## Let's read 1000.

# 1000 <br> thousand 

We read 1001 as 1000 and 1.

## thousand and one


thousand one

We read 101 as 100 and 1.


The numbers from 1002 increases by one.
thousand two thousand three

thousand two thousand three

1001 thousand one
1009 thousand nine
1010 thousand ten

1099 thousand ninety nine
1100 thousand hundred

1199 thousand hundred ninety nine
1200 thousand two hundred
1300 thousand three hundred
1500 thousand five hundred
1900 thousand nine hundred
1999 thousand nine hundred ninety nine

We know how to read the numbers from 1001 to 1999 if we know how to read from 0 to 999.

| Let's look at a new |
| :---: | :---: | :---: | :---: | :---: |
| figure. What is the |
| number on the right? |


"o" means $\square$, "t" means $\boxed{x}$, " h " means $\square$, "th" means $\square$.

## Example Write the answer in the $\square$.

| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  | 100 |  |  |
|  | 100 |  |  |
|  | 1000 | 100 | 10 |
| 10 |  |  |  |
|  | 100 | 10 | 1 |
|  |  | 1 |  |


| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  | $\boxed{100}$ |  |  |
|  | 100 |  |  |
|  | 100 | $\boxed{10}$ |  |
| 1000 | 100 | 10 | $\square 1$ |
| 1 | 10 | 10 | $\square 1$ |

## Exercise Write the answer in the $\square$.

(1)

| th | $h$ | h | o |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 100 |  | 1 |  |
|  | 100 |  | 1 | 1 |
|  | 100 | 100 |  | 1 |
| 100 | 100 | 100 | 10 | 1 |
| 100 | 100 | 100 | 10 | 1 |
|  | 10 | 1 |  |  |


(2)

| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  |  | $\boxed{10}$ |  |
|  |  | 10 | $\square 1$ |
|  | 100 | 10 | 1 |
| 1000 | 100 | 10 | 1 |
|  | 10 | 1 |  |


(3)


(5)

| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  |  |  | 1 |
|  |  |  | 1 |
|  |  |  | 1 |
|  |  | 10 | 1 |
| 1000 |  | 10 | 1 |

(6)

| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  |  |  | 1. |
|  |  |  | 1 |
|  |  |  | 1 |
| 1000 |  | 1 |  |
|  |  | 1 | 1 |
|  |  | 1 | 1 |

 ,$" t$ " means $x$ " h " means O, "th" means


| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | 1000 |  |  |

20000

| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |



| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
| $\mathbf{1 0 0 0}$ |  |  |  |
| $\mathbf{1 0 0 0}$ |  |  |  |
| 1000 |  |  |  |



| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |



| 6 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- |


| th | h | t | o |
| ---: | :---: | :---: | :---: |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 | $\mathbf{1 0 0 0}$ |  |  |



| th | h | t | o |
| :---: | :---: | :---: | :---: |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 | 1000 |  |  |
| 1000 | 1000 |  |  |

8000

| th | h | t | o |
| :---: | :---: | :---: | :---: |
| $\mathbf{1 0 0 0}$ |  |  |  |
| 1000 |  |  |  |
| $\mathbf{1 0 0 0}$ | $\mathbf{1 0 0 0}$ |  |  |
| 1000 | $\mathbf{1 0 0 0}$ |  |  |
| 1000 | $\mathbf{1 0 0 0}$ |  |  |

90000

| th | h | t | o |
| :---: | :---: | :---: | :---: |
| 1000 |  |  |  |
| 1000 | 1000 |  |  |
| 1000 | 1000 |  |  |
| 1000 | 1000 |  |  |
| 1000 | 1000 |  |  |

The number of "th" is up to 9 .


The numbers from 2002 increases by one.
two thousand two two thousand three

2002 2000 two thousand two two thousand three

| 1 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- |
| th | h | t | 0 |
|  |  |  |  |
|  |  |  |  |
| 1000 |  |  |  |

thousand

two thousand

three thousand

| $\mathbf{4}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ |
| :---: | :---: | :---: | :---: |
| th | h | t | o |
|  |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |

four thousand


| th | h | t | o |
| :---: | :---: | :---: | :---: |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |

five thousand
$6 \quad 0 \quad 0 \quad 0$

| th | h | t | o |
| ---: | :---: | :---: | :---: |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 | 1000 |  |  |

six thousand


| th | h | t | o |
| :---: | :---: | :---: | :---: |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 | 1000 |  |  |
| 1000 | $\mathbf{1 0 0 0}$ |  |  |
| 1000 | $\mathbf{1 0 0 0}$ |  |  |



| th | h | t | o |
| :---: | :---: | :---: | :---: |
| 1000 |  |  |  |
| 1000 | 1000 |  |  |
| 1000 | 1000 |  |  |
| 1000 | 1000 |  |  |
| 1000 | 1000 |  |  |

seven thousand eight thousand nine thousand

The numbers from 3001 increases by one.

three thousand one three thousand two

Let's look at numbers which ends with 1 from 9999.


We read some thousand and one same as we read 1001 like 1000 and 1 or 9000 like 9000 and 1.


| 1 | one |
| ---: | ---: |
| 1001 | thousand one |
| 2001 | two hundred one |
| 3001 | three thousand one |
| 4001 | four thousand one |
| 5001 | five thousand one |
| 6001 | six thousand one |
| 7001 | seven thousand one |
| 8001 | eight thousand one |
| 9001 | nine thousand one |

"o" means $O$, "t" means $\triangle$, " $h$ " means $O$, "th" means $\square$.

