

Introduction

This worksheet is designed to assess students' understanding of adding and subtracting ordinary fractions. It consists of 15 questions and activities that cater to different learning styles and abilities.

Section 1: Multiple Choice Questions

Choose the correct answer for each question.

1. What is the result of adding $\frac{1}{4}$ and $\frac{1}{4}$?
 - A) $\frac{1}{2}$
 - B) $\frac{1}{8}$
 - C) $\frac{2}{4}$
 - D) $\frac{3}{4}$
2. What is the result of subtracting $\frac{1}{6}$ from $\frac{2}{6}$?
 - A) $\frac{1}{6}$
 - B) $\frac{1}{12}$
 - C) $\frac{1}{3}$
 - D) $\frac{2}{6}$

Section 2: Short Answer Questions

Show your work and explain your answer for each question.

1. Add $\frac{1}{8}$ and $\frac{1}{8}$.

2. Subtract $\frac{1}{4}$ from $\frac{3}{4}$.

Section 3: Word Problems

Read each problem carefully and provide a solution.

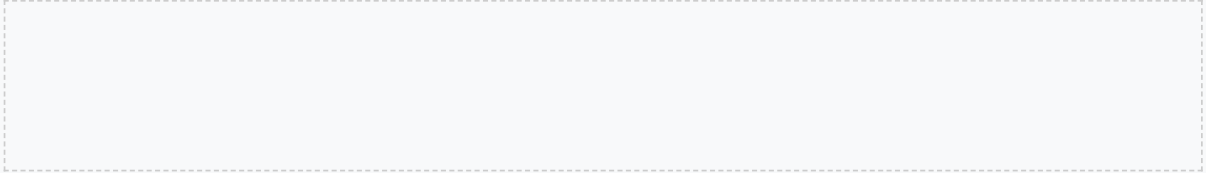
1. Tom has $\frac{1}{4}$ of a pizza and his friend gives him $\frac{1}{4}$ of another pizza. What fraction of a pizza does Tom have now?

2. A recipe calls for $\frac{3}{4}$ cup of flour. If you only have $\frac{1}{4}$ cup of flour, how much more flour do you need?


Section 4: Diagrams

Use a diagram to show the result of each calculation.

1. Add $\frac{1}{4}$ and $\frac{1}{4}$.



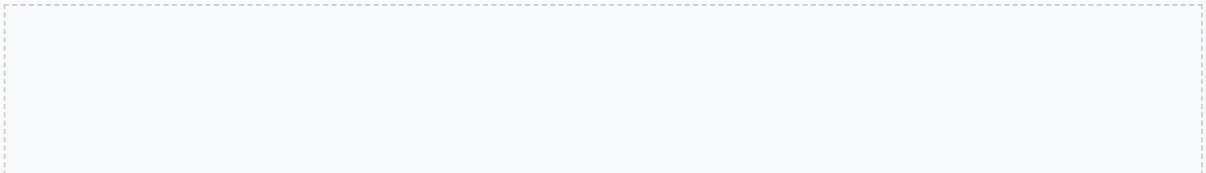
2. Subtract $\frac{1}{4}$ from $\frac{3}{4}$.



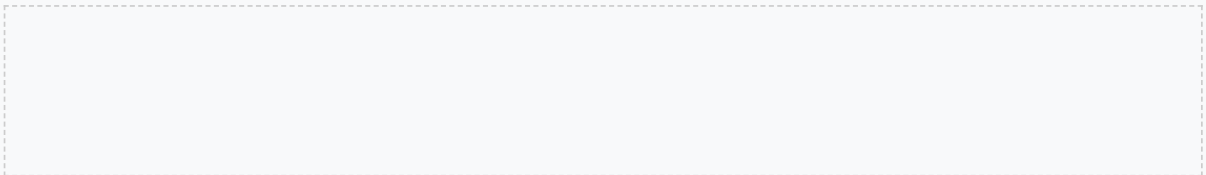
Section 5: Open-Ended Questions

Provide a detailed explanation for each question.

1. Explain the rule for adding fractions with different denominators. Provide an example to support your answer.



2. Identify the mistake in the following calculation: $\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$. Explain the correct solution.



Section 6: Fill-in-the-Blank

Fill in the blank with the correct answer.

1. When adding $\frac{1}{8}$ and $\frac{1}{8}$, the result is _____.

2. When subtracting $\frac{1}{6}$ from $\frac{2}{6}$, the result is _____.

Section 7: Error Analysis

Identify the mistake in each calculation and explain the correct solution.

1. $\frac{1}{4} + \frac{1}{4} = \frac{2}{8}$

2. $\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$

Section 8: Conclusion

Review your answers and make sure you have shown your work and explained your reasoning for each question.

Answer Key

Check your answers with the answer key.

1. 1. A) $\frac{1}{2}$
2. 2. A) $\frac{1}{6}$
3. 3. $\frac{2}{8}$ or $\frac{1}{4}$
4. 4. $\frac{2}{4}$ or $\frac{1}{2}$
5. 5. $\frac{2}{4}$ or $\frac{1}{2}$
6. 6. A diagram showing $\frac{2}{4}$ or $\frac{1}{2}$
7. The rule for adding fractions with different denominators is to find the least common multiple (LCM) of the denominators and convert both fractions to have the LCM as the denominator. Then, add the numerators and keep the LCM as the denominator.
8. $\frac{2}{4}$ or $\frac{1}{2}$ cup
9. The mistake is that the denominators are not the same. The correct solution is to find the LCM of 2 and 4, which is 4. Then, convert $\frac{1}{2}$ to $\frac{2}{4}$ and add: $\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$.

