Name_____ Class_____ Date_____

1-7 Practice

Form G

The Distributive Property

Use the Distributive Property to simplify each expression.

1. $3(h - 5)$ **2.** $7(-5 + m)$ **3.** $(6 + 9v)6$ **4.** $(5n + 3)12$

5. $20(8 - a)$ **6.** $15(3y - 5)$ **7.** $21(2x + 4)$ **8.** $(7 + 6w)6$

9. $(14 - 9p)1.1$ **10.** $(2b - 10)3.2$ **11.** $\frac{1}{3}(3z + 12)$ **12.** $4\left(\frac{1}{2}t - 5\right)$

13. $(-5x - 14)(5.1)$ **14.** $1\left(-\frac{1}{2}r - \frac{5}{7}\right)$ **15.** $10(6.85j + 7.654)$ **16.** $\frac{2}{3}\left(\frac{2}{3}m - \frac{2}{3}\right)$

Write each fraction as a sum or difference.

17. $\frac{3n + 5}{7}$ **18.** $\frac{14 - 6x}{19}$ **19.** $\frac{3d + 5}{6}$ **20.** $\frac{9p - 6}{3}$

21. $\frac{18 + 8z}{6}$ **22.** $\frac{15n - 42}{14}$ **23.** $\frac{56 - 28w}{8}$ **24.** $\frac{81f + 63}{9}$

Simplify each expression.

25. $-(14 + x)$ **26.** $-(-8 - 6t)$ **27.** $-(6 + d)$ **28.** $-(-r + 1)$

29. $-(4m - 6n)$ **30.** $-(5.8a + 4.2b)$ **31.** $-(-x + y - 1)$ **32.** $-(f + 3g - 7)$

Use mental math to find each product.

33. 3.2×3 **34.** 5×8.2 **35.** 149×2 **36.** 6×397

37. 4.2×5 **38.** 4×10.1 **39.** 8.25×4 **40.** 11×4.1

41. You buy 75 candy bars at a cost of \$0.49 each. What is the total cost of 75 candy bars? Use mental math.

42. The distance around a track is 400 m. If you take 14 laps around the track, what is the total distance you walk? Use mental math.

43. There are 32 classmates that are going to the fair. Each ticket costs \$19. What is the total amount the classmates spend for tickets? Use mental math.

Name_____ Class_____ Date_____

1-7 Practice (continued) *Form G*

The Distributive Property

Simplify each expression by combining like terms.

44. $4t + 6t$

45. $17y - 15y$

46. $-11b^2 + 4b^2$

47. $-2y - 5y$

48. $14n^2 - 7n^2$

49. $8x^2 - 10x^2$

50. $2f + 7g - 6 + 8g$

51. $8x + 3 - 5x - 9$

52. $-5k - 6k^2 - 12k + 10$

Write a word phrase for each expression. Then simplify each expression.

53. $2(n + 1)$

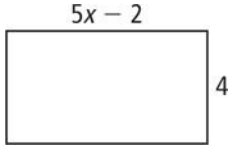
54. $-5(x - 7)$

55. $\frac{1}{2}(4m - 8)$

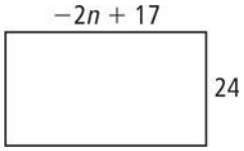
56. The tax a plumber must charge for a service call is given by the expression $0.06(35 + 25h)$ where h is the number of hours the job takes. Rewrite this expression using the Distributive Property. What is the tax for a 5 hour job and a 20 hour job? Use mental math.

Geometry Write an expression in simplified form for the area of each rectangle.

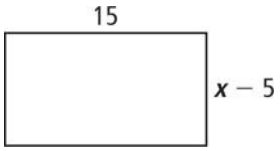
57.



58.



59.



Simplify each expression.

60. $4jk - 7jk + 12jk$

61. $-17mn + 4mn - mn + 10mn$

62. $8xy^4 - 7xy^3 - 11xy^4$

63. $-2(5ab - 6)$

64. $z + \frac{2z}{5} - \frac{4z}{5}$

65. $7m^2n + 4m^2n^2 - 4m^2n - 5m^3n^2 - 5mn^2$

66. Reasoning Demonstrate why $\frac{12x - 6}{6} \neq 2x - 6$. Show your work.

Simplify each expression.

67. $4(2h + 1) + 3(4h + 7)$

68. $5(n - 8) + 6(7 - 2n)$

69. $7(3 + x) - 4(x + 1)$

70. $6(y + 5) - 3(4y + 2)$

71. $-(a - 3b + 27)$

72. $-2(5 - 4s + 6t) - 5s + t$