## Example Write the answer in the $\square$.

## (0) Good!

| th | h | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  | 100 |  |  |
|  | 100 |  |  |
|  | 100 | 10 |  |
|  | 1000 | 100 | 10 |
| 10 | 1 | $\square$ |  |


| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  | 100 |  |  |
|  | 100 |  |  |
|  | 100 | $\boxed{10}$ |  |
| 1000 | 100 | 10 | 1 |
| 10 | 1 |  |  |
| 1 | 5 | 3 | 2 |

## Exercise Write the answer in the $\square$

(1)

| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  |  |  | 1 |
| 1000 |  |  | 1 |
| 1000 | 100 | 10 | 1 |
| 1000 | 100 | 1 |  |
| 1000 | 100 | 10 | 1 |
| 10 | 1 | 1 |  |

(2)

| th | h | t | o |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 100 | 10 | $\mid$ |  |
|  | 100 | 100 | 10 |  |
| 1000 | 100 | 100 | 10 |  |
| 1000 | 100 | 100 | 10 | 10 |
| 1000 | 100 | 100 | 10 | 10 |


(3)

(4)

(5)

| th | h | t | o |
| :---: | :---: | :---: | :---: |
| $\mathbf{1 0 0 0}$ |  |  |  |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 | $\underline{100}$ |  |  |
| 1000 | 1000 | $\underline{100}$ | $\boxed{10}$ |

(6)

| th | h | t | o |  |
| :---: | :---: | :---: | :---: | :---: |
| 1000 | 100 |  | 10 |  |
| 1000 | 1000 | 100 |  | 10 |
|  |  |  |  |  |
| 1000 | 1000 | 100 | 100 | 10 |
| 1000 | 1000 | 100 | 100 | 10 |
| 1000 | 1000 | 100 | 100 | 10 |
| 10 | 10 | 1 |  |  |

$\square$


## Exercise Write the answer in the $\square$

(7) | th | h | t | o |
| :---: | :---: | :---: | :---: |
| 1000 |  |  |  |
| 1000 |  |  |  |
| 1000 |  | 100 |  |
| 1000 | 1000 | 100 |  |
| 1000 | 1000 | 100 |  |
|  |  |  | 1 |


(8)

| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  |  | 10 |  |
|  |  | 10 |  |
| 1000 |  | 10 |  |
| 1000 |  | 10 | $\boxed{1}$ |
| 1000 |  | 10 | 10 |
|  |  |  | 1 |
|  |  |  |  |

(9)

(11)

(13)

(14)

| th | h | t | o |
| :---: | :---: | :---: | :---: |
|  | 100 | 10 |  |
| 1000 | 100 | 10 |  |
| 1000 | 100 | 10 |  |
| 1000 | 100 | 100 | 10 |
| 1000 | 100 | 100 | 10 |
| 10 | 1 | 1 |  |


(15)

(16)

| th | h | t | o |
| :---: | :---: | :---: | :---: |
| 1000 | 100 | 10 | 10 |
| 1000 | 1000 | 100 | 10 |
| 1000 | 1000 | 100 | 10 |
| 1000 | 1000 | 10 | 10 |
| 1000 | 1000 | 10 | 10 |
| 1000 | 100 | 10 | 10 |
| 10 | 10 | 10 | 1 |
|  | 10 | 1 |  |


|  |  |  |  |
| :--- | :--- | :--- | :--- |

Example Write how to read the numbers in $\square$.

## 1000

1001
thousand one
Exercise Write how to read the numbers in $\square$.

| 3001 |  |
| :--- | :--- |
| 3010 |  |
| 3020 |  |
| 3030 |  |
| 3400 |  |
| 3542 |  |
| 5768 |  |
| 7289 |  |
| 8379 |  |
| 9263 |  |

Exercise Write how to read the numbers in $\square$.


Let's write $>$ or $<$ to show which is greater.


## $348 \square 295$ <br> 188 <br> 514

The number on the open side is greater.


Good!


348 is greater than 295 and 188 is less than 514.


Example Write the sign of $>,<$ or $=$ in the $\square$.
$3400 \square 2500 \Leftrightarrow 3400 \square 2500$
$1890 \square 1890 \Leftrightarrow 1890 \square 1890$
Exercise Write the sign of $\rangle,\langle$ or $=$ in the $\square$.
(1) 3000
5000
(2) 8000
7000
(3) 1980
$\square 2015$
(4) $8095 \square 7986$
(5) $4560 \square 3872$
(6) 987
1001
(7) 2560
5230
(8)6010
5980

92798 $\quad 2798$ © $106976 \square 7796$
(11) $5560 \square 5190$ (12) $3323 \square 2334$
${ }^{(13)} 9872 \square 8976$ (14)1999

Example Fill in the missing number.


Exercise Fill in the missing number.
(1) 1 units means $\square$
$\begin{array}{llllllllll}0 & 1000 & 2000 & 3000 & 4000 & 5000 & 6000 & 7000 & 8000 & 9000\end{array}$

(2)

(4)


Exercise Fill in the missing number.
.

Example Tick in the $\square$ which indicates the number.
2830

2800


Exercise Tick in the $\square$ which indicates the number.
(1) 3700


5000

(2) $7650 \quad \underset{ }{\text { п }} \quad \underset{1}{ }$
(3) 4235 .



## Example Write the answer in the $\square$. If you don't know the answer, think it using number line. <br> $0 \quad 1000 \quad 2000 \quad 3000 \quad 4000 \quad 5000 \downarrow \begin{array}{lllllll} & 6000 & 7000 & 8000 & 9000\end{array}$ .سلسلسلسلسلسلسلسلسلسلسلساسلسلسلسلسلسلسلسلسلسلسلسلسلسلسلسا

Exercise Fill in the missing number.
(1)

is 3000 more than 3600 .
(2)

$\square$ is 400 more than 4700.
(3)

| 0 | 1000 | 2000 | 3000 | 4000 | 5000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | , | 1 | , |  |  |


is 600 more than 6500.
(4)


## .

(5)


## 7700

## Example Write the answer in the $\square$. If you don't know the answer,

 think it using number line.4300 is 1000 less than 5400 .
Good!
$0 \quad 10002000300040005000 / 600070008000900010000$


Exercise Fill in the missing number.
(1)

is 4000 less than 6200.
$0 \quad 1000 \quad 2000 \quad 3000 \quad 4000 \quad 5000 \quad 6000$ $7000 \quad 8000 \quad 9000$

(2)

(3) $\square$ is 400 less than 7100 .
(4)

is 30 less than 3200 .
.
(5) is 70 less than 6800.

