

Decimal Place Value Worksheets

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Part 1: Building a Foundation

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

Hint: Consider the position of the digit in relation to the decimal point.

- Tenths
- Hundredths
- Thousandths
- Units

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

Hint: Look at the first digit to the right of the decimal point.

- 3.57
- 5.23
- 0.56
- 7.85

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

Hint: Consider how the decimal point separates whole numbers from fractional parts.

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

Hint: Look at the position of the digit 4 in each number.

1. 0.456

2. 4.789

3. 12.34

Part 2: Understanding and Interpretation

How would you write the number 0.305 in words?

Hint: Think about how to express decimal numbers in verbal form.

- Three hundred five
- Three hundred five thousandths
- Thirty-five hundredths
- Three and five tenths

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

Hint: Analyze the position of each digit in the number.

- The digit 4 is in the hundredths place.
- The digit 9 is in the thousandths place.
- The number is greater than 2.5.
- The number is less than 2.1.

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

Hint: Consider the place values of each digit in both numbers.

Part 3: Application and Analysis

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

Hint: Look at the digit in the thousandths place to decide how to round.

- 4.76
- 4.77
- 4.78
- 4.80

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

Hint: Consider the outcome of each operation.

- $5 \div 2$
- 7×0.1
- $3 + 0.75$
- $10 - 3$

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

Hint: Think about how to divide the numerator by the denominator.

Which number line correctly represents the number 0.52?

Hint: Visualize the placement of 0.52 between 0.5 and 0.6.

- A number line with 0.5 and 0.6, with 0.52 closer to 0.5
- A number line with 0.5 and 0.6, with 0.52 exactly in the middle
- A number line with 0.5 and 0.6, with 0.52 closer to 0.6
- A number line with 0.5 and 0.6, with 0.52 at 0.6

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

Hint: Consider the value of each digit based on its position.

Part 4: Evaluation and Creation

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

Hint: Look at the digit in the hundredths place to decide how to round.

- 0.46
- 0.49
- 0.52
- 0.55

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

Hint: Consider the outcome of each scenario.

- Dividing a pizza into 3 equal parts
- Multiplying a whole number by 0.5
- Adding two whole numbers
- Subtracting a smaller whole number from a larger whole number

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

Hint: Think about a scenario where decimals are used in everyday life.

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

Hint: Consider how to express the decimal as a fraction.

1. Method 1

2. Method 2