



# Multiplication Properties

Grade 5 Multiplication Worksheet

Date: \_\_\_\_\_

Name: \_\_\_\_\_

## LET'S MAKE LEARNING FUN

1. Using distributive property, find the product of the following.

- a.  $32 \times 85$
- b.  $31 \times 316$
- c.  $72 \times 4$
- d.  $17 \times 65$

**Answer:**

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_

2. The price of 12 cupcakes is \$3. Which of these is the price of 12 dozens of cupcakes?

- a. \$45
- b. \$24
- c. \$144
- d. \$36

3. If Julie will receive around 7 eggs from every house, and there are 5 houses in a block, how many eggs will he receive from each block?

**Answer:**

4. Which is the missing number?

$$85 \times 50 = (50 \times \underline{\hspace{2cm}}) + (50 \times 35)$$

- a. 20
- b. 30
- c. 50
- d. 40

5. Explain how you can use distributive property to find the square of 56.

**Solution:**

6. Give a numeric expression that shows the following properties of multiplication.

- a. Zero Property
- b. Identity Property
- c. Associative Property
- d. Distributive Property
- e. Commutative Property

**Answer:**

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

7. Use the distributive property to find the missing variable.

- a.  $13 \times 10 = (10 \times 10) + (m \times 10)$
- b.  $8 \times 75 = (8 + 50) + (8 + r)$
- c.  $15 \times 55 = (10 \times m) + (5 \times 55)$
- d.  $150 \times 30 = (100 \times 30) + (m \times 30)$
- e.  $74 \times 200 = (m \times 200) + (4 \times 200)$

## Multiplication Properties

Grade 5 Multiplication Answer Sheet

1. Using distributive property, find the product of the following.

- a.  $32 \times 85$
- b.  $31 \times 316$
- c.  $72 \times 4$
- d.  $17 \times 65$

**Answer:**

- a. 2,720
- b. 9,796
- c. 288
- d. 1,105

2. The price of 12 cupcakes is \$3. Which of these is the price of 12 dozens of cupcakes?

**Answer:**

- d. \$36

3. If Julie will receive around 7 eggs from every house, and there are 5 houses in a block, how many eggs will he receive from each block?

**Answer:**

- 35 eggs

4. Which is the missing number?

$$85 \times 50 = (50 \times \underline{\quad\quad\quad}) + (50 \times 35)$$

**Answer:**

- d. 50

5. Explain how you can use distributive property to find the square of 85.

**Answer:**

(**Hint:** The square of a number is the number multiplied by the same number.)

$$85 \times 85 = 85 \times (100 - 15) = 8,500 - 1,275 = 7,225$$

6. Give a numeric expression that shows the following properties of multiplication.

- Zero Property
- Identity Property
- Associative Property
- Distributive Property
- Commutative Property

**Answer:**

- $5 \times 0 = 5$
- $7,250 \times 1 = 7,250$
- $(7 \times 2) \times 5 = 7 \times (2 \times 5)$
- $7 \times 25 = 7 \times (20 + 5) = 7 \times 20 + 7 \times 5$
- $7 \times 5 = 5 \times 7$

7. Use the distributive property to find the missing variable.

a.  $13 \times 10 = (10 \times 10) + (m \times 10)$

**Answer:**

$$m = 3$$

b.  $8 \times 75 = (8 \times 50) + (8 \times m)$

**Answer:**

$$m = 25$$

c.  $15 \times 55 = (10 \times m) + (5 \times 55)$

**Answer:**

$$m = 55$$

d.  $150 \times 30 = (100 \times 30) + (m \times 30)$

**Answer:**

$$m = 50$$

e.  $74 \times 200 = (m \times 200) + (4 \times 200)$

**Answer:**

$$m = 70$$