Example Write the answer in the $\square$. If you don't know the answer, think it using number line.

5000 is 1000 more than 4000.
$0 \quad 1000200030004000 \quad 5000600070008000900010000$


Exercise Fill in the missing number.
(1) 6500 is
$\square$ more than 3500.
$0 \quad 100020003000 \downarrow 4000 \quad 5000 \quad 6000 \downarrow 7000 \quad 8000 \quad 9000$

(2) 2300 is $\square$ more than 1800.

(3) 7200 is $\square$ more than 6400.

(4) 7000 is $\square$ more than 6980. 6900
(5) 4650 is


Example Write the answer in the $\square$. If you don't know the answer, think it using number line.

5000 is 400 less than 4000 .
$0 \quad 1000 \quad 2000 \quad 3000 \quad 4000 \quad 5000600070008000900010000$


Exercise Fill in the missing number.
(1) 3500 is

(2)

(3) 5200 is $\square$ less than 6100.

(4) 8910 is $\square$ less than 8980 .

(5) 3720 is

3700 less than 3750.

## 3800

.

## Example Fill in the missing number.

The number which is made of $23 \quad 100$ is


Exercise Fill in the missing number.
(1) The number which is made of 38
(2) The number which is made of $62 \boxed{100}$ is
(3) The number which is made of $77 \boxed{100}$ is
(4) The number which is made of 51 100 is
(5) The number which is made of 49 $\square$ is
(6) The number which is made of 50 $\square$ 100 is
(7) The number which is made of 63 100 is
(8) The number which is made of $99 \boxed{100}$ is

## Example Fill in the missing number.

The number which is made of $21000,1,100,310$ and $5 \square 1$ is 2135 (o) Good!

Exercise Fill in the missing number.

(1) The number which is made of $51000,7100,310$ and 4 |  |
| :---: |
| 1 |

$\square$
(2) The number which is made of $31000,1 \boxed{100}, 5 \boxed{10}$ and $0 \boxed{1}$ is $\square$
(3) The number which is made of $21000,2100,710$ and 1,1 is $\square$.
(4) The number which is made of $71000,0100,6 \boxed{10}$ and $3 \longdiv { 1 }$ is
$\square$
(5) The number which is made of $81000,0 \quad 100,0 \quad 10$ and $2 \boxed{1}$ is

## Example Fill in the missing number.

## Good!

The number which is made of 18100 is 1800 .

Exercise Fill in the missing number.
(1) The number which is made of

100 is 1800.
(2) The number which is made of

(3) The number which is made of

(4) The number which is made of

(5) The number which is made of

(6) The number which is made of

(7) The number which is made of


Example Fill in the missing number. The numbers which is made of 3 1000, 6 100,
5
10 and 4
1 is 3654 .
(@)Good!

Exercise Fill in the missing number.
(1) The numbers which is made of

(2) The numbers which is made of

(3) The numbers which is made of

(4) The numbers which is made of


Exercise Fill in the missing number.
(5) The numbers which is made of $\square 1000, \square 100$, $\square 10$ and $\square 1$ is 8647.
(6) The numbers which is made of

(7) The numbers which is made of

$\square 10$ and $\square 1$ is 3654 .
(8)The numbers which is made of

(8) The numbers which is made of


Example Write the answer in the $\square$.

## $300+900=1200$

## There are $3+9$ sets of 100 .

## (O) Good!

Exercise
Write the answer in the
(1) $300+800=$
(2) $400+900=$

There are $3+8$ sets of 100
There are $4+9$ sets of 100

(3) $500+500=\square$
There are $5+5$ sets of 100
(4) $600+800=$

There are $6+8$ sets of 100
(5) $500+900=\square$ © $800+400=$

There are $5+9$ sets of 100
There are $8+4$ sets of 100

## (7) $900+200=$

There are $9+2$ sets of 100
(8) $900+700=$

There are $9+7$ sets of 100
(9) $700+800=$

There are $7+8$ sets of 100
(10) $700+500=$

There are $7+5$ sets of 100

Example Write the answer in the $\square$.

## $300+900=1200 \&_{G 000}$

Exercise Write the answer in the $\square$.
(1) $200+900=$
(2) $700+300=$
(3) $400+800=$
(4) $900+600=$
(5) $600+700=$
(6) $900+400=$
(7) $600+600=$
(9) $900+800=\square$ (10) $500+800=$
(11) $700+700=$
(12) $800+300=$
(13) $100+900=\square$
(14) $900+500=$
(15) $800+700=\square$
(16) $800+800=$

Example Write the answer in the $\square$. $1500-800=700$

There are 15-8 sets of 100

## Good!

Exercise Write the answer in the $\square$
$\begin{array}{ll}\text { (1) } 1200-600=\square & \text { (2) } 1500-700= \\ \text { There are } 12-6 \text { sets of } 100 & \text { There are } 15-7 \text { sets of } 100\end{array}$
(3) $1800-900=\square$ (4) $1700-800=\square$

There are $18-9$ sets of 100
There are $17-8$ sets of 100
(5) $1600-700=$

There are $16-7$ sets of 100
(6) $1100-400=$

There are $11-4$ sets of 100
(8) $1400-600=$

There are $14-6$ sets of 100
(8) $1300-500=$

There are $13-5$ sets of 100

Example Write the answer in the $\square$.
$1500-800=700$ \& ${ }^{3}$ good
Exercise Write the answer in the $\square$.




