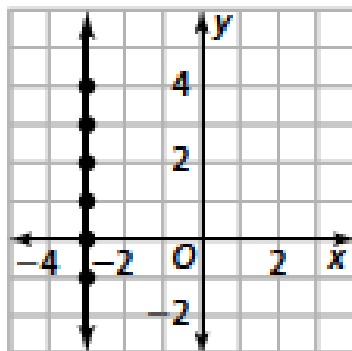


Lesson 3.12 Additional Practice

1. a. Answers may vary. Sample:

$(-3, -1), (-3, 0), (-3, 1), (-3, 2),$
 $(-3, 3), (-3, 4)$



- b. A line parallel to the y -axis and 3 units to the right of it; see part (a) for graph.

2. a. no; yes; no; yes

- b. Answers may vary. Samples:

$(1, 1), (4, 2), (4, -2), (9, 3)$

3. a. $h = -5$ b. $v = 3$

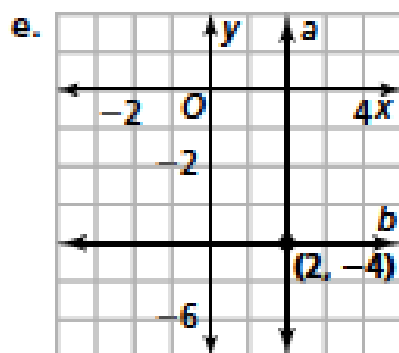
4. a. on neither b. on v
 c. on h d. on both
 e. on neither

5. a. $(2, -1), (2, 0), (2, 1), (2, 2)$

- b. $(-1, -4), (0, -4), (1, -4), (2, -4)$

- c. $a = 3$

- d. $b = -4$

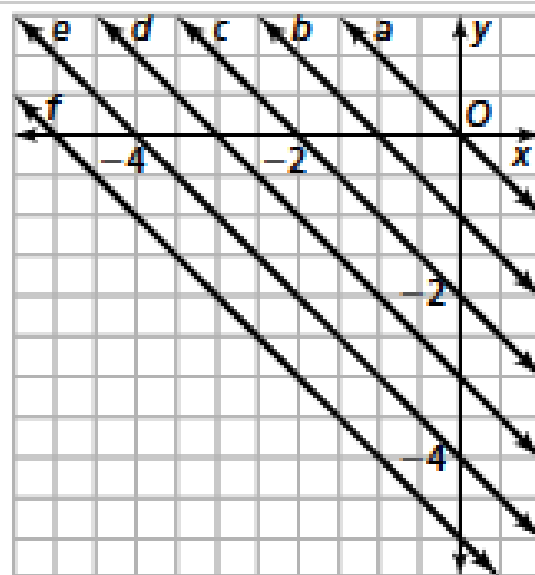


6. a. Answers may vary. Sample: $(0, -9),$
 $(4, -6), (8, -3), (12, 0), (16, 3)$

- b. Answers may vary. Sample:

$(0, 0), (0, 1), (1, 0), (2, 0), (0, 2)$

7. a-f.



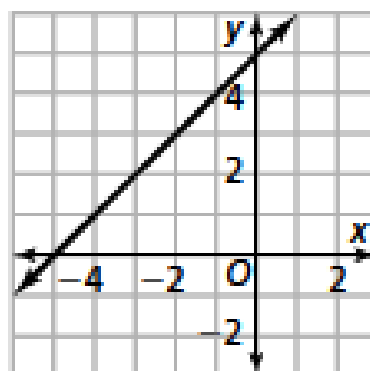
- g. In each case, the y in the first equation is replaced with $(y + n)$, with n being a number that increases by 1 in each equation.
- h. The graphs are parallel lines that shift down 1 unit for each increase of the number that is added to y . Adding a larger number to y moves the graph lower.
- i. The graph of $y + 10 = -x$ is parallel to the other graphs and would cross the y -axis at $(0, -10)$. In other words, it is the first graph shifted 10 units down.

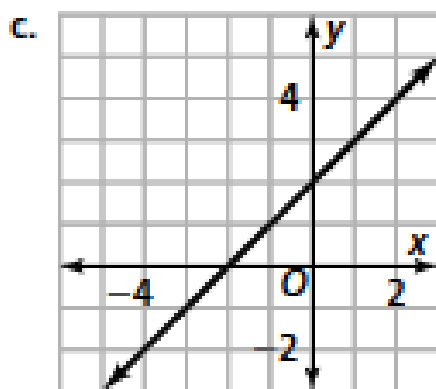
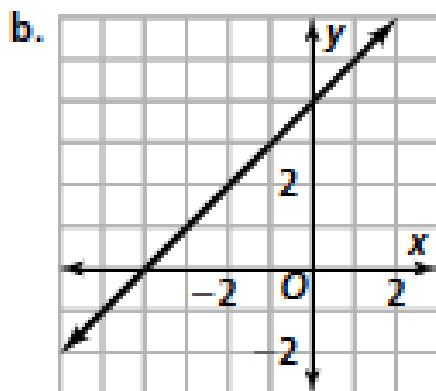
Lessons 3.13 and 3.14 Additional Practice

1. B

2. a. IV b. I c. II d. III

3. a.





4. a. The graphs do not intersect because the lines are parallel.
 b. You get the statement $7 = 2$, which is false, so there is no solution.

5. Answers may vary. Sample:

$$y = -\frac{1}{2}x; x + y = 4$$

6. a. $x^2 + y^2 = 4$ is the circle; $x + y = 2$ is the line.
 b. $(0, 2)$ and $(2, 0)$; both points are on the circle because $0^2 + 2^2 = 4$ and $2^2 + 0^2 = 4$. Both points are on the line because $0 + 2 = 2$ and $2 + 0 = 2$.

7. a. $(-3, 0)$ b. $(-3, 1)$ c. $(-3, 2)$
 d. $(-3, 3)$ e. $(-3, 4)$ f. $(-3, 5)$
 g. $(-3, 6)$ h. $(-3, 7)$ i. $(-3, 8)$
 j. $(-3, 9)$
 k. The x -coordinate is always -3 .
 The y -coordinate is the value given in the equation.