

Chapter 4 Cumulative Review

Circle the letter of the best answer.

- Simplify $-3 + 2 \cdot 4 - 2m$
 A. -2 B. 3 C. 1 D. -6
- What is the opposite of 19?
 F. -1 G. $\frac{1}{19}$ H. 19 J. -19
- Simplify $5 + (-4) + (-5)$.
 A. -4 B. 14 C. -14 D. -10
- Simplify $-2y - (3k - 2y) + 3k$.
 F. 0 G. $4y - 6k$ H. $4y$ J. $6k - 4y$
- Which integer is *not* a solution of $36 + x > 14$?
 A. 5 B. -20 C. -22 D. -16
- Which number is divisible by both 3 and 2?
 F. 68,211 G. 45,305 H. 28,000 J. 58,404
- Which expression is equivalent to $-6 \cdot m \cdot m \cdot n \cdot 3 \cdot m$?
 A. $-6m^3 + 3n$ B. $-18m^3n$ C. $-18mn^3$ D. $-18 \cdot 3m \cdot n$
- Which expression is the GCF of $12x^3$ and $32xy$?
 F. $93x^3y$ G. $96x^4y$ H. $4x$ J. $4xy$
- Which is equivalent to $\frac{m^4n^5}{m^6n^2}$?
 A. m^2n^3 B. $m^{-2}n^3$ C. m^2n^{-3} D. $m^{-2}n^{-3}$
- Evaluate $\frac{4m-n-5}{n}$ for $m = 5, n = 25$.
 F. 5 G. 3 H. $\frac{5}{3}$ J. $\frac{3}{5}$
- Simplify $x^6 \cdot y^2 \cdot x^3 \cdot y$.
 A. x^3y B. x^2y C. x^9y^3 D. $x^{18}y^2$
- Simplify $\frac{w^{10}y^{12}z}{w^6z^5}$.
 F. $\frac{w^4y^{12}}{z^4}$ G. $\frac{w^{16}y^{12}}{z^6}$ H. $w^{16}y^{12}z^6$ J. $w^4y^{12}z^4$
- Simplify 5^{-2} .
 A. -10 B. 25 C. -25 D. $\frac{1}{25}$
- Which is true?
 F. $14 > 9 \cdot 3$ G. $-26 - 12 = 38$
 H. $4[-5 - (-2)] = (-2)6$ J. $50 - (-3 \cdot 5) \geq 55$

Chapter 4 Cumulative Review (continued)

15. Which expression is equal to x^{14} ?

A. $x^7 + x^7$

B. $(x^7)^2$

C. $(x^7)^7$

D. $x^2 \cdot x^7$

16. Which symbol makes $(5^3)^4$ $5^3 \cdot 5^4$ true?

F. $<$

G. $>$

H. $=$

J. none

17. Write a variable expression using parentheses for the total area of the rectangle. Then find the area for $x = 5$.

18. The quotient of a number n and 3.2 is negative twenty-five hundredths. Write and solve an equation to find n .

19. List all the factors of 56.

20. A restaurant offers a breakfast special of one egg, toast, and orange or tomato juice for \$1.79. The egg may be poached, scrambled, or fried. List all the breakfast special combinations that are available. How many are there? Explain how you know you have them all.