Example Solve.

$$
318+246 \quad 318+246
$$




Exercise Solve.
(1) $519+253$
$\left[\begin{array}{r:r:r}\hline 5 & 1 & 9 \\ + & 2 & 5 \\ \hline & & \\ \hline & & \\ \hline\end{array}\right.$
(2) $127+436$
(3) $453+342$
(4) $243+615$



(5) $526+324$
(6) $257+314$
(7) $129+630$
(8) $308+651$


308
$+651$

## Example Solve.

(9) $372+415$

(10) $166+513$

(11) $651+323$
(12) $531+265$

(13) $465+407$
(14) $553+138$
(15) $627+336$
(16) $469+524$
$\left[\begin{array}{r:r:}\hline & 2 \\ + & 3 \\ \hline & 3 \\ \hline & \\ \hline\end{array}\right.$
(17) $227+626$
(18) $303+418$

(19) $353+237$

(20) $336+445$ +
$\Delta \omega$
$\Delta \omega$
$\sigma \quad \sigma$

Example Solve. Make sure to write " + ".
$318+246$


$$
318+246
$$

| h | t | o |
| :--- | :--- | :--- |

Exercise Solve. Make sure to write " + ".
(1) $517+364$
(2) $478+216$
(3) $204+638$

(4) $340+529$
(5) $232+464$
(6) $304+503$
$\square$
$\square$

Exercise Solve. Make sure to write " + ".
(7) $316+442$
8684+115
(9615+182

(10) $314+236$
(11) $389+408$
(12) $123+749$

(3) $228+536$
(4) $379+318$
(15) $358+425$


Example Solve. Make sure to write " + " and the horizontal line.
$318+246$


## $318+246$

n t 10


Exercise Solve. Make sure to write " + " and the horizontal line.
(1) $125+767$
(2) $133+629$
(3) $458+423$

(4) $127+765$
(5) $534+128$
$\square$
(6) $526+325$


Exercise Solve. Make sure to write " + " and the horizontal line.
(7) $427+432$
(8) $516+142$
(9) $206+402$

(1) $421+509$
(11) $238+653$
(12) $247+537$

| n | $t$ | $\bigcirc$ |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |


(3) $326+354$
(14) $225+327$
(15) $567+126$

"o" means - "t" means $\times$, " h " means O .


Example Solve.

$$
462+183 \quad 462+183
$$




Exercise Solve.
(1) $162+597$
(2) $437+281$

(3) $361+264$
(4) $693+124$
$\left[\begin{array}{lll} \\ 4 & 6 & 1 \\ \hline & 2 & 4 \\ \hline & & \\ & & \\ \end{array}\right]$

(7) $134+78$ (8) $475+68$
$\left[\begin{array}{c:c} \\ & 1 \\ + & 3 \\ \hline & \\ & \\ & \\ & \\ & \\ \hline\end{array}\right]$

## Exercise Solve.

(9) $372+185$

(10) $166+351$

(11) $451+273$
(12) $381+265$


381 $+265$

(14) $356+186$
(15) $267+555$
(16) $548+295$

(17) $272+62$

(18) $360+48$

(19) $353+79$

(20) $534+87$


Example Solve. Make sure to write " + " and the horizontal line.

$$
462+183 \quad 462+183
$$

$\square$

| $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- |



Exercise Solve. Make sure to write " + " and the horizontal line.
(1) $157+362$
(2) $773+156$
(3) $554+289$

(4) $484+329$
(5) $272+64$
(6) $377+53$
$\square$

Exercise Solve. Make sure to write " + " and the horizontal line.
(7) $674+242$
(8784+151
${ }^{9} 653+192$


(10) $568+263$

(11) $389+438$

(12) $333+479$

(13) $280+57$
(44) $379+66$
(15) $358+75$


Example Solve. Make sure to write "十" and the horizontal line.

## $462+183$ <br> $462+183$

| $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- |

$\square$


Good!

Exercise Solve. Make sure to write " + " and the horizontal line.
(1) $155+762$
(2) $385+220$
(3) $358+375$

(4) $197+765$
(5) $534+71$
(6) $896+35$
$\square$
$\square$

Exercise Solve. Make sure to write " + " and the horizontal line.
(7) $427+481$
(8) $579+140$
(9) 236 +482

(10) $421+199$
(11) $288+653$
(12) $277+537$


(13) $386+54$
(14) $252+79$
(15) $567+88$

" o " means $\bigcirc$, " t " means $\times, " \mathrm{~h} "$ means O .


Example Solve.

$$
238+265 \quad 238+265
$$

| 2 |
| ---: |
| 2 | 8


| 1 | 1 |
| ---: | ---: |
| 2 | 3 |
| 2 | 6 |
| +5 | 0 |
|  | 0 |

Exercise Solve.
(1) $379+324$
(2) $269+535$
(3) $455+147$
(4) $325+476$

(5) $546+257$
(6) $483+18$
(7) $536+65$
(8) $295+5$

$\left(\begin{array}{c:c} & 2 \\ + & 5 \\ \hline & \\ \hline & \\ & \\ & \\ & \\ & \\ \hline\end{array}\right.$

## Exercise Solve.

(9) $412+189$

(10) $146+354$

(11) $428+273$
(12) $335+265$


335 $+265$

(19) $353+49$

(20) $594+7$


Example Solve. Make sure to write " + ".
$238+265$
$238+265$

| $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- |

$\rightarrow$ Do NOT

Exercise Solve. Make sure to write " + ".
(1) $137+364$
(2) $643+158$
(3) $214+289$

