1.2 Apply Order of Operations
pp. 8–12

EXAMPLE

Evaluate $(5 + 3)^2 \div 2 \times 3$.

$$(5 + 3)^2 \div 2 \times 3 = 8^2 \div 2 \times 3 \qquad \text{Add within parentheses.}$$
$$= 64 \div 2 \times 3 \qquad \text{Evaluate power.}$$
$$= 32 \cdot 3 \qquad \text{Divide.}$$
$$= 96 \qquad \text{Multiply.}$$

EXERCISES

EXAMPLES
1, 2, and 3
on p. 8–9
for Exs. 13–21

Evaluate the expression.

13. $12 - 6 \div 2$

14. $1 + 2 \cdot 9^2$

15. $3 + 2^3 - 6 \div 2$

16. $15 - (4 + 3^2)$

17. $\dfrac{20 - 12}{5^2 - 1}$

18. $50 - [7 + (3^2 \div 2)]$

Evaluate the expression when $x = 4$.

19. $15x - 8$

20. $3x^2 + 4$

21. $2(x - 1)^2$

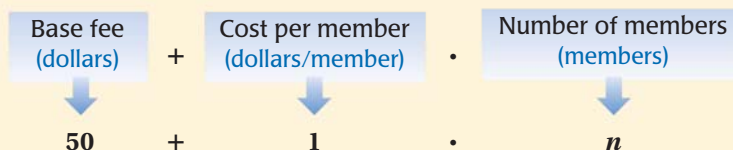## 1.3 Write Expressions
pp. 15–20

EXAMPLE

Write an expression for the entry fee in a jazz band competition if there is a base fee of $50 and a charge of $1 per member.

Write a verbal model. Then translate the verbal model into an algebraic expression. Let n represent the number of band members.

Base fee (dollars)	+	Cost per member (dollars/member)	·	Number of members (members)
50	+	1	·	n

▶ An expression for the entry fee (in dollars) is $50 + n$.

EXERCISES

EXAMPLES
1, 2, and 3
on pp. 15–16
for Exs. 22–27

Translate the verbal phrase into an expression.

22. The sum of a number k and 7

23. 5 less than a number z

24. The quotient of a number k and 12

25. 3 times the square of a number x

26. **TOLL ROADS** A toll road charges trucks a toll of $3 per axle. Write an expression for the total toll for a truck.

27. **SCHOOL SUPPLIES** You purchase some notebooks for $2.95 each and a package of pens for $2.19. Write an expression for the total amount (in dollars) that you spend.