

Lesson
7.1**Review & Refresh**

Evaluate the expression when $a = -4$, $b = 3$, and $c = 8$.

1. $c - a$

2. $2a$

3. $a - b$

4. bc

Find the product or the quotient, if possible.

5. $(-50) \div (-10)$

6. $\frac{|-32|}{-8}$

7. $3(-8)$

8. $(-5)7(-2)0$

9. You earn 100 points for a winning hand in a card game. You lose points for every card in your hand. Find your total score after each event.

a. You win 2 hands.

b. You lose the next 4 hands. The table shows the cards you had left.

Card Value	1	2	3	4	5	6	7	8	9
Number of Cards	5	8	1	2	8	4	0	2	3

c. You win 1 more hand.

Evaluate the expression.

10. $-10 + 3^3$

11. $15 - (-2)^4$

12. $-2(6-10) + 5$

13. $\frac{4^2 - 5^2}{-3}$

14. $6^2 - 3(4-5) + 8$

Identify the terms, coefficients, and constants.

15. $4x + 8$

16. $4a^2 - 5b + 6$

Lesson

7.1

Review & Refresh (continued)

Evaluate the expression when $a = -3$, $b = 8$, and $c = 10$.

17. $2b + 5$
18. $3a + b$
19. $a^2 + bc$
20. A plane descends 500 feet per minute. What is the altitude change of the plane, as an integer, after 7 minutes?
21. What is the area of a square with a side length of $6x$ units?
22. On a mountain, the temperature decreases by 8°C for every 6000-foot increase in elevation. The temperature at 6000 feet is 4°C . What is the temperature at 15,000 feet?

Lesson

7.1

Self-Assessment

Use the scale to rate your understanding of the learning target and the success criteria.

- 1 I don't understand yet.
- 2 I can do it with help.
- 3 I can do it on my own.
- 4 I can teach someone else.

	Rating	Date
7.1 Algebraic Expressions		
Learning Target: Evaluate algebraic expressions given values of the variables.	1 2 3 4	
I can identify parts of an algebraic expression.	1 2 3 4	
I can evaluate algebraic expressions with one or more variables.	1 2 3 4	
I can evaluate algebraic expressions with one or more operations.	1 2 3 4	

Lesson
7.2**Review & Refresh**

Evaluate the expression when $a = 4$, $b = -6$, and $c = 2$.

1. $3a - 10$

2. $2b - 3c$

3. $a^2 - 2b + c$

Write the phrase as an expression.

4. 16 subtracted from a number a

5. 10 times a number b

6. The expression $10m + 20$ represents the cost in dollars of a streaming service for m months.

a. What do the 10 and 20 represent in the expression?

b. Find the total cost for 1 year.

Find the quotient, if possible.

7. $0 \div (-12)$

8. $\frac{-84}{-7}$

9. $\frac{|-56|}{-8}$

10. $(-48) \div (-16)$

Write the algebraic expression as a phrase.

11. $z + 4$

12. $-3y$

13. $10 - x$

14. $4 + 2w$

15. To rent a car, the cost is \$50 per day and there is a \$25 rental fee.

a. Write an expression that represents the cost, in dollars, to rent the car for d days.

b. How much do you pay if you rent the car for 9 days?

Lesson**7.2****Review & Refresh** (continued)

Evaluate the expression.

16. $-7 - 4^2$

17. $9 - 2^2(-3)$

18. $16 - 7(8 - 4) + 3$

19. $\frac{-4^2+3}{13}$

20. $-3(4 - 6)^2 + 12$

Write the expression using exponents.

21. $a \cdot a \cdot a \cdot a \cdot a$

22. $-9 \cdot c \cdot c \cdot c$

Identify the terms, coefficients, and constants.

23. $3x^2 + x + 6$

24. $-c^2 - 8c$

Lesson**7.2****Self-Assessment**

Use the scale to rate your understanding of the learning target and the success criteria.

1 I don't understand yet.	2 I can do it with help.	3 I can do it on my own.	4 I can teach someone else.
----------------------------------	---------------------------------	---------------------------------	------------------------------------

	Rating	Date
7.2 Writing Expressions		
Learning Target: Write algebraic expressions and solve problems involving algebraic expressions.	1 2 3 4	
I can write phrases as algebraic expressions.	1 2 3 4	
I can write algebraic expressions as phrases.	1 2 3 4	
I can write and evaluate algebraic expressions that represent real-life problems.	1 2 3 4	

Lesson
7.3**Review & Refresh**

1. There are 64 teams in a tournament. 6 teams are eliminated after each round.
 - a. Write an expression to represent the number of teams remaining after r rounds.
 - b. How many teams are left after 8 rounds?

2. The expression $60a + 40c$ represents the cost for a adults and c children to attend an amusement park.
 - a. What is the cost for each adult and each child?
 - b. What is the cost for 2 adults and 4 children?

3. For one month, you have 2 deposits of \$1000. You have the following withdrawals during the month. Four bills at \$75 each, 4 trips to the grocery store at \$150 each, rent for \$750, and miscellaneous expenses for \$350. What is amount left at the end of the month?

4. It costs \$8 for a bucket of golf balls and \$15 to rent golf clubs at a driving range.
 - a. Write an expression to represent the total cost to rent golf clubs and b buckets of golf balls.
 - b. What is the total cost with 3 buckets?

Simplify the expression.

5. $-8 + (10 + a)$

6. $3(c + 6)$

7. $-2(f + 4 - g)$

8. $3(y + 2) - 8$

9. $4x - 5 - 6x + 7$

10. $-10x + 4x + 9x$

Lesson
7.3**Review & Refresh** (continued)Evaluate the expression when $a = -5$, $b = 7$, and $c = -3$.

11. $2c + 8$

12. $a - 2b$

13. $b^2 + a + 2c$

Write the phrase as an algebraic expression.

14. -9 plus a number c

15. 2 times a number d squared

Write the expression using exponents.

16. $b \cdot b \cdot b \cdot b$

17. $7 \cdot d \cdot d \cdot d \cdot d \cdot d$

Simplify the expression.

18. $3(z + 2) - 4(z - 3)$

19. $4(a + 5) + 2(3 - a)$

Lesson
7.3**Self-Assessment**

Use the scale to rate your understanding of the learning target and the success criteria.

1 I don't understand yet.	2 I can do it with help.	3 I can do it on my own.	4 I can teach someone else.
----------------------------------	---------------------------------	---------------------------------	------------------------------------

	Rating	Date
7.3 Writing Equivalent Expressions		
Learning Target: Apply properties of operations to generate equivalent algebraic expressions.	1 2 3 4	
I can explain what it means for algebraic expressions to be equivalent.	1 2 3 4	
I can apply the Commutative and Associative Properties to simplify algebraic expressions.	1 2 3 4	
I can apply the Distributive Property to simplify algebraic expressions.	1 2 3 4	
I can use the Distributive Property to combine like terms.	1 2 3 4	