

# A

## Answers

\_\_\_\_\_ Correct / 14 Total

---

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

14. \_\_\_\_\_

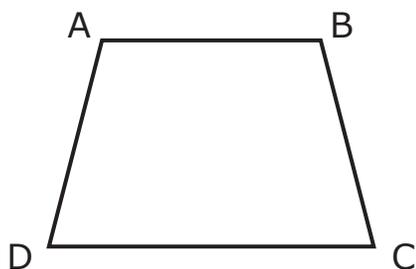


# Pre-Test

The following questions are multiple-choice. Read carefully and write your answer (**A**, **B**, **C**, or **D**) on the answer sheet.

1. Circle the situation that represents a variable.

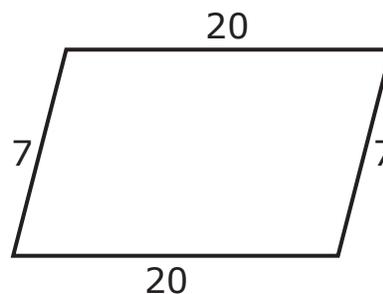
**A**



**C**  $9g = 900$

**B**  $3(2^3 + 1) - \frac{4}{5}$

**D**



2. Look at the following two equations.

$4(w) = 16$       and       $8 + w = 12$

What is the value of  $w$ ?

**A**  $w = 20$

**B**  $w = 4$

**C**  $w = 28$

**D**  $w = 4$  and  $w = 28$

# Pre-Test

3. This set of equations represents a pattern.

$$1(1) = 1$$

$$2(1) = 2$$

$$3(1) = 3$$

$$4(1) = 4$$

Which of the following is a generalization of the pattern using a variable?

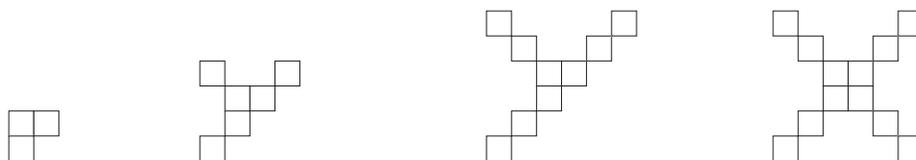
**A**  $n + 1 = n$

**C**  $n(1) = 1$

**B**  $n + 0 = n$

**D**  $n(1) = n$

4. Look at the geometric pattern and table.



Stage	Number of Blocks
1	3
2	6
3	9
4	12

Looking at the pattern in the tile design, which of the following is the correct generalization?

**A**  $3n$

**B**  $n + 3$

**C**  $3n + 3$

**D**  $n$

# Pre-Test

5. Look at the table.

Term	Thinking Process	Total
1	⊕ ⊕ ⊕	3
2	⊕ ⊕ ⊕ ⊕ ⊕	5
3	⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	7
4	⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	9

Which of the following is the correct generalization of the pattern in the table?

- A**  $n + 2$       **C**  $2n + 1$   
**B**  $3n + 1$       **D**  $2n$

6. Look at the table.

Term	Thinking Process	Total
1	⊕ ⊕ ⊕ ⊕	4
2	⊕ ⊕ ⊕ ⊕ ⊕	5
3	⊕ ⊕ ⊕ ⊕ ⊕ ⊕	6
4	⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	7

Which of the following generalizations correctly represents the pattern in the table?

- A**  $3n$       **C**  $n + 4$   
**B**  $n + 3$       **D**  $3n + 1$

**P**re-Test

7. Think about the following situation.

***The product of the first number and 4 is equal to the second number.***

Which of the following equations represents the situation?

**A**  $4 + x = y$

**B**  $4x = x$

**C**  $4x = y$

**D**  $\frac{x}{4} = y$

8. Think about the following situation.

***The sum of one number and three times the second number is 8.***

Which of the following equations represents the situation?

