Multiply By 4 Worksheet

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Part 1: Building a Foundation

What is the product of 4 × 5?

Hint: Think about the multiplication table for 4.

- ◯ A) 9
- ◯ B) 20
- ◯ C) 15
- ◯ D) 25

Which of the following are correct products of multiplying by 4?

Hint: Check each multiplication carefully.

- ☐ A) 4 × 3 = 12
- ☐ B) 4 × 6 = 28
- ☐ C) 4 × 2 = 8
- ☐ D) 4 × 7 = 28

Explain in your own words what it means to multiply a number by 4.

Hint: Think about repeated addition.

List the products of 4 multiplied by 1, 2, and 3.

Hint: Calculate each product separately.

1. 4 × 1

2. 4 × 2

3. 4 × 3

Part 2: Comprehension and Interpretation

Which property of multiplication is demonstrated by the equation 4 × 3 = 3 × 4?

Hint: Think about how the order of numbers affects the product.

- ◯ A) Associative Property
- ◯ B) Distributative Property
- ◯ C) Commutative Property
- ◯ D) Identity Property

Identify the correct applications of the distributative property involving multiplication by 4.

Hint: Look for equations that break down multiplication into parts.

- ☐ A) 4 × (2 + 3) = (4 × 2) + (4 × 3)
- ☐ B) 4 × (5 + 1) = (4 × 5) + (4 × 1)
- ☐ C) 4 × (3 + 4) = (4 × 3) + (4 × 4)
- ☐ D) 4 × (6 + 2) = (4 × 6) + (4 × 2)

Describe how you can use an array to visually represent 4 × 3.

Hint: Think about how to arrange objects in rows and columns.

Part 3: Application and Analysis

If a car travels 4 miles every hour, how many miles will it travel in 6 hours?

Hint: Multiply the distance traveled in one hour by the number of hours.

- ◯ A) 20 miles
- ◯ B) 24 miles
- ◯ C) 18 miles
- ◯ D) 28 miles

Which of the following scenarios correctly apply the concept of multiplying by 4?

Hint: Think about situations where you can group items in fours.

- ☐ A) Calculating the total number of legs on 4 dogs.
- ☐ B) Determining the number of wheels on 4 bicycles.
- ☐ C) Finding the total number of apples in 4 baskets, each containing 3 apples.
- ☐ D) Counting the number of days in 4 weeks.

A farmer has 4 fields, each with 5 rows of crops. How many rows of crops are there in total? Show your calculation.

Hint: Think about how to calculate the total number of rows.

Which equation correctly shows the breakdown of 4 × 9 using the distributative property?

Hint: Look for an equation that splits 9 into two parts.

- ◯ A) 4 × 9 = (4 × 5) + (4 × 4)
- ◯ B) 4 × 9 = (4 × 3) + (4 × 6)
- ◯ C) 4 × 9 = (4 × 8) + (4 × 1)
- ◯ D) 4 × 9 = (4 × 7) + (4 × 2)

Part 4: Evaluation and Creation

Evaluate the following methods and select those that correctly simplify the calculation of 4 × 15.

Hint: Look for equations that break down 15 into parts.

- ☐ A) 4 × (10 + 5)
- ☐ B) 4 × (7 + 8)
- ☐ C) 4 × (12 + 3)
- ☐ D) 4 × (9 + 6)

Create a real-world problem that involves multiplying by 4, and solve it. Explain your reasoning and steps.

Hint: Think about a scenario where you can group items in fours.