Introduction to Basic Fractions and Equivalent Ratios

Introduction to Fractions

Welcome to the world of fractions! Fractions are a way of showing part of a whole. In this worksheet, we will learn about basic fractions and equivalent ratios.

Fractions are used to represent a part of a whole. They consist of a numerator (the top number) and a denominator (the bottom number). For example, 1/2 is a fraction that shows one part out of two equal parts.

What is a Fraction?

Match the following fractions to their equivalent ratios:

1. 1/2 = _____
2. 1/4 = _____
3. 3/4 = _____

Equivalent Ratios

Equivalent ratios are fractions that have the same value, but with different numbers. For example, 1/2 and 2/4 are equivalent ratios.

Simplify the following fractions:

1. 4/8 = _____
2. 6/12 = _____
3. 9/18 = _____

Real-World Applications

Fractions are used in real-world applications such as measuring ingredients for a recipe, telling time, and understanding music rhythms.

Solve the following real-world problems:

1. A recipe calls for 3/4 cup of flour. If you want to make half the recipe, how much flour will you need?
2. A clock shows 3/4 of the hour. What time is it?

Adding and Subtracting Fractions

To add or subtract fractions, we need to have the same denominator.

Add or subtract the following fractions:

1. 1/4 + 1/4 = _____
2. 3/4 - 1/4 = _____

Multiplying and Dividing Fractions

To multiply fractions, we multiply the numerators and denominators. To divide fractions, we invert the second fraction and multiply.

Multiply or divide the following fractions:

1. 1/2 x 3/4 = _____
2. 2/3 ÷ 1/2 = _____

Word Problems

Solve the following word problems:

1. A bookshelf has 5 shelves, and 3 of them are filled with books. What fraction of the bookshelf is filled with books?
2. A pizza has 16 slices, and 4 of them are eaten. What fraction of the pizza is left?

Review

Review what you have learned about fractions and equivalent ratios.

Match the following fractions to their equivalent ratios:

1. 1/2 = _____
2. 1/4 = _____
3. 3/4 = _____

Challenge

Challenge yourself to create your own fraction problems and solve them.

Create and solve your own fraction problems.

Conclusion

Congratulations! You have completed the introduction to basic fractions and equivalent ratios.

Remember to practice and apply what you have learned to real-world problems.