## 8－1

－Instruction Above the＂One Thousands Place，＂there are the ＂Ten Thousands Place，＂＂Hundreds Thousands Place，＂＂One millions Place，＂ ＂Ten Millions Place，＂respectively．

For example，＂I 4037872 ＂can be read as ＂fourteen million，thirty－seven thousand， eight hundred seventy－two．＂
（＊Population of Tokyo，the capital of Japan，202I）

Example Write the following number in the table and read it．
9425622 （＊population of London，the capital of England，2020）＊io

| Ten One | Hunded | Ten | One |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Milios | Thousans |  |  |  |  |  |  |
| 9 | 4 | 2 | 5 | 6 |  |  |  |

In many countries，the comma（，） or space are added every three digits to make it easier to read， like $9,425,622$ or 9425622 ．

Nine million，four hundred twenty－five thousand，six hundred twenty－two．
Write the following numbers in the table and read it．
8175133
（＊Population of New York
City，USA，2020）

| Ten | One | Hundred | Ten | One | Hundreds | Tens | Ones |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Millions |  | Thousands |  |  |  |  |  |
|  | 8 |  | 7 | 5 |  |  |  | 3 |

4481795
（＊Number of tickets sold in the Tokyo Olympic，2021）

| Ten | One | Hundred | Ten | One |  | Hundreds | Tens |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ones |  |  |  |  |  |  |  |
| Millions |  | Thousands |  |  |  |  |  |
|  | 4 |  | 8 |  | 7 |  | 5 |

$\square$
（3） 35091944
（＊Number of newspapers published in Japan during

| Ten | One | Hundred | Ten | One |  | Hundreds | Tens |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Ones 2020）

$\square$

## 8－2 <br> Structure of Numbers（I）

## Example Write the numbers in the <br> $\square$

1） 9588198 is made of 9 one millions， $5^{\circ}$ hundred thousands， 8 ten thousands， 8 one thousands， 1 ，mio hundreds， 9 tens and 8 ones． （＊Population of Jakarta，the capital of Indonesia，2016）

Focus on each individual number．Otherwise，there could be many answers．

2 The number made of 4 one millions，I ten thousands， 7 one thousands， 5 tens and 2 ones is 4017056
（＊Car sales in Germany，2019）

Write the numbers in the $\square$ ．
（1） 1538762 is made of $\square$ one millions， $\square$ one hundred thousands，$\square$ ten thousands， $\square$ one thousands，
 hundreds，$\square$ tens and $\square$ ones．
（＊Number of Mobile Phone production in Japan during March 2021）
（2）I705685 is made of $\square$ one millions， $\square$ hundred thousands， $\square$ one thousands， $\square$ hundreds， $\square$ tens and $\square$ ones． （＊Cumulative number of people infected with COVID－19 by October 2021）
（3）The number made of 2 ten millions，I one millions， 8 hundred thousands， 9 ten thousands， 3 one thousands tens and 2 tens is
$\square$ ．（＊Population of Beijing City，the capital of China，2019）

4．The number made of 2 ten millions， 5 one millions， 7 hundred thousands， 6 ten thousands， 8 one thousands， 6 hundreds， 7 tens and 7 ones is $\square$ （＊Car sales of China，2019）

## （O）Numbers Greater than 10000 <br> Structure of Numbers（2）

Example How many＂one thousands（ 1000 ＇s）＂make up the number 14000 ？

14000 is made of 10000 and 4000.


Write the numbers in the $\square$
（1）How many＂one thousands（ 1000 ＇s）＂make up the number $\mid 3000$ ？

（2）How many＂one thousands（ 1000 ＇s）＂make up the number 25000？


3 How many＂one thousands（ 1000 ＇s）＂make up the number 78000？


4 $\square$ one thousands（ 1000 ＇s）make up the number 56000.

5 $\square$ one thousands（ 1000 ＇s）make up the number 49000.

6 $\square$ one thousands（ 1000 ＇s）make up the number 300000.

## －Numbers Greater than 10000 <br> Number Line

Example Write the numbers in the $\square$
$0 \quad 10000 \quad 20000300004000050000600007000080000$


The smallest
 show units of 1000.

Write the numbers in the $\square$ ．

1 $10 \begin{array}{llllllll} & 0 & 10000 & 20000 & 30000 & 40000 & 50000 & 60000\end{array} 70000$


2


3


4


5


6


## （O）$\sim$ Numbers Greater than 10000 <br> Comparing Numbers

－Example Calculate the following，and fill in the $\square$ with the appropriate symbol，$=,>$ ，or $<$ ．


Calculate the following and write the appropriate symbol，$=,>$ ，or $<$ in the $\qquad$ ．
（1） $40000+30000 \square 80000$（2） $10000+60000 \square 70000$
（3） $20000+30000 \square 60000$（4） $50000+80000 \square 120000$
（5） $60000-40000 \square 10000$（6） $70000-50000 \square 20000$
（1） $90000-10000 \square 80000$ 8 $40000-30000 \square 70000$
（9） $28000 \square 20000+8000$
（10） $36000 \square 30000+60000$
（II） $14000 \square 20000-4000$
（12） $56000 \square 60000-3000$
（13） $45000 \square 50000-6000$
（14） $72000 \square 80000-8000$
（15） 7 million $\square 5$ million +2 million
（16） 15 million -8 million $\square 6$ million

