Identifying the Place Value of 3-Digit Numbers

Place value is the value of a digit depending on its position in a number. We can **identify the place value of a digit** using a place value chart.

To identify the place value of a digit:

1. Use or draw a place value chart.
2. Make the number with base-10 equipment or write it in the place value chart.
3. Identify the digit.
4. What is the place value of the column?
5. State the place value of the digit.

Example: What is the place value of the 4 in the number 452?

Ones		
Hundreds	Tens	Units
4	5	2

Answer: 4 hundreds or 400

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Comparing 3-Digit Numbers

To **compare numbers**, we need to understand their place value. One way to do this is to use a place value chart.

To compare the size of numbers:

1. **Write each number in a place value chart.** Make sure the digits are aligned correctly. You may find base-10 blocks useful for comparing the size of numbers.
2. **Start with the hundreds column.** To compare the numbers, start with the hundreds column (↑).
3. **Move to the tens column.** If the digits are the same, move right to the tens column (↑) and compare the size of the digits.
4. **Move to the units column.** If the digits are the same, move right to the units column (↑).
5. **Answer.** State your final answer.

Example: Use words and symbols to compare the following numbers. < means less than, > means more than, = means equal.

245 ☐ 145
364 ☐ 366
945 ☐ 945

Answer:
245 > 145
364 < 366
945 = 945

Ones		
Hundreds	Tens	Units
2	4	5
1	4	5
3	6	4
3	6	6
9	4	5
9	4	5

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Ordering 3-Digit Numbers

To **put numbers in order of size**, we need to understand their place value. One way to do this is using a place value chart.

To put numbers in order of increasing (small to large) size:

1. **Write each number in a place value chart.** Make sure the digits are aligned correctly. You may find base-10 equipment useful for comparing the size of numbers.
2. **Start with the hundreds digit first.** The number with the smallest digit in this column will be the smallest. The number with the next smallest digit will be the second smallest. Continue until all numbers have been placed in order of increasing size.
3. **Move to the tens column.** If two or more numbers have the same digit in the hundreds column, move right to the tens column (↑) and compare the digits from the same number.
4. **Move to the units column.** If two or more numbers have the same digit in the tens column, move right to the units column (↑) and compare the digits from the same number.
5. **Answer.** State your final answer.

Example: Put these numbers in order of increasing size: 794, 927, 618, 772, 792.

Ones		
Hundreds	Tens	Units
7	9	4
9	2	7
6	1	8
7	7	2
7	9	2

Answer: 618, 772, 792, 794, 927

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Ordering 3-Digit Numbers

To **put numbers in order of size**, we need to understand their place value. One way to do this is using a place value chart.

To put numbers in order of decreasing (large to small) size:

1. **Write each number in a place value chart.** Make sure the digits are aligned correctly. You may find base-10 equipment useful for comparing the size of numbers.
2. **Start with the hundreds digit first.** The number with the **largest** digit in this column will be the largest. The number with the next largest digit will be the second largest. Continue until all numbers have been placed in order of increasing size.
3. **Move to the tens column.** If two or more numbers have the same digit in the hundreds column, move right to the tens column (↑) and compare the digits from the same number.
4. **Move to the units column.** If two or more numbers have the same digit in the tens column, move right to the units column (↑) and compare the digits from the same number.
5. **Answer.** State your final answer.

Example: Put these numbers in order of decreasing size: 123, 321, 124, 909, 456.

Ones		
Hundreds	Tens	Units
1	2	3
3	2	1
1	2	4
9	0	9
4	5	6

Answer: 909, 456, 321, 124, 123

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