

Introduction

This worksheet is designed to assess students' understanding of fractions and decimals, specifically their ability to understand equivalent fractions, add and subtract fractions with like and unlike denominators, convert between fractions and decimals, apply fractions and decimals to real-world problems, and demonstrate proficiency in ordering and comparing fractions and decimals.

Section 1: Multiple Choice Questions

Choose the correct answer for each question.

1. What is the equivalent fraction of $\frac{1}{2}$ with a denominator of 6?
 1. A) $\frac{1}{6}$
 2. B) $\frac{2}{6}$
 3. C) $\frac{3}{6}$
 4. D) $\frac{4}{6}$
2. What is the sum of $\frac{1}{4}$ and $\frac{1}{6}$?
 1. A) $\frac{1}{10}$
 2. B) $\frac{2}{10}$
 3. C) $\frac{3}{10}$
 4. D) $\frac{5}{12}$
3. What is the decimal equivalent of $\frac{3}{4}$?
 1. A) 0.25
 2. B) 0.5
 3. C) 0.75
 4. D) 1.0
4. What is the difference between $\frac{2}{3}$ and $\frac{1}{4}$?
 1. A) $\frac{1}{12}$
 2. B) $\frac{2}{12}$
 3. C) $\frac{3}{12}$
 4. D) $\frac{5}{12}$
5. What is the equivalent fraction of $\frac{2}{4}$ with a denominator of 8?
 1. A) $\frac{1}{8}$
 2. B) $\frac{2}{8}$
 3. C) $\frac{3}{8}$
 4. D) $\frac{4}{8}$

Section 2: Short Answer Questions

Show your work and explain your answers.

1. A recipe calls for $\frac{3}{4}$ cup of sugar. If you only have a $\frac{1}{4}$ cup measuring cup, how many times will you need to fill the measuring cup to get the required amount of sugar?

2. Compare the fractions $\frac{2}{3}$ and $\frac{3}{4}$. Which one is greater?

3. A bookshelf has 5 shelves, and each shelf can hold $\frac{3}{4}$ of a meter of books. If the bookshelf is currently empty, how many meters of books can be placed on it in total?

Section 3: Problem-Solving Questions

Show your work and explain your answers.

1. A water tank can hold $\frac{3}{4}$ of a liter of water. If $\frac{1}{4}$ of the tank is already filled, how much more water can be added to the tank?

2. A bakery sells $\frac{2}{3}$ of a cake for \$12. If you want to buy $\frac{1}{2}$ of the cake, how much will you pay?

Section 4: Open-Ended Question

Describe a real-world situation where you would need to use fractions and decimals. Explain how you would solve the problem and provide a clear and concise answer.

Answer Key

Section 1:

1. B) $\frac{3}{6}$
2. D) $\frac{5}{12}$
3. C) 0.75
4. C) $\frac{5}{12}$
5. C) $\frac{4}{8}$

Section 2:

1. 3 times
2. $\frac{3}{4}$ is greater
3. 3.75 meters

Section 3:

1. $\frac{1}{2}$ liter
2. \$8

Section 4: Answers will vary, but should include a real-world situation, a clear explanation of how to solve the problem, and a concise answer.

Marking Guide

Section 1: 1 mark each

Section 2: 2-3 marks each

Section 3: 4-5 marks each

Section 4: 5-6 marks

Conclusion

This worksheet is designed to assess students' understanding of fractions and decimals. The questions and tasks are designed to evaluate students' knowledge, understanding, and application of fractions and decimals, as well as their problem-solving skills and ability to think critically.