(4) $284+19$
(5) $232+69$
(6) 395+8
$\square$

Exercise Solve. Make sure to write " + ".
(7) $674+228$
8784+119
© $907+197$

(10) $538+263$
(11) $393+409$
(12) $353+49$

(13) $248+57$
(44) $379+26$
(5) $594+8$


Example Solve. Make sure to write " + " and the horizontal line.
$238+265$
$238+265$


| h | $t$ | - |  |  | h | t | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\Rightarrow$ <br> Do NOT forget! |  | $\begin{aligned} & 1 \\ & 2 \\ & 2 \\ & 5 \end{aligned}$ | $\begin{aligned} & 1 \\ & 3 \\ & 6 \\ & 0 \end{aligned}$ | 8 |  |

Exercise Solve. Make sure to write " + " and the horizontal line.
(1) $155+348$
(2) $385+216$
(3) $228+475$

(4) $137+65$
(5) $527+75$
(6) $896+5$


Exercise Solve. Make sure to write " + " and the horizontal line.
(7) $217+388$
(8) $479+123$
(9) $236+469$

(10) $401+199$
(11) $248+653$
(12) $267+537$

|  | h | I |
| :---: | :---: | :---: |
|  | 0 |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |


(13) $386+14$
(14) $222+79$
(15) $597+8$


We calculate in order: first, at the "o" and second at the " t ".



Example Solve.

$$
835+423 \quad 835+423
$$



Exercise Solve..
(1) $524+665$
(2) $357+921$
(3) $763+414$
(4) $645+832$
524
357

| 7 | 6 |
| ---: | ---: |
|  | 3 |
|  | 1 |
|  |  |
|  |  |

$\left[\begin{array}{r}64 \\ +8 \\ \hline\end{array}\right] 2$
(5) $646+636$
(6) $828+367$
(7) $482+667$
(8) $981+755$

$\left(\begin{array}{lll} & 4 & 8 \\ + & 6 & 7 \\ \hline & & \\ & & \end{array}\right]$
$\left[\begin{array}{c:c}1 & 8 \\ +7 & 5 \\ \hline & \\ \hline & \\ & \\ \hline\end{array}\right]$

## Exercise Solve.

(9) 302+985

(10) $666+721$

(11) $459+843$
(12) $361+965$


## $\frac{1}{3} 61$ +965


(14) $556+586$
(15) $267+955$
(16) $548+895$

$\left[\begin{array}{ll}1 & 1 \\ 5 & 8 \\ + & 8 \\ \hline & \\ \hline & \\ \hline\end{array}\right]$
(17) $785+667$
(18) $365+958$

(19) $388+735$

(20) $534+687$

$$
\begin{array}{r}
1 \\
\hline
\end{array} \frac{1}{3}, 48
$$

Example Solve. Make sure to write " + ".
$835+423$
$835+423$

| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |



Exercise Solve. Make sure to write " + ".
(1)225 +933
(2) $641+726$
$3854+415$

| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{0}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

(4) $536+753$
(5) $527+651$
(6) $464+822$

| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{0}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| th | h | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| th | h | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Exercise Solve. Make sure to write " + ".


(13) $361+859$
(4) $278+935$
(15) $785+647$


Example Solve. Make sure to write " + " and the horizontal line.
$835+423$
$835+423$


Exercise Solve. Make sure to write " + " and the horizontal line.
(1)315+763 (2)841+452 (3)645+613

| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

(4) $712+642$
(5) $316+972$

6 $547+752$

| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{0}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| th | h | t | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Exercise Solve. Make sure to write " + " and the horizontal line.



## (3) $739+473$ (14) $863+948$ (15 $687+635$

| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


"o" means - "t" means $\times$, " h " means O , "th" means $\square$.


Example Solve.
$3254+4368 \quad 3254+4368$


Exercise Solve.
(1) $2724+3158$
(2) $5357+2135$

(5) $2643+1636$
(6) $5828+3341$


## Exercise Solve..



| (16) $5148+3895$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| + | $5$ | $8$ | $4$ | 8 |
|  |  |  |  |  |

Example Solve. Make sure to write " + ".
$3254+4368 \quad 3254+4368$

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |



Good!

Exercise Solve. Make sure to write " + ".
(1) $3125+2339$
(2) $5146+1726$
(3) $1654+6175$


(4) $4362+2553$
(5) $2527+5651$
(6) $2464+4822$

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Exercise Solve. Make sure to write " + ".
(7)6463+2199
(8) $1274+7476$

| th | $h$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |


(9) $5673+3545$

| th | $h$ | $t$ | 0 |
| :--- | :--- | :--- | :--- |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

(12) $4485+3736$

(13) $3136+5892$
(14) $2087+6931$
(15) $1785+4219$


Example Solve. Make sure to write " + " and the horizontal line.

$$
3254+4368 \quad 3254+4368
$$

| th | h | t | 0 |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |



Good!

Exercise Solve. Make sure to write " + " and the horizontal line.
(1) $1315+3376$

(4) $2172+5462$
$\square$
(2) $5418+3145$

(5) $2316+2972$
(6) $4547+1751$
$\square$
(3) $1465+6163$

$\square$

Exercise Solve. Make sure to write " + " and the horizontal line.
(7) $6752+1982$
(8) $5322+2981$
(9)3526+1798

(10) $1463+4768$

(11)2283+3735


(12) $2570+5498$

(13) $4739+4273$
(14) $7863+1188$
(15) $3687+3315$

| th | $h$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |



Example Solve.


