

## Accelerate Math Success

Assessment



## **Unit Pretest**

**Circle** the letter of the correct answer.

- **1.**  $10^4 =$ 
  - **A** 104
  - **B** 1,400
  - **C** 10,100
  - **D** 10,000
- **2.** Which answer shows a base of 5 and an exponent of 3?
  - $A 5^3$
  - **B** 35
  - **C** 53
  - **D** 3<sup>5</sup>
- **3.** Which answer is the same as  $12 + 4^2$ ?
  - **A**  $12 + 4 \times 2$
  - **B**  $12 + (4 \times 2)$
  - **C**  $12 + (4 \times 4)$
  - **D** 12 + 4 + 2
- **4.**  $10 \times 5^2 =$ 
  - **A** 1,025
  - **B** 250
  - **C** 125
  - **D** 1,250

- **5.** Which answer is the same as 3x + 4?
  - A the sum of 3, x, and 4
  - **B** 3 raised to the x power plus 4
  - C the product of 3 and x, plus 4
  - **D** 3 times *x* to the fourth power
- **6.** Which answer is the same as 5 times the sum of 2 and *y*?
  - **A** 10*y*
  - **B** 5 + 2 + y
  - **C** 10 + y
  - **D** 5(2 + y)
- **7.** What is n(8 + n) when n = 3?
  - **A** 33
  - B 11
  - **C** 27
  - D 24

- **8.** What is 5x + 3 when x = 4?
  - **A** 20
  - **B** 23
  - **C** 35
  - **D** 12
- **9.** Which expression is equivalent to 8x 4 + 2x?
  - **A** 2*x*
  - **B** 10x 4
  - **C** 8x 2
  - D 6x 4
- **10.** What is  $4(x^2 3)$  when x = 2?
  - **A** 4
  - B 1
  - **C** 16
  - **D** 13
- **11.** When you evaluate an expression, which of these operations should you do last?
  - A Multiply and divide from left to right.
  - **B** Solve any exponential notation.
  - C Do the operations in the parentheses.
  - **D** Add and subtract from left to right.

- **12.** Which symbol means *product*?
  - Α -
  - B +
  - $\mathsf{C} \times$
  - D ÷
- **13.** Which answer is the same as this statement?

The sum of 15 and *x* is 23.

- **A** 15 + x = 23
- **B** 15x = 23
- **C** 15 + 23 = x
- **D** 23 + x = 15
- **14.** Which equation matches this situation?

There are *n* people at a beach. A group of 7 people leave the beach, and 4 more arrive. There are now 38 people at the beach.

A 
$$7 + 4 = 38 - n$$

**B** 
$$n = 38 - 7 - 4$$

C 
$$38 - n = 7 + 4$$

**D** 
$$n-7+4=38$$

- **15.** If 27 = 35 x, what is the value of x?
  - **A** 62
  - **B** 8
  - **C** 19
  - **D** 27
- **16.** If 4(3x + 5) = 92, what is the value of x?
  - **A** 17
  - **B** 32
  - **C** 6
  - **D** 5
- 17. A small museum had 18 visitors on Thursday and 15 visitors on Friday. Tickets to the museum cost \$7 each, but 3 of the visitors were admitted free because they were under 12 years old. How much money did the museum earn from tickets on that Thursday and Friday?
  - **A** \$330.00
  - **B** \$230.00
  - **C** \$280.00
  - **D** \$210.00

- **18.** 5.2 is between what two consecutive integers?
  - **A** 5 and 2
  - **B** 5 and 6
  - **C** 0 and 10
  - **D** 4 and 5
- **19.** Which symbol means "less than or equal to"?
  - A ≤
  - B >
  - **C** <
  - $D \geq$
- **20.** Which inequality expression matches this situation?

We harvested fewer than 18 ears of corn from our garden.

