# **Basic Properties of Multiplication**

### A. Choose the correct answer:

- 1. Which of the following shows the Commutative Property of multiplication?
  - a)  $4 \times (3 \times 2) = (4 \times 3) \times 2$
  - b)  $5 \times 1 = 5$
  - c)  $6 \times 3 = 3 \times 6$
  - d)  $8 \times 0 = 0$
- 2. The Identity Property of multiplication states that
  - a) Any number multiplied by 0 is 0
  - b) Any number multiplied by 1 remains the same
  - c) Numbers can be multiplied in any order
  - d) Grouping of numbers does not matter
- 3. Which is the Zero Property of multiplication?
  - a)  $1 \times 5 = 5$
  - b)  $5 \times 5 = 25$
  - c)  $0 \times 7 = 0$
  - d)  $7 \times 1 = 7$

### B. Fill in the Blanks

- 1. The product of any number and 0 is always \_\_\_\_\_
- 2. According to the Commutative Property,  $9 \times 6 = \times 9$
- 3.  $1 \times 7 = 7$  shows the \_\_\_\_\_ property of multiplication
- 4.  $(2 \times 3) \times 4 = 2 \times (3 \times 4)$  shows the \_\_\_\_\_ property
- 5.  $10 \times 0 =$  \_\_\_\_\_ shows the \_\_\_\_ property

# **C.** Different Type Questions

- 1. Use the Commutative Property to solve and verify:  $4 \times 9 = 9 \times 4$
- 2. Show with numbers how multiplication is different from addition using the Identity Property
- 3. Write any two number sentences that show the Zero Property of multiplication
- 4. Use the Associative Property to find the product:  $(2 \times 5) \times 3$  and  $2 \times (5 \times 3)$
- 5. Solve:  $7 \times 1 \times 8$  and explain which property you used to simplify it

# Mark each sentence with a True ( ✓ ) or False (X): The Commutative Property says that changing the order of numbers changes the product 0 × 123 = 0 The product of a number and 1 is always the number itself Associative Property allows you to group numbers differently without changing the answer 5 × 2 and 2 × 5 show the Identity Property

## **E.** Miscellaneous Questions

- 1. Write a multiplication fact using the number 6 and apply the Commutative Property
- 2. Create a short word problem that uses the Zero Property
- 3. List the three main properties of multiplication and give an example for each
- 4. Circle the property shown:  $(3 \times 2) \times 4 = 3 \times (2 \times 4)$
- 5. Use a real-life example to show that multiplying by 1 doesn't change the value