Exercise Solve.
(1) $23+78+25$

| + | $\begin{aligned} & 2 \\ & 7 \\ & 2 \end{aligned}$ | $\begin{aligned} & 3 \\ & 8 \\ & 5 \end{aligned}$ |
| :---: | :---: | :---: |

(2) $48+95+21$
(3) $69+27+16$


(4) $75+623+54$
(5) $574+147+95$
(6) $54+138+749$

| 十 | 6 | $\begin{aligned} & 7 \\ & 2 \\ & 5 \end{aligned}$ | $\begin{aligned} & 5 \\ & 3 \\ & 4 \end{aligned}$ |
| :---: | :---: | :---: | :---: |


| + | $\begin{aligned} & 5 \\ & 7 \end{aligned}$ | $\begin{aligned} & 7 \\ & 4 \\ & 9 \end{aligned}$ | $\begin{gathered} 4 \\ 5 \end{gathered}$ |
| :---: | :---: | :---: | :---: |

$\left[\begin{array}{rll} & & \\ & 1 & 4 \\ + & 7 & 4\end{array}\right.$

## Exercise Solve.

(7) $96+45+32$
(8) $58+43+28$
(9) $278+31+154$

|  |  |  |
| :---: | :---: | :---: |
|  | 9 | 6 |
| + | 3 | 5 |
|  |  | 2 |
|  |  |  |



| $:$ |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 2 | 7 | 8 |
| 1 | 1 | 5 | 4 |
|  |  |  |  |
|  |  |  |  |

(10) $763+189+76$
(11) $514+329+178$
(12) $785+546+298$

$\left[\begin{array}{rrr}7 & 8 & 5 \\ + & 4 & 6 \\ + & 9 & 8 \\ \hline & & \\ \hline\end{array}\right.$
(13) $371+437+693$ (14) $326+899+656$
(15) $135+829+364$


|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 3 | 2 | 6 |
| +1 | 6 | 5 | 6 |
|  |  |  |  |
|  |  |  |  |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 1 | 3 | 5 |
| 1 | 3 | 2 | 9 |
|  |  |  |  |
|  |  |  |  |

Example Solve. Make sure to write " + ".
$36+59+48 \quad 36+59+48$



Exercise Solve. Make sure to write " + ".
(1) $73+28+41$

(2) $67+54+38$
(3) $85+77+59$


(4) $261+184+457$
(5) $253+168+385$

(6) $226+409+195$ |  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  | $\qquad$



## Exercise Solve. Make sure to write " + ".

(7) $96+39+28$

|  |  |  |
| :---: | :---: | :---: |
|  |  |  |

(8) $87+55+49$
(9) $346+56+129$



(11) $537+25+584$
(12) $348+276+158$


$\square$

(15) $546+439+196$



## Example Solve.

Cross out the number when it changes.

## 362-214 <br> 362-214





Exercise Solve.
Cross out the number when it changes.


## Exercise Solve.

Cross out the number when it changes.


(14) $871-620$
(15) 763-324
(16) 560-235




Example Solve. Make sure to write "一".
Cross out the number when it changes.
362-214
362-214


Exercise Solve. Make sure to write "-".
Cross out the number when it changes.
(1) 476-253
(2) $847-502$
(3) 687-321

| $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


(4) 741-328

| $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

(5) 591-263

| $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

(6) 986-748

| $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Exercise Solve. Make sure to write "一".
Cross out the number when it changes.
(7) 732-511
8852-330
(9579-243

(10) 549-306
(11) 482-150
(12) 295-137

(3) 685-436
(44) 417-108
(15) 872-536


Example Solve. Make sure to write "-" and the horizontal line. Cross out the number when it changes.
362-214
362-214


Exercise Solve. Make sure to write " - " and the horizontal line. Cross out the number when it changes.
(1) $627-514$
(2) $678-414$
(3) 368-143

(4) 453-216
(5) 770-726
(6) 561-127
$\square$
$\square$

Exercise Solve. Make sure to write " - " and the horizontal line.
Cross out the number when it changes.
(7) 436-123
(8) $854-241$
(9) 358-237

(10) 275-104
(11) 567-340
(12) 723-418

(3) 634-418
(14) 971-528
(5) 624-307

| $h$ | $t$ | 0 |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |


| $h$ | $t$ | 0 |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |


| $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |



We can't subtract at the " t ", so calculate by borrowing 100 from the " $h$ ". Do not forget the line to cross out the number because the number at the " $h$ " and " t ".


## Example Solve.

Cross out the number when it changes.

## 526-374



526-374
$\begin{aligned} & \text { Do NOT } \\ & \text { forget! }\end{aligned}: \begin{array}{c:c:c}4 & 12 \\ 5 & 8\end{array}$
$\begin{aligned} & \text { Do NOT } \\ & \text { forget! }\end{aligned}: \begin{array}{c:c:c}4 & 12 \\ 5 & 8\end{array}$

Exercise Solve.
Cross out the number when it changes.


## Exercise Solve.

Cross out the number when it changes.


(14) $872-678$
(15) 753-358
(16) 832-265



Example Solve. Make sure to write "-". Cross out the number when it changes.

526-374
$\square$

$$
526-374
$$



Exercise Solve. Make sure to write "-".
Cross out the number when it changes.
(1) 674-293
(2) 925-652
(3) 648-462

(4) $836-575$
(5) $718-542$
(6) 689-397


| $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{0}$ |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Exercise Solve. Make sure to write "一".
Cross out the number when it changes.
(7) 821-440
8507-363
(9)602-70

(10) 409-26
(11) 571-392
(1) $953-584$

(3) 831-294
(4) 840-372
(15) 540-274


| $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Example Solve. Make sure to write "-" and the horizontal line. Cross out the number when it changes.

