Multiplication Division Worksheets Questions and Answers PDF

Multiplication Division Worksheets Questions And Answers PDF

Disclaimer: The multiplication division worksheets questions and answers pdf was generated with the help of StudyBlaze AI. Please be aware that AI can make mistakes. Please consult your teacher if you're unsure about your solution or think there might have been a mistake. Or reach out directly to the StudyBlaze team at max@studyblaze.io.

Part 1: Building a Foundation

What is the product of 7 and 8?

Hint: Think about the multiplication table.

- ◯ 54
- ◯ **56** ✓
- ◯ 58
- ◯ 60

> The product of 7 and 8 is 56.

Which of the following are properties of multiplication?

Hint: Consider the different ways multiplication can be expressed.

- ☐ **Associative Property** ✓
- ☐ **Distributative Property** ✓
- ☐ **Communtative Property** ✓
- ☐ Subtractive Property

> The properties of multiplication include Associative, Distributative, and Commutative properties.

Explain the Zero Property of multiplication and provide an example.

Hint: Think about what happens when you multiply by zero.

The Zero Property states that any number multiplied by zero equals zero. For example, 5 × 0 = 0.

List the terms used in a division operation.

Hint: Think about the components of a division equation.

1. Term 1:

Dividend

2. Term 2:

Divisor

3. Term 3:

Quotient

4. Term 4:

Remainder

The terms used in a division operation are dividend, divisor, quotient, and remainder.

What is the result of dividing any number by 1?

Hint: Consider what happens to a number when it is divided by itself.

- ◯ 0
- ◯ **The number itself ✓**
- ◯ 1
- ◯ Undefined

> Dividing any number by 1 results in the number itself.

Part 2: Understanding and Application

If 9 × 5 = 45, what is 45 ÷ 9?

Hint: Think about the relationship between multiplication and division.

- ◯ 4
- ◯ **5 ✓**
- ◯ 6
- ◯ 9

> 45 ÷ 9 equals 5.

Which of the following statements are true about division?

Hint: Consider the properties and rules of division.

- ☐ **Division is the inverse of multiplication. ✓**
- ☐ **Division by zero is undefined. ✓**
- ☐ Division always results in a whole number.
- ☐ **Division can be used to find equal groups. ✓**

> True statements about division include that it is the inverse of multiplication and division by zero is undefined.

Describe how you can use multiplication to check the result of a division problem.

Hint: Think about the relationship between multiplication and division.

You can multiply the quotient by the divisor to check if it equals the dividend.

If a rectangle has a length of 8 units and a width of 3 units, what is its area?

Hint: Use the formula for the area of a rectangle.

- ◯ 11 square units
- ◯ **24 square units ✓**
- ◯ 16 square units
- ◯ 32 square units

The area of the rectangle is 24 square units.

You have 36 apples and want to divide them equally into baskets. Which of the following are possible numbers of apples per basket?

Hint: Think about the factors of 36.

- ☐ **3 ✓**
- ☐ **4 ✓**
- ☐ 5
- ☐ **6 ✓**

Possible numbers of apples per basket include 3, 4, and 6.

A group of 5 friends wants to share 20 candies equally. How many candies does each friend get? Show your calculation.

Hint: Think about how to divide 20 by 5.

Each friend gets 4 candies, calculated by 20 ÷ 5 = 4.

Part 3: Analysis, Evaluation, and Creation

Which of the following expressions demonstrates the Distributative Property?

Hint: Look for the expression that shows multiplication over addition.

- ◯ **4 × (2 + 3) = (4 × 2) + (4 × 3) ✓**
- ◯ 4 + 2 = 2 + 4
- ◯ (4 × 2) × 3 = 4 × (2 × 3)
- ◯ 4 × 0 = 0

The expression 4 × (2 + 3) = (4 × 2) + (4 × 3) demonstrates the Distributative Property.

Analyze the following division problems and identify which have a remainder:

Hint: Consider the results of each division.

- ☐ **15 ÷ 4 ✓**
- ☐ 20 ÷ 5
- ☐ **23 ÷ 6 ✓**
- ☐ 18 ÷ 3

The division problems 15 ÷ 4 and 23 ÷ 6 have a remainder.

Explain how the Commutative Property of multiplication can simplify calculations in a real-world scenario.

Hint: Think about how changing the order of factors affects the product.

The Commutative Property allows you to rearrange factors to make calculations easier, such as multiplying 2 × 3 or 3 × 2.

Which strategy would be most effective for estimating the product of 47 and 6?

Hint: Consider rounding numbers for easier calculations.

- ◯ **Round both numbers to the nearest ten and multiply. ✓**
- ◯ Use a calculator.
- ◯ Add 47 six times.
- ◯ Divide 47 by 6 and multiply by 36.

Rounding both numbers to the nearest ten and multiplying is the most effective strategy for estimation.

Evaluate the following scenarios and determine which demonstrate effective use of division:

Hint: Think about practical applications of division.

- ☐ **Splitting a bill evenly among friends. ✓**
- ☐ Determining the number of weeks in a year.
- ☐ Calculating the area of a square.
- ☐ **Allocating resources equally in a project. ✓**

Effective uses of division include splitting a bill evenly among friends and allocating resources equally in a project.

Create a real-world problem that involves both multiplication and division, and provide a solution to your problem.

Hint: Think about a scenario that requires both operations.

An example could be: If a box contains 12 chocolates and you have 4 boxes, how many chocolates do you have in total? (12 × 4 = 48). If you share them equally among 6 friends, each gets 8 chocolates (48 ÷ 6 = 8).

Propose two different methods to solve the multiplication problem 12 × 15.

Hint: Think about different strategies for multiplication.

1. Method 1:

Standard algorithm (12 × 15 = 180)

2. Method 2:

Break down (12 × 10 + 12 × 5 = 120 + 60 = 180)

One method is to use the standard algorithm, and another is to break it down into smaller parts (12 × 10 + 12 × 5).