

Student Name: _____

Class: _____

Due Date: _____

Introduction and Warm-Up

Fractions and decimals are used to represent part of a whole. Can you think of examples where fractions and decimals are used in real life?

Match the following fractions to their equivalent decimals:

1. $\frac{1}{2}$ = _____

2. $\frac{1}{4}$ = _____

3. $\frac{3}{4}$ = _____

Understanding Fractions

A fraction is a way of representing part of a whole. It consists of a numerator (top number) and a denominator (bottom number).

Example: $\frac{1}{2}$ represents one equal part out of two.

Write the following fractions in simplest form:

1. $\frac{2}{4} = \underline{\hspace{2cm}}$

2. $\frac{6}{8} = \underline{\hspace{2cm}}$

3. $\frac{3}{6} = \underline{\hspace{2cm}}$

Understanding Decimals

A decimal is a way of representing a fraction as a numerical value.

Example: 0.5 is equal to $\frac{1}{2}$.

Convert the following decimals to fractions:

1. $0.25 = \underline{\hspace{2cm}}$

2. $0.75 = \underline{\hspace{2cm}}$

3. $0.5 = \underline{\hspace{2cm}}$

Equivalent Ratios

Equivalent ratios are fractions that have the same value, but with different numerators and denominators.

Example: $\frac{1}{2}$ is equivalent to $\frac{2}{4}$.

Find the equivalent ratios for the following fractions:

1. $\frac{1}{2} = \underline{\hspace{2cm}}$

2. $\frac{1}{4} = \underline{\hspace{2cm}}$

3. $\frac{3}{4} = \underline{\hspace{2cm}}$

Converting Between Fractions and Decimals

Convert the following fractions to decimals:

1. $\frac{1}{2} =$ _____

2. $\frac{1}{4} =$ _____

3. $\frac{3}{4} =$ _____

Convert the following decimals to fractions:

1. $0.25 =$ _____

2. $0.75 =$ _____

3. $0.5 =$ _____

Real-World Applications

Scenario: A recipe calls for $\frac{3}{4}$ cup of sugar. If you want to make half the recipe, how much sugar will you need?

Solve the following real-world problems:

1. A book costs \$15.99. If you pay with a \$20 bill, how much change will you get?
2. A water tank can hold $\frac{3}{4}$ of a gallon of water. If $\frac{1}{2}$ of the tank is already filled, how much more water can you add?

Word Problems

Read each problem carefully and solve:

1. A group of friends want to share some candy equally. If they have $\frac{3}{4}$ of a bag of candy and there are 4 friends, how much candy will each friend get?
2. A bike ride is $\frac{3}{4}$ of a mile long. If you ride $\frac{1}{2}$ of the distance, how much farther do you have to ride?

Mixed Numbers and Improper Fractions

A mixed number is a combination of a whole number and a fraction.

Example: $2 \frac{1}{2}$ is a mixed number.

Convert the following mixed numbers to improper fractions:

1. $2 \frac{1}{2} = \underline{\hspace{2cm}}$

2. $1 \frac{3}{4} = \underline{\hspace{2cm}}$

3. $3 \frac{1}{2} = \underline{\hspace{2cm}}$

Review and Practice

Review: Fractions and decimals are used to represent part of a whole.

Convert the following fractions to decimals:

1. $1/2 =$ _____

2. $1/4 =$ _____

3. $3/4 =$ _____

Convert the following decimals to fractions:

1. $0.25 =$ _____

2. $0.75 =$ _____

3. $0.5 =$ _____

Challenge and Conclusion

Challenge: Create your own real-world scenario that involves fractions and decimals.

Conclusion: Fractions and decimals are essential concepts in mathematics. Remember to practice and apply your knowledge to solve real-world problems!