Addition And Subtraction Of Fractions Worksheets Questions and Answers PDF

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Part 1: Building a Foundation

What is the numerator in the fraction 3/4?

Hint: Identify the top number in the fraction.

- ◯ **3 ✓**
- ◯ 4
- ◯ 7
- ◯ 1

> The numerator is the number above the fraction line.

Which of the following are proper fractions?

Hint: A proper fraction has a numerator smaller than its denominator.

- ☐ **5/6 ✓**
- ☐ 7/3
- ☐ **2/5 ✓**
- ☐ 9/9

> Proper fractions have numerators less than denominators.

Define what a mixed number is and provide an example.

Hint: A mixed number combines a whole number and a fraction.

A mixed number consists of a whole part and a fractional part, such as 1 1/2.

Part 2: Comprehension and Application

What is the least common denominator of 1/4 and 1/6?

Hint: Find the smallest number that both denominators can divide into.

- ◯ **12 ✓**
- ◯ 24
- ◯ 6
- ◯ 8

The least common denominator is the smallest multiple common to both denominators.

When adding fractions with unlike denominators, which steps are necessary?

Hint: Consider the process of finding a common denominator.

- ☐ **Find a common denominator ✓**
- ☐ Add the numerators directly
- ☐ **Simplify the result ✓**
- ☐ **Convert to improper fractions ✓**

Finding a common denominator is essential for adding fractions with different denominators.

Explain why it is necessary to find a common denominator when adding or subtractting fractions.

Hint: Think about how fractions represent parts of a whole.

A common denominator allows fractions to be combined accurately as they represent parts of the same whole.

What is the result of adding 2/3 and 1/6?

Hint: Make sure to find a common denominator before adding.

- ◯ 3/9
- ◯ **5/6 ✓**
- ◯ 7/6
- ◯ 1/2

The result is found by converting to a common denominator and then adding the numerators.

Solve the following problem: Add 1 1/4 and 2 2/3. Show your work and provide the answer as a mixed number.

Hint: Convert mixed numbers to improper fractions for easier addition.

Convert to improper fractions, find a common denominator, add, and convert back to a mixed number.

Part 3: Analysis, Evaluation, and Creation

If you have the fractions 3/5 and 4/10, which statement is true?

Hint: Compare the two fractions by finding a common denominator or converting them.

- ◯ **3/5 is greater than 4/10 ✓**
- ◯ 3/5 is less than 4/10
- ◯ 3/5 is equal to 4/10
- ◯ Can not be determined

> You can determine the relationship by comparing the fractions directly or converting them.

Analyze the following problem: Why might someone choose to convert mixed numbers to improper fractions before adding them?

Hint: Consider the ease of calculation when adding fractions.

- ☐ **It simplifies the calculation ✓**
- ☐ **It makes it easier to find a common denominator ✓**
- ☐ It is required by mathematical rules
- ☐ It allows for direct addition of numerators

> Converting to improper fractions simplifies the addition process.

Break down the process of subtractting 7/12 from 5/6. Explain each step and why it is necessary.

Hint: Think about finding a common denominator and subtract the numerators.

> **To subtract, find a common denominator, convert fractions, and then subtract the numerators.**

Which of the following scenarios correctly apply the concept of fraction addition in real life?

Hint: Think about situations where parts are combined.

- ☐ **Combining 1/2 cup of sugar with 1/4 cup of sugar in a recipe ✓**
- ☐ **Adding 3/4 of a mile to 1/2 of a mile for a total distance ✓**
- ☐ Subtractting 1/3 of a pizza from 1/2 of a pizza
- ☐ Doubling a recipe that requires 2/3 cup of flour

> Real-life scenarios often involve combining parts, which can be represented as fractions.

Create a real-world problem involving the addition of fractions. Provide a detailed solution to your problem.

Hint: Think about a scenario where you combine parts.

> **A real-world problem should involve combining fractions, and the solution should show the steps taken.**