Name _____ Class _____ Date _____

Practice 3-4

Mixed Exercises

Solve and check each equation.

1. $4(2r + 8) = 88$

2. $-3(b - 5) = -21$

3. $3(f + 2) = -15$

4. $6h + 5(h - 5) = 52$

5. $-5d + 3(2d - 7) = -5$

6. $7 + 2(4x - 3) = 33$

7. $2(3h + 2) - 4h = -16$

8. $-3(4 - y) = -27$

9. $3(2n - 4) - 2n = 24$

10. $-w + 4(w + 3) = -12$

11. $4 = 0.4(3d - 5)$

12. $-4d + 2(3 + d) = -14$

13. $2x + \frac{3}{4}(4x + 16) = 7$

14. $2(3a + 2) = -8$

15. $5(t - 3) - 2t = -30$

16. $5(b + 4) - 6b = -24$

17. $\frac{2}{5}(5k + 35) - 8 = 12$

18. $0.4(2s + 4) = 4.8$

19. $\frac{2}{3}(9b - 27) = 36$

20. $\frac{1}{2}(12n - 8) = 26$

21. $0.5(2x - 4) = -17$

Simplify each expression.

22. $3.5(3x - 8)$

23. $4(x + 7)$

24. $-2.5(2a - 4)$

25. $\frac{2}{3}(12 - 15d)$

26. $-(2k - 11)$

27. $-\frac{1}{3}(6h + 15)$

28. $(2c - 8)(-4)$

29. $-3(4 - 2b)$

30. $2(3x - 9)$

Use an equation to model and solve each problem.

31. The attendance at a ball game was 400 people. Student tickets cost \$2 and adult tickets cost \$3. If \$1050 was collected in ticket sales, how many of each type of ticket were sold?

32. Find two consecutive integers such that the sum of the first and 3 times the second is 55.

33. An angle and its complement always have a sum of 90°. The sum of the measures of an angle and five times its complement is 298°. What is the measure of the angle?

34. The perimeter of a pool table is 30 ft. It is twice as long as it is wide. What is the length of a pool table?

35. Suppose you have a coin collection of nickels and dimes containing 63 coins. If you have \$5.05, how many of each type of coin do you have?

Solve and check each equation.

36. $2(a - 4) + 15 = 13$

37. $7 + 2(a - 3) = -9$

38. $13 + 2(5c - 2) = 29$

39. $5(3x + 12) = -15$

40. $4(2a + 2) - 17 = 15$

41. $2(m + 1) = 16$

42. $-4x + 3(2x - 5) = 31$

43. $-6 - 3(2k + 4) = 18$

44. $3(t - 12) = 27$