Name _____ Date _____

Cumulative Practice

For use after Chapter 3

Write the product using an exponent. (Lesson 1.2)

1. $5 \cdot 5 \cdot 5$
2. $24 \cdot 24$
3. $m \cdot m \cdot m \cdot m \cdot m$

Evaluate the expression when $a = 3$ and $b = 5$. (Lesson 1.3)

4. $8a - 3b$
5. $4(a + b)^2$
6. $\dfrac{2a^2}{6b + 6}$

Evaluate the expression when $x = 7$ and $y = -3$. (Lesson 1.4)

7. $-|y| + 16$
8. $2x + (-y)$
9. $4|-y| - 3|x|$
10. $-3|x|$

Simplify. (Lessons 1.5–1.7)

11. $-2 + 6$
12. $1 + (-5)$
13. $-4 - (-13)$
14. $-16 + (-3)$
15. $10 - (-7)$
16. $-20 + 9$
17. $-21 - 11$
18. $-1(-15)$
19. $30 \div (-2)$
20. $3(-60)$
21. $\dfrac{-33}{3}$
22. $-5(-20)$

Identify the property that the statement illustrates. (Lesson 2.1)

23. $-3 + 8 = 8 + (-3)$
24. $(9 \cdot 4^3) \cdot 2 = 9 \cdot (4^3 \cdot 2)$
25. $-5b \cdot 1 = -5b$
26. $k + 0 = k$

Use the distributive property to write an equivalent variable expression. (Lesson 2.2)

27. $-9(x - 4)$
28. $(6 + t)(-7)$
29. $5(3y - 8)$
30. $(2 + 4z)12$

Write the verbal statement as an equation. Then solve the equation. (Lessons 2.4–2.6)

31. The sum of -5 and b is 15.
32. The quotient of p and 12 is -9.
33. The product of -6 and x is -96.
34. The sum of $-a$ and -17 is -31.
35. The quotient of y and 3 is -4.
36. The product of x and -3 is 90.

37. You are going on a school trip to the Grand Canyon. The trip costs $1100 per student. Through your savings and fundraisers you have raised $800 for the trip. The last fundraiser is a sandwich sale. For each sandwich you sell, you make a profit of $3.75. How many sandwiches do you need to sell to pay for the rest of your trip? (Lessons 3.1–3.3)

Review and Projects

Name _____   Date _____

Cumulative Practice

For use after Chapter 3

Solve the equation. (Lessons 3.1–3.3)

38. $19 + z = 36$

39. $8k + 15 = -57$

40. $\dfrac{d}{4} - 12 = -23$

41. $29n + 14 - 17n = 62$

42. $18 = 2(f - 3)$

43. $48 - (5x + 7) = -9$

44. $5m + 31 = -53 - 9m$

45. $7s + 32 = 11s$

46. $13 + 12x = -6x + 49$

47. $-3t + 11 = 4t - 17$

48. $9(3y - 9) = 32y + 19$

49. $25x + 3 = 2(10x - 36)$

Solve the inequality. Graph your solution. (Lessons 3.4–3.6)

50. $p + 5 > 2$

51. $m - 6 \leq 14$

52. $9 \geq y - 3$

53. $g - 17 < -9$

54. $\dfrac{x}{2} \leq -7$

55. $-13n > 78$

56. $\dfrac{y}{-3} < 8$

57. $4t \geq -60$

58. $3x + 5 \leq 23$

59. $15 - 3s < -6$

60. $22p - 14 > 13p + 31$

61. $-8 - 5w \geq w - 74$

Review and Projects