

Extra Practice

Lesson 1-1

(pages 6–9)

Write an algebraic expression for each verbal expression.

1. the sum of b and 21 $b + 21$
2. the product of x and 7 $7x$
3. a number t increased by 6 $t + 6$
4. the sum of 4 and 6 times a number z $4 + 6z$
5. -10 increased by 4 times a number a $-10 + 4a$
6. the sum of 8 and -2 times n $8 + (-2n)$
7. one-half the cube of a number x $\frac{1}{2}x^3$
8. four-fifths the square of m $\frac{4}{5}m^2$

Evaluate each expression.

9. 2^4 **16**
10. 10^2 **100**
11. 7^3 **343**
12. 20^3 **8000**
13. 3^6 **729**
14. 4^5 **1024**

15–23. Sample answers given.

Write a verbal expression for each algebraic expression. **19. five times n squared minus 6**

15. $2n$ **2 times n**
16. 10^7 **ten to the seventh power**
17. m^5 **m to the fifth power**
18. xy **the product of x and y**
19. $5n^2 - 6$
20. $9a^3 + 1$ **nine times a cubed plus 1**
21. $x^3 \cdot y^2$ **x cubed times y squared**
22. $c^4 \cdot d^6$ **c to the fourth power times d to the sixth power**
23. $3e + 2e^2$ **3 times e plus 2 times e squared**