Extra Practice

Lesson 4-4

(pages 212–217)

Find the solution set for each equation, given the replacement set. 1. {(0, −1), (2, 5)}

1. $y = 3x - 1$; {(0, −1), (4, 2), (2, 4), (2, 5)}
2. $3y = x + 7$; {(1, 8), (0, 7), (2, 3), (5, 4)} {(2, 3), (5, 4)}
3. $4x = 8 - 2y$; {(2, 0), (0, 4), (0, 2), (−4, 12)} {(2, 0), (0, 4), (−4, 12)}
4. $3x = 10 - 4y$; {(3, 0.25), (−10, 5), (2, 1), (5, 5)} {(2, 1), (3, 0.25)}

Solve each equation if the domain is {−2, −1, 0, 1, 2}. 5–13. See margin.

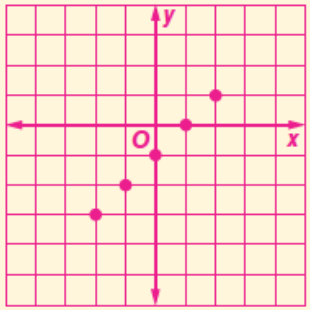
5. $x + y = 3$
6. $y = x$
7. $y = 5x + 1$
8. $4x + 3y = 13$
9. $5y = 8 - 4x$
10. $2x + y = 4$
11. $y = 4 + x$
12. $2x + 3y = 10$
13. $2y = 3x + 1$

Solve each equation for the given domain. Graph the solution set. 14–21. See margin.

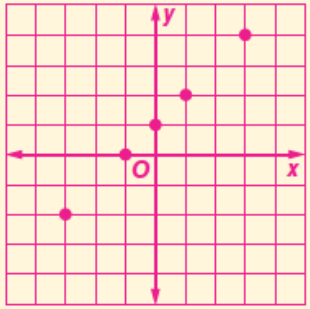
14. $x = y + 1$ for $x = \{-2, -1, 0, 1, 2\}$
15. $y = x + 1$ for $x = \{-3, -1, 0, 1, 3\}$
16. $x + 4y = 2$ for $x = \{-8, -4, 0, 4, 8\}$
17. $y - 3 = x$ for $x = \{-5, -1, 3, 7, 9\}$
18. $x + y = -2$ for $x = \{-4, -3, 0, 1, 3\}$
19. $2x - 3y = -5$ for $x = \{-5, -3, 0, 5, 6\}$
20. $3y = \frac{2}{3}x - 4$ for $x = \{-6, -3, 0, 1, 3\}$
21. $-2y = 8 - \frac{3}{2}x$ for $x = \{-4, 0, 4, 6, 8\}$

5. {(−2, 5), (−1, 4), (0, 3), (1, 2), (2, 1)}
6. {(−2, −2), (−1, −1), (0, 0), (1, 1), (2, 2)}
7. {(−2, −9), (−1, −4), (0, 1), (1, 6), (2, 11)}
8. $\left\{(-2, 7), \left(-1, \frac{17}{3}\right), \left(0, \frac{13}{3}\right), (1, 3), \left(2, \frac{5}{3}\right)\right\}$
9. $\left\{\left(-2, \frac{16}{5}\right), \left(-1, \frac{12}{5}\right), \left(0, \frac{8}{5}\right), \left(1, \frac{4}{5}\right), (2, 0)\right\}$
10. {(−2, 8), (−1, 6), (0, 4), (1, 2), (2, 0)}
11. {(−2, 2), (−1, 3), (0, 4), (1, 5), (2, 6)}
12. $\left\{\left(-2, \frac{14}{3}\right), (-1, 4), \left(0, \frac{10}{3}\right), \left(1, \frac{8}{3}\right), (2, 2)\right\}$
13. $\left\{\left(-2, -\frac{5}{2}\right), (-1, -1), \left(0, \frac{1}{2}\right), (1, 2), \left(2, \frac{7}{2}\right)\right\}$

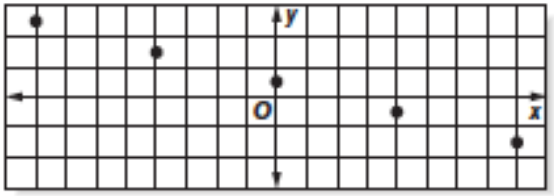
14. $\{(-2, -3), (-1, -2), (0, -1), (1, 0), (2, 1)\}$



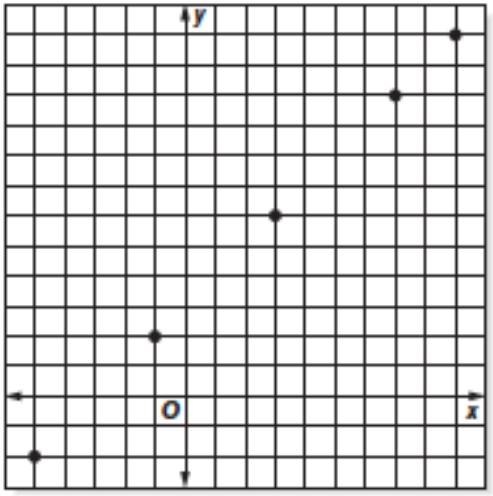
15. $\{(-3, -2), (-1, 0), (0, 1), (1, 2), (3, 4)\}$



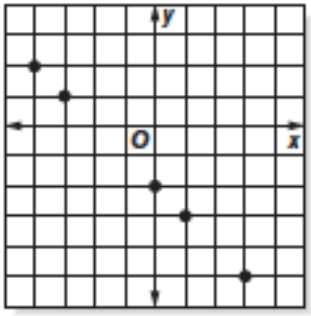
16. $\{(-8, 2.5), (-4, 1.5), (0, 0.5), (4, -0.5), (8, -1.5)\}$



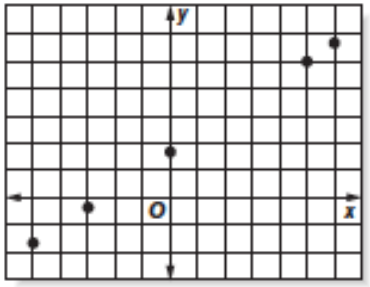
17. $\{(-5, -2), (-1, 2), (3, 6), (7, 10), (9, 12)\}$



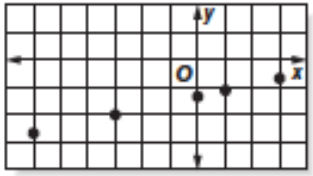
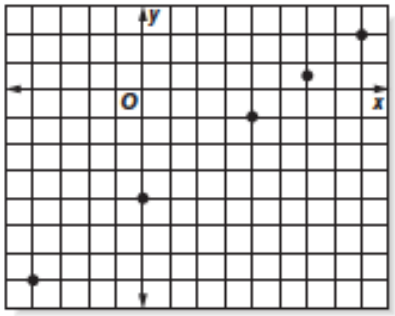
18. $\{(-4, 2), (-3, 1), (0, -2), (1, -3), (3, -5)\}$



19. $\left\{\left(-5, -\frac{5}{3}\right), \left(-3, -\frac{1}{3}\right), \left(0, \frac{5}{3}\right), (5, 5), \left(6, \frac{17}{3}\right)\right\}$



20. $\left\{\left(-6, -\frac{8}{3}\right), (-3, -2), \left(0, -\frac{4}{3}\right), \left(1, -\frac{10}{9}\right), \left(3, -\frac{2}{3}\right)\right\}$



21. $\{(-4, -7), (0, -4), (4, -1), (6, 0.5), (8, 2)\}$