**A**  $3a + a = 8$

**B**  $3a + b = 8$

**C**  $a + b + 3 = 8$

**D**  $3(a + b) = 8$

# Pre-Test

9. Think about the following situation.

***Jeremiah started working at a restaurant. The total amount of money he makes ( $a$ ) will be based on the number of hours ( $r$ ) that he works at the restaurant.***

Relating to the situation, which of the following correctly represents the quantities that vary as independent and dependent?

- A**  $r$  is independent  
 $a$  is dependent
- B**  $r$  is independent  
 $a$  is independent
- C**  $r$  is dependent  
 $a$  is independent
- D**  $r$  is dependent  
 $a$  is dependent

10. Think about the following situation.

***The cost ( $c$ ) of a gym membership is \$75 per month ( $m$ ).***

Which equation represents the relationship in the situation?

- A**  $m = c + 75$
- B**  $c = m + 75$
- C**  $m = 75c$
- D**  $c = 75m$

# Pre-Test

Think about the following situation and use to answer questions 11 and 12.

***Miguel enjoys reading. Miguel’s book club charges a fee of \$3 plus \$5 per book purchased.***

**11.** If  $b$  = number of books and  $c$  = book club cost, which equation best represents the situation above?

**A**  $c = 5b$

**C**  $c = 5b + 3$

**B**  $c + 5 = 3b$

**D**  $c = 3b + 5$

**12.** Which table best represents the situation above?

**A**

Number of Books ( $b$ )	Book Club Cost ( $c$ )
1	\$5
2	\$10
3	\$15

**C**

Number of Books ( $b$ )	Book Club Cost ( $c$ )
1	\$3
2	\$8
3	\$13

**B**

Number of Books ( $b$ )	Book Club Cost ( $c$ )
1	\$5
2	\$8
3	\$11

**D**

Number of Books ( $b$ )	Book Club Cost ( $c$ )
1	\$8
2	\$13
3	\$18

# Pre-Test

Read the following situation and use to answer questions 13 and 14.

***Jessica is selling carnations to earn money for a trip. She already has \$25 and is selling carnations for \$1.50 each.***

**13.** Which equation best represents the situation above?

**A**  $m = 1.50c + 25$

**C**  $m = c + 25$

**B**  $m = 25c + 1.50$

**D**  $m = 1.50c$

**14.** Which table best represents the situation above?

**A**

Number of Carnations ( $c$ )	Total Money Earned ( $m$ )
1	\$1.50
2	\$3.00
3	\$4.50

**C**

Number of Carnations ( $c$ )	Total Money Earned ( $m$ )
1	\$25.00
2	\$26.50
3	\$28.00

**B**

Number of Carnations ( $c$ )	Total Money Earned ( $m$ )
1	\$26.50
2	\$28.00
3	\$29.50

**D**

Number of Carnations ( $c$ )	Total Money Earned ( $m$ )
1	\$26.00
2	\$27.00
3	\$28.00



# Answer Key

Item	Correct Answer	Standard	Lesson
<b>1.</b>	<b>C</b>	A.3(A)	1
<b>2.</b>	<b>B</b>	A.3(A)	2
<b>3.</b>	<b>D</b>	A.3(B)	3
<b>4.</b>	<b>A</b>	A.3(B)	4
<b>5.</b>	<b>C</b>	A.3(B)	5
<b>6.</b>	<b>B</b>	A.3(B)	6
<b>7.</b>	<b>C</b>	A.1(C)	7
<b>8.</b>	<b>B</b>	A.1(C)	8
<b>9.</b>	<b>A</b>	A.1(A)	9
<b>10.</b>	<b>D</b>	A.1(C)	10
<b>11.</b>	<b>C</b>	A.1(C)	11
<b>12.</b>	<b>D</b>	A.1(D)	11
<b>13.</b>	<b>A</b>	A.1(C)	12
<b>14.</b>	<b>B</b>	A.1(D)	12