

Fractions Into Decimals Worksheet Answer Key PDF

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Part 1: Building a Foundation

What is a fraction?

undefined. A) A whole number

undefined. B) A part of a whole expressed as $\frac{a}{b}$ ✓

undefined. C) A decimal number

undefined. D) A percentage

A fraction is a part of a whole expressed as $\frac{a}{b}$.

Which of the following are true about decimals?

undefined. A) They are always less than 1

undefined. B) They can represent whole numbers ✓

undefined. C) They are expressed in a base-10 system ✓

undefined. D) They are always greater than 1

Decimals can represent whole numbers and are expressed in a base-10 system.

Explain the relationship between fractions and decimals.

Fractions and decimals are two ways to represent parts of a whole; fractions can be converted to decimals and vice versa.

List two common fractions and their decimal equivalents.

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

0.5

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

0.25

Common fractions include $\frac{1}{2}$ (0.5) and $\frac{1}{4}$ (0.25).

What method is commonly used to convert fractions to decimals?

undefined. A) Multiplication

undefined. B) Long division ✓

undefined. C) Addition

undefined. D) Subtraction

Long division is the common method used to convert fractions to decimals.

Part 2: comprehension and Application

Which of the following is a repeating decimal?

undefined. A) 0.5

undefined. B) 0.333... ✓

undefined. C) 0.25

undefined. D) 1.75

0.333... is a repeating decimal.

Which statements are true about terminating decimals?

undefined. A) They end after a finite number of digits ✓

undefined. B) They repeat indefinitely

undefined. C) They can be converted back to fractions ✓

undefined. D) They are always greater than 1

Terminating decimals end after a finite number of digits and can be converted back to fractions.

Describe how you can identify if a fraction will result in a terminating or repeating decimal.

A fraction will result in a terminating decimal if the denominator has only the prime factors 2 and/or 5.

Convert the following fractions to decimals: $\frac{1}{8}$, $\frac{3}{5}$.

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

0.125

2. $\frac{3}{5}$

0.6

$\frac{1}{8}$ converts to 0.125 and $\frac{3}{5}$ converts to 0.6.

Explain the steps you would take to convert the fraction $\frac{7}{9}$ into a decimal using long division.

To convert $\frac{7}{9}$ to a decimal, divide 7 by 9 using long division, which will show that it repeats.

If you convert $\frac{1}{4}$ into a decimal, what is the result?

undefined. A) 0.4

undefined. B) 0.25 ✓

undefined. C) 0.75

undefined. D) 0.5

$\frac{1}{4}$ converts to 0.25.

Part 3: Analysis, Evaluation, and Creation

When analyzing the fraction $\frac{5}{6}$, which of the following are true about its decimal form?

undefined. A) It is a terminating decimal

undefined. B) It is a repeating decimal ✓

undefined. C) It is greater than 0.8 ✓

undefined. D) It is less than 0.9 ✓

$\frac{5}{6}$ is a repeating decimal, greater than 0.8 and less than 0.9.

Analyze the pattern you observe when converting fractions with denominators of 10, 100, and 1000 into decimals.

Fractions with denominators of 10, 100, and 1000 convert directly to decimals based on their place value.

Which fraction will result in a decimal that repeats?

undefined. A) $\frac{1}{2}$

undefined. B) $\frac{1}{3}$ ✓

undefined. C) $\frac{1}{4}$

undefined. D) $\frac{1}{5}$

$\frac{1}{3}$ results in a repeating decimal.

Evaluate the importance of understanding fraction to decimal conversions in real-world scenarios, such as financial calculations.

Understanding fraction to decimal conversions is crucial for accurate financial calculations and measurements in everyday life.

Create two real-world problems where converting fractions to decimals would be necessary, and solve them.

1. Problem 1: A recipe requires $\frac{3}{4}$ cup of sugar. How much is that in decimal?

0.75

2. Problem 2: A store is offering a 25% discount on a \$40 item. What is the discount in decimal?

0.25

Examples could include calculating discounts or converting measurements in recipes.

Which scenario best illustrates the use of decimals in everyday life?

undefined. A) Measuring the length of a table ✓

undefined. B) Counting the number of apples

undefined. C) Calculating the area of a square

undefined. D) Determining the time of day

Measuring the length of a table is a common scenario that illustrates the use of decimals.