- **A** c = 18
- B c >
- **C** c < 18
- **D**  $c \ge 18$

## **Unit Posttest**

**Circle** the letter of the correct answer.

**1.** 
$$10^5 =$$

- **A** 105
- **B** 1,005
- **C** 100,000
- **D** 10,500,000
- **2.** Which answer shows a base of 6 and an exponent of 4?
  - **A** 46
  - **B** 6<sup>4</sup>
  - **C** 46
  - **D** 64
- **3.** Which answer is the same as  $14 + 6^2$ ?
  - **A**  $14 + (6 \times 6)$
  - **B**  $14 + (6 \times 2)$
  - **C**  $14 + 6 \times 2$
  - **D** 14 + 6 + 2
- **4.**  $10 \times 6^2 =$ 
  - **A** 1,036
  - **B** 136
  - **C** 1,360
  - **D** 360

- **5.** Which answer is the same as  $\frac{30}{x} 7$ ?
  - A 7 less than 30 divided by x
  - **B** the quotient of 30 less 7 and x
  - **C** x less 7 divided into 30
  - **D** 30 times *x* divided by 7
- **6.** Which answer is the same as the sum of 5 and *x*, divided by 7?
  - A  $\frac{5x}{7}$
  - **B**  $5 + \frac{x}{7}$
  - c  $\frac{5+x}{7}$
  - D  $\frac{5}{x+7}$
- **7.** What is  $\frac{24}{x+9}$  when x = 3?
  - **A** 36
  - **B** 12
  - **C** 3
  - **D** 2

- **8.** What is 42 4x when x = 9?
  - **A** 2
  - **B** 6
  - **C** 27
  - **D** 38
- **9.** Which expression is equivalent to 3(5 + x)?
  - **A** 15 + 3x
  - **B** 35 + x
  - **C** 15 + x
  - **D** 35 + 3x
- **10.** What is  $5(12 x^2)$  when x = 3?
  - **A** 57
  - **B** 51
  - **C** 3
  - **D** 15
- **11.** When you evaluate an expression, which of these operations should you do first?
  - A Multiply and divide from left to right.
  - **B** Do the operations within the parentheses.
  - **C** Solve any exponential notation.
  - **D** Add and subtract from left to right.

- **12.** Which symbol means *quotient*?
  - A -
  - В
  - C÷
  - $D \times$
- **13.** Which answer is the same as this statement?

The number 21 decreased by x is 16.

- **A** 21 = 16 x
- **B** 21 x = 16
- **C** 21 16 = x
- **D** x 21 = 16
- **14.** Which equation matches this situation?

A truck delivers *n* boxes of tools to a hardware store, along with 8 extra tools. Each box contains 15 tools. The total number of tools that were delivered is 68.

- A n = 68 + 8
- **B** 8n = 68
- **C** 15n = 68
- **D** 15n + 8 = 68

- **15.** If 41 = x + 7, what is the value of *x*?
  - **A** 11
  - **B** 37
  - **C** 34
  - **D** 41
- **16.** If 5(9x 6) = 15, what is the value of x?
  - **A** 1
  - **B** 5
  - **C** 6
  - **D** 9
- 17. A ferry made 6 trips to an island. On each trip to the island, it carried 15 passengers. On each trip back to the mainland, it carried 4 people. The rest of the people stayed at a hotel on the island. How many people stayed at the hotel on the island?
  - **A** 66
  - **B** 24
  - **C** 21
  - **D** 90

- **18.** -3.7 is between what two consecutive integers?
  - **A** 0 and −10
  - B 2 and -3
  - $\mathbf{C}$  -4 and -3
  - D -7 and -3
- **19.** Which symbol means "greater than or equal to"?
  - A <
  - $B \geq$
  - **C** >
  - $D \leq$
- **20.** Which inequality expression matches this situation?

More than 45 players tried out for the soccer team.

- **A** p < 45
- B  $p \ge 45$
- **C**  $p \le 45$
- **D** p > 45





## **Assessment**

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