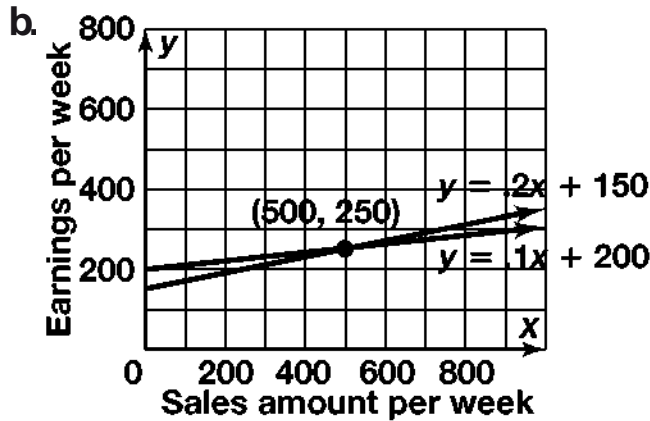


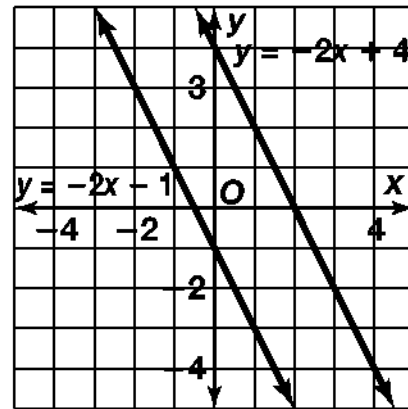
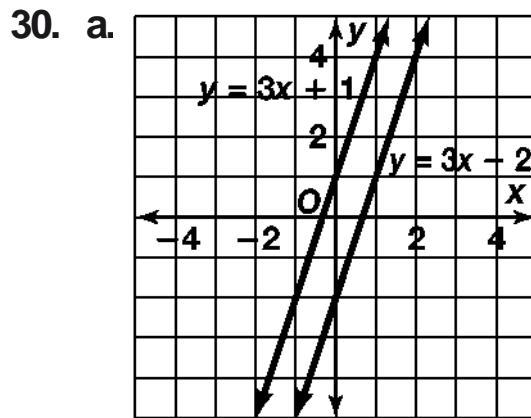
1. no
2. no
3. yes
4. (4, 5)
5. (1, 7)
6. (-2, -1)
7. (1, 6)
8. (-2, -6)
9. (4, 6)
10. no solution
11. no solution
12. infinitely many solutions
13. no solution
14. infinitely many solutions
15. infinitely many solutions
16. -2, -6
17. no
18. yes
19. a. $x + y = 4$; $x = 3y$
b. (3, 1); 3 ft, 1 ft
20. no solution
21. infinitely many solutions
22. (1, 5)
23. infinitely many solutions
24. (3, 1)
25. infinitely many solutions
26. 20 ft²
27. 1, -4
28. 3 chickens, 8 cows

29. a. $y = 200 + 0.10x$ and
 $y = 150 + 0.20x$



\$500

c. If weekly sales are about \$600, you would earn more money at the position that pays \$150/wk plus 20% commission. If $x = 600$, $y = 270$. If $x = 600$ in the other equation, $y = 260$, which is less than 270.



b. Conjectures may vary. Sample: A system of equations with the same slope but different y -intercepts has no solutions.

31-33. Answers may vary.

31. $y = 3x$
 $y = 3x + 2$

32. $y = x + 1$
 $y = 2x$

33. $y - x = 2$
 $y = x + 2$

34. 12 units²

35. $(-3, -1)$