ORDERING NUMBERS

A COMPARE NUMBERS

> **Definition Comparing Numbers**
>
> **Comparing** is looking at two or more numbers to see which is greater (bigger), less (smaller), or if they are equal (the same amount).

> **Definition Comparison Symbols**
>
> We use special symbols to write down our comparisons:
>
> | Symbol | Meaning | Example |
> |:---:|:---:|:---:|
> | = | **is equal to** | $4 \ = \ 4$ |
> | > | **is greater than** | $4 \ > \ 2$ |
> | < | **is less than** | $3 \ < \ 5$ |

Helpful Trick: The Alligator Mouth

Think of the > and < symbols as a hungry alligator's mouth. The alligator always wants to eat the **bigger** number!

$$4 > 2 \qquad 3 < 5$$

The open mouth always faces the bigger number.

B HOW TO COMPARE 3-DIGIT NUMBERS

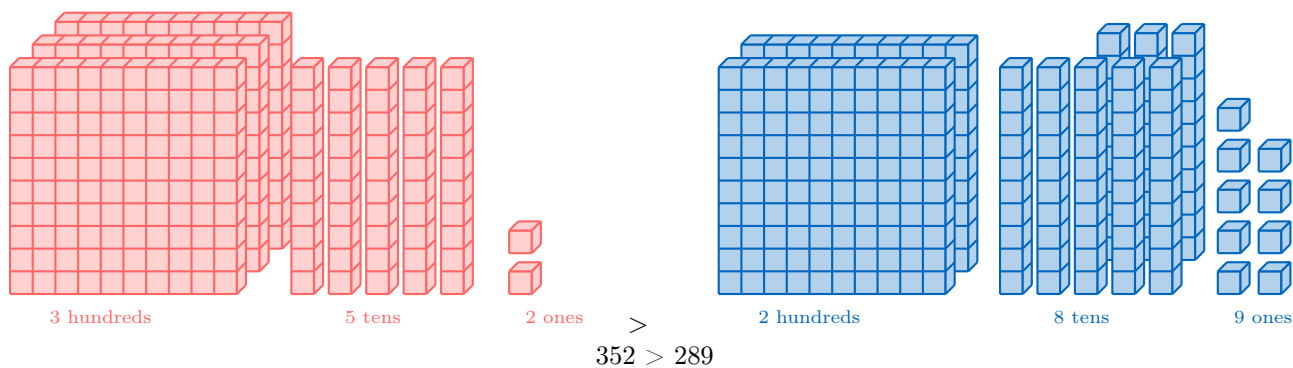> **Method Comparing 3-Digit Numbers**
>
> To compare numbers, we always start by looking at the place with the biggest value. For 3-digit numbers, this is the **hundreds** place!
>
> - **Step 1: Compare the Hundreds place.** Look at the digit in the hundreds place. The number with more hundreds is the greater number.
>
> - **Step 2: Compare the Tens place (if needed).** If the hundreds are the **same**, then you look at the tens place. The number with more tens is the greater number.
>
> - **Step 3: Compare the Ones place (if needed).** If the hundreds AND the tens are the **same**, then you look at the ones place. The number with more ones is the greater number.

Ex: Compare 352 and 289.

Answer:

- **Step 1: Compare the Hundreds.**

  - The number 352 has **3 hundreds**.

  - The number 289 has **2 hundreds**.

- Since 3 hundreds is more than 2 hundreds, we know that **352 is greater than 289**. We don't need to look at the tens or ones.

3 hundreds   5 tens   2 ones   >   2 hundreds   8 tens   9 ones

$$352 > 289$$

Ex: Compare 461 and 438.

Answer:

- **Step 1: Compare the Hundreds.**
    - The number 461 has **4 hundreds**.
    - The number 438 has **4 hundreds**.

- The hundreds are the same! So, we must move to the next step.

- **Step 2: Compare the Tens.**
    - The number 461 has **6 tens**.
    - The number 438 has **3 tens**.

- Since 6 tens is more than 3 tens, we know that **461 is greater than 438**.

4 hundreds   6 tens   1 one   >   4 hundreds   3 tens   8 ones

$$461 > 438$$