



## Rounding Whole Numbers

Rounding whole numbers is a method used to simplify numbers to make them easier to work with. When rounding, we change the number to the nearest ten, hundred, thousand, etc., based on the number we are rounding and the place value we are rounding to. The goal is to make the number simpler but still close to the original value.

### Rules for Rounding Whole Numbers

- If the digit to the right of the place value you are rounding to is 5 or greater, round the number up.
- If the digit to the right is less than 5, round the number down.
- For example, rounding to the nearest ten means looking at the digit in the ones place. If it's 5 or more, add 1 to the tens place. If it's less than 5, keep the tens place the same.

### Steps to Round Whole Numbers

- Identify the place value you want to round to (e.g., nearest ten, hundred, thousand).
- Look at the digit immediately to the right of that place.
- If this digit is 5 or more, increase the target place value by 1.
- If the digit is less than 5, keep the target place value the same and change all digits to the right to zero.

### Properties of Rounding

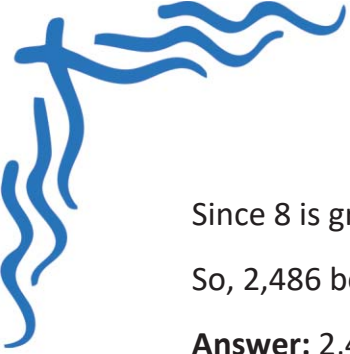
- Rounding makes numbers easier to estimate or compare.
- It helps to simplify calculations, especially when working with large numbers.
- Rounding does not change the overall size of the number drastically; it just simplifies it.

### Example 1

**Question:** Round 2,486 to the nearest hundred.

**Solution:**

The digit in the tens place is 8.



Since 8 is greater than 5, we round up.

So, 2,486 becomes 2,500.

**Answer:** 2,486 rounded to the nearest hundred is 2,500.

### **Example 2**

**Question:** Round 9,837 to the nearest thousand.

**Solution:**

The digit in the hundreds place is 8.

Since 8 is greater than 5, we round up.

So, 9,837 becomes 10,000.

**Answer:** 9,837 rounded to the nearest thousand is 10,000.

### **Summary Points**

- Rounding helps simplify large numbers for easier calculations.
- Use the place value you are rounding to and look at the digit right next to it.
- Rounding is helpful for estimating numbers and simplifying mental math.
- Remember the rules: 5 or more, round up; less than 5, round down.