

LESSON

1

NUMBER SENSE AND PROBLEM SOLVING

Compare and Order Numbers

Key Ideas

- When ordering numbers, compare the same place values between numbers.
- Round numbers to estimate answers or eliminate answer choices in multiple-choice questions.

Place Value

Numbers are part of your everyday life. Whether you're paying with cash, reading bus schedules, or changing television channels, you're using whole numbers.

The value of a number depends on the **place value** of its digits. On the place-value chart below, note that the value of a digit increases as you move to the left.

			1	4	7	9
			thousands	hundreds	tens	ones
			ten thousands	thousands	hundreds	tens
			hundred thousands	ten thousands	thousands	hundreds
			millions	hundred thousands	ten thousands	thousands

In the whole number shown on the chart, 1 has the greatest value. The number would be read as "one thousand four hundred seventy-nine."

Comparing and Ordering Values

To **order** numbers, you need to compare the value of their digits. Align the place values of the numbers you are comparing. Start at the left and compare the value of the first digit of each number.

Example 1: Place the numbers 342, 98, and 317 in order from least to greatest.

1. Compare the first digit in each number. Since 98 is a two-digit number, and the other numbers are three-digit numbers, 98 has the smallest value.
2. Next, compare the first digit of the remaining numbers. Since both numbers have the same digit (3) in the hundreds place, compare the digits in the tens place. Since 1 is less than 4, 317 is less than 342.

hundreds	tens	ones
3	4	2
3	1	7
9	8	

From least to greatest:
98, 317, 342

GED® TEST TIP

It's important to know the inequality symbols below.

- < means "is less than"
 ≤ means "is less than or equal to"
 > means "is greater than"
 ≥ means "is greater than or equal to"

Rounding Numbers

Place value is also essential to **rounding** numbers.

Example 2: Round 2451 to the nearest hundred.

2451

1. Locate the place value that you want to round to. Then look at the place value to the right. If the digit to the right is 5 or greater, round up. If the digit to the right is less than 5, don't change the number in the hundreds place.
2. Round up the digit in the hundreds place. Then change the digits to the right of the hundreds place to zeros.

The value to the right of the hundreds place is a 5. Round up.

2451 rounds up to 2500