526-374
$\square$

526-374


Exercise Solve. Make sure to write "-" and the horizontal line. Cross out the number when it changes.
(1) $827-465$
(2) $572-391$


(4) 657-362
(5) 388-195
(6) 563-282
$\square$

Exercise Solve. Make sure to write "-" and the horizontal line. Cross out the number when it changes.
(7) 512-260
(8) 703-361

(9) 525-82

(11) 407-75
(11) 453-179
(1) $862-485$


(3) 762-578
(44) 720-271
(15) 530-264


## Solve.

$$
1000-368 \quad 1000-368
$$

| th | $h$ | $t$ | 0 |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  | 10 |  |  |
|  | 0 | 0 | 0 |
|  | 3 | 0 | 8 |

We can't subtract 8 from 0 , so want to borrow 10 from the " t ", but the " t " is 0 and also the " h " is 0 .

Then in this calculation, we borrow from the " th" in order. Frist, borrow from the 'th" to the "h".

Since we borrow from the " h " to the " t ", we cross out 10 at the " $h$ " and write 9 at the top of " $h$ ".

Finally, as we borrow from the " t " to the "o", we cross out 10 and write 9. We write 10 at the top of "o".

## 1000-368

1000-368

| th | $h$ | $t$ | 0 |
| :---: | :---: | :---: | :---: |
|  | 9 |  |  |
| 10 | 10 |  |  |
|  | $Q$ | $Q$ | 0 |
|  | 3 | 6 | 8 |

" o " means $\bigcirc$, " t " means $\times$, " h " means O , "th" means $\square$.


Example Solve. Cross out the number when it changes.

$$
1000-368 \quad 1000-368
$$


(1) 1000-347

(2) 1003-497

(5) 1000-81
$\left[\begin{array}{ll:l}1 & & \\ \hline-1 & 0 & 0 \\ \hdashline & & 8 \\ \hline & & \\ \hline\end{array}\right]$
(4) 1005-978
$\left(\begin{array}{ccc:c:c}\vdots & \vdots & \vdots & & \\ \vdots & \vdots & & & \\ \vdots & & & & \\ \vdots & & & & \\ \vdots & & & & \\ \vdots & & & & \\ \vdots & & & & \\ \vdots & & & & \\ \vdots\end{array}\right.$

Exercise Solve. Cross out the number when it changes.

(8)604-237

(9)803-655


(13) 602-98

(14) 201-5

(15)403-7


Example Solve. Cross out the number when it changes.
1000-368

| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

1000-368


Exercise Solve. Cross out the number when it changes.
(2) 1005-287

(1) 1000-514

(4) 1002-925

| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

(3) 1400-666

(5) 1000-38

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  |  |  | $:$ |
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(6) 1000-29

| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
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Exercise Solve. Cross out the number when it changes.
(7) 602-376
(8) 302-178
(9) 401-244

(10) 305-108

(11) 600-203

(12) 308-59

(13) 702-67

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
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(14) 304-7

(15) 403-8


Example Solve. Cross out the number when it changes.

## 1000-368 <br> 1000-368




Exercise Solve. Cross out the number when it changes.
(1) 1000-935

(4) 1003-28

| th $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |  |
| :---: | :---: | :---: | :---: |
|  | $:$ |  |  |
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|  |  |  |  |

(2) 1007-739

(3) 1500-523

(6) 1000-55


Exercise Solve. Cross out the number when it changes.
(7) 704-597
(8) 908-729

(9) 505-327

(10) 603-305

(11) 300-109

(12) 405-48

(13) 807-58

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{0}$ |
| :---: | :---: | :---: | :---: |
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(14) 605-9

(15) 702-6


Calculate in order from the " 0 ".



Example Solve. Cross out the number when it changes.

$$
1267-516 \text { Do Not } 1267-51,6
$$



Exercise Solve. Cross out the number when it changes.
(1) 1645-822

(2) 1178-653

(5) 1427-783
$\begin{array}{lll} & & \\ & 1 & 2 \\ & 7 & 7 \\ & & 8\end{array}$
(6)1549-960

|  |  |  |
| :---: | :---: | :---: |
|  | 1 |  |
|  |  | 9 |
|  |  |  |
|  |  |  |

Exercise Solve. Cross out the number when it changes.

(91323-655
$\left[\begin{array}{l:l:l}\hline & & \\ \hline & & 6 \\ \hline & & \\ \hline & & \\ \hline\end{array}\right.$

(11)2643-851

(14)2214-636

(15)2435-868


Example Solve. Cross out the number when it changes.

1267-516

| th | h | $t$ | - |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |

1267-516


Exercise Solve. Cross out the number when it changes.
(1) 1184-721

(4) 1325-418

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
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|  |  |  |  |

(2) 1688-884

(5) 1168-392

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |  |
| :--- | :--- | :--- | :--- | :--- |
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(3) $1256-532$

(6) 1527-654

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
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Exercise Solve. Cross out the number when it changes.
(7) 1246-358
(8) 1352-776
(9) 1435-847

(10) 2315-684

(11) 2237-693

(12) 2569-786

(13) 2192-524

(14) 2345-418

(15) 2461-935


Example Solve. Cross out the number when it changes.
1267-516

|  | th h | t | - |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |



Exercise Solve. Cross out the number when it changes.
(1) 1368-652

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
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(4) $1832-914$

(2) 1257-736

(5) $1639-852$

(3) $1186-423$

(6) $1341-515$

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{0}$ |
| :---: | :---: | :---: | :---: |
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## Exercise Solve. Cross out the number when it changes.

