

Cumulative Review

Chapter 1

Multiple Choice

For Exercises 1–10, choose the correct letter.

1. Which property is illustrated by $(3 + 5) + 7 = 3 + (5 + 7)$?
A. Additive Identity C. Commutative Property of Addition
B. Associative Property of Addition D. Distributive Property
2. Which algebraic expression represents the statement “4 more than the product of 6 and a number”?
F. $4n + 6$ H. $4 - 6n$
G. $6 - 4n$ I. $6n + 4$
3. What is the value of $-9 + (2^3 - 3^2)$?
A. -26 B. -10 C. -8 D. -4
4. What is the value of $\sqrt{49}$?
F. $\sqrt{7}$ G. 7 H. 14 I. 49
5. What is the order of the numbers $\sqrt{12}$, -3.5 , $\frac{5}{3}$, $-\frac{2}{3}$ from least to greatest?
A. $\sqrt{12}$, -3.5 , $\frac{5}{3}$, $-\frac{2}{3}$ C. -3.5 , $-\frac{2}{3}$, $\sqrt{12}$, $\frac{5}{3}$
B. $\sqrt{12}$, $\frac{5}{3}$, $-\frac{2}{3}$, -3.5 D. -3.5 , $-\frac{2}{3}$, $\frac{5}{3}$, $\sqrt{12}$
6. Which ordered pair is not a solution of $y = 2x + 1$?
F. (3, 7) G. (0, 1) H. (-1, 1) I. (-3, -5)
7. Which expression is equivalent to $-3.2(2x - 2.1)$?
A. $-6.4x + 6.72$ C. $6.4x + 6.72$
B. $-6.4x - 6.72$ D. $-6.4x + 2.1$
8. Toby purchased 5 tickets online for a show. The tickets cost \$12 each plus there was a \$3.50 service fee for the order. How much money did Toby spend for the tickets?
F. \$15.50 G. \$51.50 H. \$60 I. \$63.50
9. What is the value of $3^3 - (4^2 - 2^3)$?
A. -1 B. 7 C. 19 D. 35
10. Which expression is equivalent to $4(2x + 1) - (-6x)$?
F. $14x + 4$ G. $8x - 2$ H. $2x + 4$ I. $-14x - 4$

Cumulative Review (continued)

Chapter 1

11. In the absence of predators, the rabbit population in a forest has grown to 5^6 over the past 5 years. What is the rabbit population in the forest?
12. Cherie is laying square tiles on her square kitchen floor. She buys the tiles for \$2 per square foot tile. If her total estimated cost for the tiles is \$288, what is the length of her floor in feet?
13. Simplify $8^2 \div 4 + 3(6 - 3) + 2^3$.
14. What is the value of $3 + |x - 2|$ for $x = -3$?
15. Evaluate $x(y - z)^2$ for $x = -1$, $y = 5$, and $z = -3$.
16. Write an equation for the sentence: the difference of $6n$ and -5 is -13 .
17. **Vocabulary** What type of number can be written in the form $\frac{a}{b}$, where a and b are integers, and $b \neq 0$?
18. Simplify $(x^2 + 6) - (3x^2 - 2x - 5)$.
19. What is the solution of the equation $9x + 12 = 39$?
20. Jack is taking his family to the fair. He plans to take \$5 for each admission ticket plus \$35 for food. Write an equation that models the amount of money Jack takes to the fair.
21. What is the value of the expression $(-7)(3) - (5)(-3)$?