

Decimal Place Value Worksheets Answer Key PDF

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Part 1: Building a Foundation

What is the place value of the digit 7 in the number 5.783?

undefined. Tenths

undefined. Hundredths ✓

undefined. Thousandths

undefined. Units

The digit 7 is in the hundredths place.

Which of the following numbers have a digit 5 in the tenths place? (Select all that apply)

undefined. 3.57 ✓

undefined. 5.23 ✓

undefined. 0.56

undefined. 7.85 ✓

The numbers 3.57, 5.23, and 7.85 have a digit 5 in the tenths place.

Explain the importance of the decimal point in determining the value of a decimal number.

The decimal point is crucial as it indicates the separation between whole numbers and fractions, affecting the value of each digit.

Identify the place value of the digit 4 in each of the following numbers:

1. 0.456

Hundredths

2. 4.789

Units

3. 12.34

Ten

In 0.456, 4 is in the hundredths place; in 4.789, it is in the units place; in 12.34, it is in the tens place.

Part 2: Understanding and Interpretation

How would you write the number 0.305 in words?

undefined. Three hundred five

undefined. Three hundred five thousandths ✓

undefined. Thirty-five hundredths

undefined. Three and five tenths

The number 0.305 is written as 'Three hundred five thousandths'.

Which statements are true about the number 2.049? (Select all that apply)

undefined. The digit 4 is in the hundredths place. ✓

undefined. The digit 9 is in the thousandths place. ✓

undefined. The number is greater than 2.5.

undefined. The number is less than 2.1. ✓

The digit 4 is in the hundredths place, and the digit 9 is in the thousandths place. The number is less than 2.1.

Describe how you would compare the numbers 0.67 and 0.607 to determine which is larger.

To compare 0.67 and 0.607, look at the tenths place first, then the hundredths place if needed.

Part 3: Application and Analysis

If you round the number 4.768 to the nearest hundredth, what is the result?

undefined. 4.76

undefined. 4.77 ✓

undefined. 4.78

undefined. 4.80

When rounding 4.768 to the nearest hundredth, the result is 4.77.

Which of the following operations will result in a decimal number? (Select all that apply)

undefined. $5 \div 2$ ✓

undefined. 7×0.1 ✓

undefined. $3 + 0.75$ ✓

undefined. $10 - 3$

The operations $5 \div 2$, 7×0.1 , and $3 + 0.75$ will result in decimal numbers.

Convert the fraction $\frac{3}{4}$ into a decimal and explain your process.

The fraction $\frac{3}{4}$ converts to 0.75 by dividing 3 by 4.

Which number line correctly represents the number 0.52?

undefined. A number line with 0.5 and 0.6, with 0.52 closer to 0.5 ✓

undefined. A number line with 0.5 and 0.6, with 0.52 exactly in the middle

undefined. A number line with 0.5 and 0.6, with 0.52 closer to 0.6

undefined. A number line with 0.5 and 0.6, with 0.52 at 0.6

The correct number line shows 0.52 closer to 0.5.

Break down the number 5.406 into its individual place values and explain the value of each digit.

In 5.406, 5 is in the units place, 4 is in the tenths place, 0 is in the hundredths place, and 6 is in the thousandths place.

Part 4: Evaluation and Creation

Which of the following numbers is closest to 0.5 when rounded to the nearest tenth?

undefined. 0.46

undefined. 0.49

undefined. 0.52

undefined. 0.55 ✓

The number 0.55 is closest to 0.5 when rounded to the nearest tenth.

Evaluate the following scenarios and determine which would result in a decimal number. (Select all that apply)

undefined. Dividing a pizza into 3 equal parts ✓

undefined. Multiplying a whole number by 0.5 ✓

undefined. Adding two whole numbers

undefined. Subtracting a smaller whole number from a larger whole number

Dividing a pizza into 3 equal parts and multiplying a whole number by 0.5 will result in decimal numbers.

Create a real-world problem that involves comparing two decimal numbers, and explain how you would solve it.

An example could be comparing prices of two items to determine which is cheaper.

Propose two different methods to convert the decimal 0.875 into a fraction, and explain each method briefly.

1. Method 1

Recognize that 0.875 is $875/1000$, which simplifies to $7/8$.

2. Method 2

Use long division to convert 0.875 into a fraction.

One method is to recognize that 0.875 is $875/1000$, which simplifies to $7/8$. Another method is to use long division to convert it.