

3.4 Practice A

In Exercises 1–3, graph the linear equation.

1. $x = 4$

2. $y = 3$

3. $x = -3$

In Exercises 4–7, find the x - and y -intercepts of the graph of the linear equation.

4. $2x - 5y = 10$

5. $3x + 4y = 12$

6. $-3x + 5y = -30$

7. $-6x - 4y = 24$

In Exercises 8–13, use intercepts to graph the linear equation. Label the points corresponding to the intercepts.

8. $2x + 4y = 8$

9. $3x + 2y = 12$

10. $-5x + 2y = 20$

11. $-4x + 4y = 20$

12. $-3x + 4y = 16$

13. $-2x + 6y = 24$

14. A dance team has two competitions on the same day. The coaches decide to split the 96-member team, sending some to each competition. Competition A requires four-member dance teams per event, and Competition B requires six-member dance teams per event. The equation $4x + 6y = 96$ models this situation, where x is the number of four-member teams and y is the number of six-member teams.

- Graph the equation. Interpret the intercepts.
- Find four possible solutions in the context of the problem.

15. Describe and correct the error in finding the intercepts of the graph of the equation.

\times	$4x - 9y = 36$	$4x - 9y = 36$
	$4x - 9(0) = 36$	$4(0) - 9y = 36$
	$4x = 36$	$-9y = 36$
	$x = 9$	$y = -4$
	The intercept is at $(9, -4)$.	

16. Write an equation in standard form of a line whose intercepts are fractions. Explain how you know the intercepts are fractions.