Comparing Numbers

Comparing numbers means determining which number is greater, smaller, or equal when two or more numbers are given. This is done by looking at their place values from left to right, starting from the highest place value (thousands, millions, etc.).

How to Compare Numbers

- Compare the digits from left to right, starting with the highest place value (the leftmost digit).
- If the digits are different, the number with the larger digit is the greater number.
- If the digits are the same, move to the next place value and compare again.
- If all the digits are the same, the numbers are equal.

Properties of Comparing Numbers

- **Greater than (>):** If one number is larger than another, we use the symbol >.
- **Less than (<):** If one number is smaller than another, we use the symbol <.
- **Equal to (=):** If two numbers are exactly the same, we use the symbol =.

Example 1

Question: Compare 45,678 and 56,789.

Solution:

Step 1: Compare the first digit (thousands place).

In 45,678, the first digit is 4, and in 56,789, the first digit is 5.

Step 2: Since 5 > 4, 56,789 is greater than 45,678.

Answer: 45,678 < 56,789

Example 2

Question: Compare 6,432 and 6,423.

Solution:

Step 1: Compare the first digit (thousands place).

Both numbers have 6 in the thousands place.

Step 2: Compare the second digit (hundreds place).

Both numbers have 4 in the hundreds place.

Step 3: Compare the third digit (tens place).

Both numbers have 3 in the tens place.

Step 4: Compare the fourth digit (ones place).

In 6,432, the last digit is 2, and in 6,423, the last digit is 3.

Since 2 < 3, 6,432 is smaller than 6,423.

Answer: 6,432 < 6,423

Summary Points

- Comparing numbers involves looking at their digits from left to right, starting with the highest place value.
- Use the symbols >, <, and = to show the relationships between numbers.
- If digits are the same, move to the next place value until a difference is found.
- Comparing numbers helps in understanding their relative sizes and arranging them in order.