Multi-Part Lesson 1-3: Powers of 10

Part D

PAGES 62–65

Write each product using an exponent.

1. $4 \times 4 \times 4 \times 4$
2. $10 \times 10 \times 10$
3. 14×14
4. $3 \times 3 \times 3 \times 3$
5. $2 \times 2 \times 2$
6. $6 \times 6 \times 6 \times 6 \times 6$
7. $8.2 \times 8.2 \times 8.2$
8. $7 \times 7 \times 7 \times 7 \times 7 \times 7$
9. $9.5 \times 9.5 \times 9.5$

Write each power as a product of the same factor. Then find the value.

10. 9^4
11. 2^3
12. 3^5
13. 4^3
14. 6^5
15. 5^4
16. 8.5^3
17. 1.3^2

18. **FOOD** The number of Calories in a small banana can be written as 2^7. What whole number does 2^7 represent?

Multi-Part Lesson 5-1: Write and Evaluate Expressions

PART E

PAGES 270–273

Find the value of each expression.

1) $12 + 10 - 5 - 6$
2) $2 \times 3 + 9 \times 2$
3) $8 + 12 \times 4 \div 8$
4) $54 \div (8 - 5)$
5) $4^2 + 3^3$
6) $(11 - 7) \times 3 - 5$
7) $25 - 9 + 4$
8) $100 \div 10 \times 2$
9) 3×4^3
10) $11 + 4 \times (12 - 7)$
11) $6^2 - 7 \times 4$
12) $12 + 5^2 - 9$

PART F

PAGES 274–278

Evaluate each expression if $m = 2$ and $n = 4$.

1. $m + m$
2. $n - m$
3. mn
4. $3m + 5$
5. $2n + 2m$
6. $m \cdot 0$
7. $64 \div n$
8. $12 - m$
9. $5n \div m$
10. $6mn$
11. $4n - 3$
12. $n \div m + 8$

Evaluate each expression if $a = 3$, $b = 4$, and $c = 12$.

13. $a + b$
14. $c - a$
15. $a + b + c$
16. $b - a$
17. $c - a \cdot b$
18. $a + 2 \cdot b$
19. $b + c \div 2$
20. ab
21. $25 + c \div b$
22. $c \div a + 10$
23. $2b - a$
24. $2ab$

Name: Study Guide Period: _____

Write an algebraic expression to translate each written phrase or real-life scenario.

1. the sum of 4 and a number y _____
2. 6 less than a number x _____
3. the quotient of a number m and 16 _____
4. the product of a number t and 9 _____
5. I want to double my profits from last year. _____
6. The number of apples split evenly between 5 people. _____
7. Liz has 10 more cans of soda than Peter. _____
8. Five years less than Mary's age _____
9. Bowl three games and pay for $2.00 shoe rental _____
10. Mei paid $8.00 to enter the carnival area and then bought 50 game tickets. _____