Name: _____   Date: _____
Instructor: _____   Section: _____

Practice Set 3.3

Use the choices to fill in each blank.

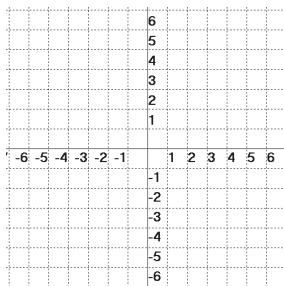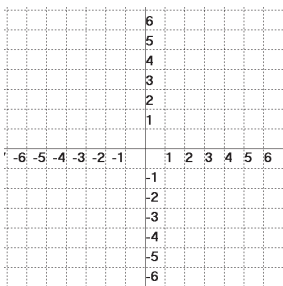|			
slope-intercept form	horizontal	oblique	x-coordinate
standard form	vertical	constant	y-coordinate

1. The equation $ax + by = c$ is in _____.

2. The graph of $y = b$ for any real number b is a(n) _____ line.

3. The graph of $x = a$ for any real number a is a(n) _____ line.

4. When the equation $3(x - 1) = 4x - 5$ is solved graphically, the solution is the _____
    of the intersection of the lines $y = 3(x - 1)$ and $y = 4x - 5$.

5. The function $f(x) = b$ is called the _____ function.
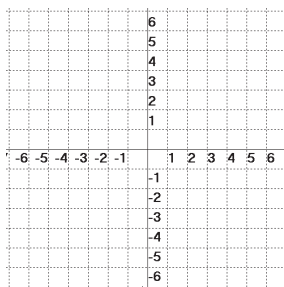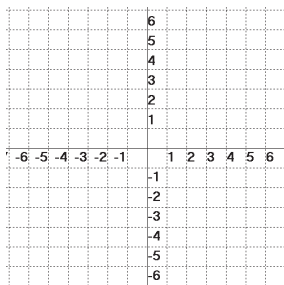
Write each equation in standard form.

6. $y = -2x + 6$ 7. $5x = 3y - 7$ 6._____

                                                              7._____

8. $2(x - 1) = 3(y + 3)$ 9. $\dfrac{1}{2}y = 3(x - 4) + 5$ 8._____

                                                              9._____

Graph each equation using the x- and y- intercepts. Write the x- and y- intercepts.

10. $y = -2x + 1$ 11. $-6x + 3y = 0$ 10._____

                      11._____

12. $y = \dfrac{1}{2}x + 3$ 13. $f(x) = 4x + 1$ 12._____

                      13._____

Angel/Runde, *Intermediate Algebra for College Students,* 9e
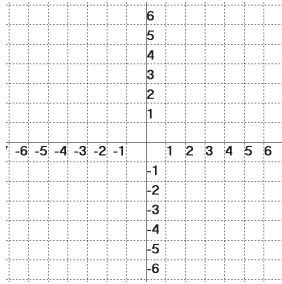
Practice Set 3.3

Graph each equation. Write the *x*- and *y*-intercepts.

14. $-4x + 2y = 0$
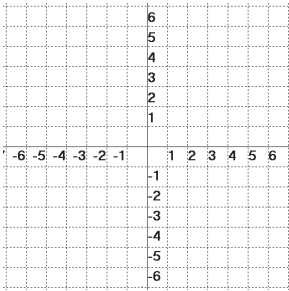
15. $1.2x + 0.6y = 2.4$

14. _____

15. _____

16. $\dfrac{1}{4}x + \dfrac{1}{2}y = 1$
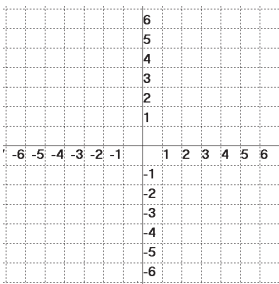
17. $f(x) = \dfrac{5}{2}$
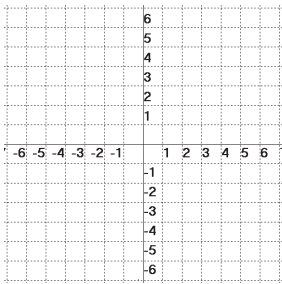
16. _____

17. _____

Problem Solving

18. The yearly profit, *p*, of a charter boat company can be estimated by the function $p(n) = 1500n - 500{,}000$, where *n* is the number of chartered trips.
  a) Estimate the number of trips needed in order to break even.
  b) Estimate the number of trips needed for the company to make a yearly profit of $100,000.

18. a) _____

b) _____

19. Guadalupe works at a clothing store. Her weekly salary consists of $300 plus 3% of her sales for that week.
  a) Write a function expressing Guadalupe's weekly salary, *w*, in terms of her weekly sales, *s*.
  b) If Guadalupe's sales for one week were $1435, what was her weekly salary?

19. a) _____

b) _____