCABULARY** The equation $Ax + By = C$ represents a(n) _?_ provided $B \neq 0$.

2. **WRITING** Is the equation $y = 6x + 4$ in standard form? *Explain.*

EXAMPLE 1
on p. 215
for Exs. 3–10

CHECKING SOLUTIONS Tell whether the ordered pair is a solution of the equation.

3. $2y + x = 4$; $(-2, 3)$
4. $3x - 2y = -5$; $(-1, 1)$
5. $x = 9$; $(9, 6)$
6. $y = -7$; $(-7, 0)$
7. $-7x - 4y = 1$; $(-3, -5)$
8. $-5y - 6x = 0$; $(-6, 5)$

9. **ERROR ANALYSIS** *Describe* and correct the error in determining whether $(8, 11)$ is a solution of $y - x = -3$.

$$y - x = -3$$
$$8 - 11 = -3$$
$$-3 = -3 \qquad (8, 11) \text{ is a solution.}$$

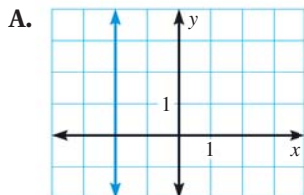10. 🔺 **TAKS REASONING** Which ordered pair is a solution of $6x + 3y = 18$?

Ⓐ $(-2, -10)$ Ⓑ $(-2, 10)$ Ⓒ $(2, 10)$ Ⓓ $(10, -2)$

EXAMPLES 2 and 3
on p. 216
for Exs. 11–25

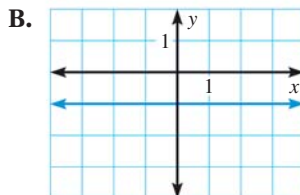**GRAPHING EQUATIONS** Graph the equation.

11. $y + x = 2$
12. $y - 2x = 5$
13. $y - 3x = 0$
14. $y + 4x = 1$
15. $2y - 6x = 10$
16. $3y + 4x = 12$
17. $x - 2y = 3$
18. $3x + 2y = 8$
19. $x = 0$
20. $y = 0$
21. $y = -4$
22. $x = 2$

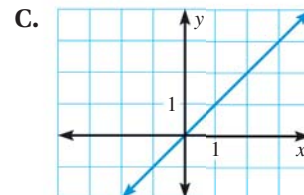**MATCHING EQUATIONS WITH GRAPHS** Match the equation with its graph.

23. $y - x = 0$
24. $x = -2$
25. $y = -1$

A.
B.
C.

EXAMPLE 4
on p. 217
for Exs. 26–31

GRAPHING FUNCTIONS Graph the function with the given domain. Then identify the range of the function.

26. $y = 3x - 2$; domain: $x \geq 0$
27. $y = -5x + 3$; domain: $x \leq 0$
28. $y = 4$; domain: $x \leq 5$
29. $y = -6$; domain: $x \geq 5$
30. $y = 2x + 3$; domain: $-4 \leq x \leq 0$
31. $y = -x - 1$; domain: $-1 \leq x \leq 3$

32. 🔺 **TAKS REASONING** Graph $x - y = 3$ and $2x - 2y = 6$. *Explain* why the equations look different but have the same graph. Find another equation that looks different from the two given equations but has the same graph.