## 8 <br> 6

## Exemple What can we say about the number 120000 ？ Fill in the <br> $\square$ with the appropriate numbers．

（1）It is made up of 100000 and 20000 added together．
（2）It is 80000 less than 200000.
（3）It is made of 12 10000＇s．
One number can be expressed various ways，can＇t we？
Regarding（3），we think that how many 10000＇s there are．


1 What can we say about the number 760000？
Write the appropriate numbers in the $\square$ ．
（1）It is made up of 700000 and $\square$ added together．
（2）It is $\square$ less than 800000 ．
（3）It is made of $\qquad$ 10000＇s．

2 What can we say about the number 380000？
Fill in the $\square$ with appropriate numbers．
（1）It is made up of 300000 and $\square$ added together．
 less than 400000.
（3）It is made up $\square$ I 0000＇s．

3 What can we say about the number 12 million（｜2000000）？
Fill in the $\square$ with appropriate numbers．
（1）It is made up of 10 million and $\square$ added together．
（2）It is $\square$
（3）It is made up one millions．

## －Numbers Greater than 10000 <br> Numbers Multiplied by 10 and 100

Exemple 11 What number is 10 times as much as 25 ？
$25 \xrightarrow{10 \text { times }} 250$
$25 \times 10=250$


When you multiply a number by 10 ，all digits in the number go up one place．The answer is the number made by placing a 0 to the right of the original number．

1 What are the numbers that are 10 times the following numbers？
（1） 50

（2） 79

3
38


4

（5） 632

6
980
$\square$

Example 2 What number is 100 times as much as 25 ？


2 What are the numbers that are 100 times the following numbers？
1
27 $\square$
（2） 90

（3） 100

785 $\square$
5
6000 $\square$
6
10000 $\square$

## （o）Numbers Greater than 10000 <br> Numbers Divided by 10，and 100000000

Exemple 1 What number is 200 divided by 10 ？


When a number with 0 in the ones place is divided by 10 ， each digit moves down one place．It remains the same number except with a 0 in the ones place．

1 When the following numbers are divided by 10 ，what do you get？

2

（3）
250


4

5

（6） 10000

－Example 2 There is the＂Hundred Million Place＂above the＂Ten
 Million Place．＂One hundred million is the number that is 10 times as much as ten million．
$100000000=10000000 \times 10$

2 Write the appropriate numbers in the $\square$ ．
（1）One hundred million is the number $\square$ times as much as ten million．
2）One hundred million is made up of $\square$ ten millions．

## （o）Numbers Greater than 10000 <br> Review

1 Write the appropriate numbers in the $\square$ ．
（1）The digit in the hundred thousands place of 5285194 is $\square$ and digit in the ten thousands place is $\square$ ， ．
（2）The digit in the one million place of I 3729054 is $\square$ ，and the digit in the hundred thousands place is $\square$

Focus on each individual number． Otherwise，there could be many answers．
（3） 4 I73968 is made of $\square$ one millions， $\square$ hundred thousands， $\square$ ten thousands， $\square$ one thousands， $\square$ hundreds， $\square$ tens and $\square$ ones．
（4） 2603040 is made of $\square$ one millions， $\square$ hundred thousands， $\square$ thousands and $\square$ tens．
（5）The number made of 4 ten millions， 7 one millions，I ten thousands， 2 one thousands， 5 tens and 8 ones is $\square$
6．The number made of 3 ten millions， 5 hundred thousands， 8 ten thousands and 9 ones is $\square$
2 Write the numbers in the $\square$ ．
$\square$ one thousands（ 1000 ＇s）make up the number 78000.
$\square$ one thousands（ 1000 ＇s）make up the number 34000.

3 $\square$ one thousands（ 1000 ＇s）make up the number 250000.

3 Write the numbers in the $\square$
1


2


3


4 Calculate the following and write the appropriate symbol，$=$ ， $>$ ，or $<$ in the $\square$ ．
（1） $20000+40000$ $\square$ 60000 （2） $50000+50000 \square 10000$
（3） $60000-30000$ $\square$ 50000
（4） $50000-3000$ $\square$ 20000
（5） 5 million +2 million $\square$ 7 million

5 What can we say about the number 460000？Write the appropriate numbers in the $\square$ ．
（1）It is made up of 400000 and $\square$ added together．
（2）It is $\square$ less than 500000.
（3）It is made of $\square$ 10000＇s．

6 What are the numbers that are 10 times the following numbers？
1 35

（2） 670 $\square$ （3） 893 $\square$
7 When the following numbers are divided by 10 ，what do you get？
1 $500 \square$
2． 6000 $\square$
（3） $10000 \square$