(7) 1547-898

(8) 1234-765

(9) 1325-648

(10) 2336-771

(11) 2154-482

(12) 2243-650

(13) 2155-367

(14) 2435-578

| th | $h$ | $t$ | 0 |
| :--- | :--- | :--- | :--- |

(15) 2612-954




Example Solve. Cross out the number when it changes.

$$
3749-1375 \text { Do NOT } 3749-1375
$$



Exercise Solve. Cross out the number when it changes.
(1) 8564-4532

|  |
| :---: |
|  |

(2) 5464-1822

(3) $3625-2134$

| 3 | 6 | 2 |
| ---: | ---: | ---: |
| -2 | 1 | 3 |
|  |  |  |

(4) $3872-1365$
$\begin{array}{lll} & & \\ 3 & 8 & 2 \\ -1 & 3 & 5\end{array}$
(5) 5259-3285
$\begin{array}{rl} & \\ & 2 \\ 2 & 2 \\ 2 & 5\end{array}$
(6)7693-2847


Exercise Solve. Cross out the number when it changes.


(13) 5142-4148
(14)3527-1839

(15)4760-2894


Example Solve. Cross out the number when it changes.

3749-1375

| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
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|  |  |  |  |

3749-1375


Exercise Solve. Cross out the number when it changes.
(1) 6975-3621

(4) $4583-2457$
(5) $6748-2763$

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
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|  |  |  |  |

(3) $8537-4261$

(6) 5372-3516


Exercise Solve. Cross out the number when it changes.
(7) 5836-1468
(8) 7600-4329
(9) 8704-5916

(10) $8103-3726$

(11) $6032-3257$

(12) 4032-1756

(13) 3151-2154

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
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(14) 7325-4638

(15) $5230-3377$


Example Solve. Cross out the number when it changes.

$$
3749-1375 \quad 3749-1375
$$

| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :--- | :--- | :--- | :--- |
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Exercise Solve. Cross out the number when it changes.

(4) 5473-2635

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
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(2) $4257-2635$

(3) $3718-2453$

(6) 8253-4617

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
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Exercise Solve. Cross out the number when it changes.
(7) 6825-1577
(8) $6400-3157$
(9) 7503-4628


| th | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
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(10) $5302-2537$

(11) 8041-5363

(12) 4025-1567

(13) $3284-2286$

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{o}$ |
| :---: | :---: | :---: | :---: |
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(14) 9231-6745

(15) $4520-2653$

| $\mathbf{t h}$ | $\mathbf{h}$ | $\mathbf{t}$ | $\mathbf{0}$ |
| :---: | :---: | :---: | :---: |
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Each of the three members has a bowl with 5 onions. How many onions are there altogether?


There are three bowls altogether because each one has a bowl.


Let's find out how many onions do they have altogether.

We can
find out by addition.





We write a number sentence of multiplication in the following order. (the number of groups) $\times$ (the number of things in a group)

$$
=\text { (the total number of things) }
$$

The number of onions in a group is 5 and the number of groups is 3 , therefore the total number of onions is 15.
" $3 \times 5$ " means there are 5 onions in each of the three groups.

Example Fill in the $\square$ to make a number sentence of multiplication.


Exercise Fill in the $\square$ to make a number sentence of multiplication.
(1)

(2)

(3)

(4)


Exercise Fill in the $\square$ to make a number sentence of multiplication.
(5)


$$
\square \times \square
$$

(6)

(7)

(8)


Example Fill in the $\square$ to find out the total number of onions.


Exercise Fill in the $\square$ to find out the total number of onions.
(1)


(2)

$5+5$

(3)

$5+5+5$

(4)


$$
5+5+5+5 \times \square=\square
$$

Exercise Fill in the $\square$ to find out the total number of onions.
(5)

$5+5+5+5+5$

$$
\square \times \square=\square
$$

(6)

(7)

(8)

(9)

$5+5+5+5+5+5+5+5+5$

## Let's look at 5 times table.


7\times5=35
7\times5=35
$8 \times 5=40$
$9 \times 5=45$

The " o " of
the answers
are $5,0,5,0$.

$$
\begin{array}{l|l|}
\hline 1 \times 5= & 0 \\
2 \times 5=1 & 0 \\
3 \times 5=1 & 5 \\
4 \times 5=2 & 0 \\
\hline
\end{array}
$$

The answer increases by 5 .

Let's memorize 5 times table. After writing your answer, read them to memorize.
$1 \times 5=$ $\square$ one times five is five
$2 \times 5=$ $\square$ two timesfive is ten
$3 \times 5=$ $\square$ three times five is fifteen
$4 \times 5=$ $\square$ four times five is twenty
$5 \times 5=$ $\square$ five times five is twenty five
$6 \times 5=$ $\square$ six times five is thirty
$7 \times 5=$ $\square$ seven times five is thirty five $8 \times 5=$ $\square$ eight times five is forty $9 \times 5=$ $\square$ nine times five is forty five


Example Fill in the $\square$ to find out the total number of onions.


Exercise Fill in the $\square$ to find out the total number of onions.
(1)

(2)

(3)


$$
2+2+2 \quad \square \times \square
$$

(4)


Exercise Fill in the $\square$ to find out the total number of onions.
(5)


$$
2+2+2+2+2
$$

$$
\square \times \square=\square
$$

(6)

$2+2+2+2+2+2=\square=\square$

(8)


$$
2+2+2+2+2+2+2+2=\square=\square
$$



Let's look at 2 times table.

$2 \times 2=4$
$3 \times 2=6$

$6 \times 2=12$


$$
7 \times 2=14
$$


$8 \times 2=16$

$9 \times 2=18$

The answer increases by 2.

Let's memorize 2 times table. After writing your answer, read them to memorize.

one times two is two
$2 \times 2=\square$
two times two is four

three times two is six

four times two is eight

five times two is ten

six times two is twelve

seven times two is fourteen
$8 \times 2=$
eight times two is sixteen
$9 \times 2=$
nine times two is eighteen


Let's find the total number of eggs from 1 to 4 bowls which of them have three ones.


Do you notice anything by comparing the answers?
 by three when the number of bowls increases by one.

Example Fill in the $\square$ to find out the total number of onions.


Exercise Fill in the $\square$ to find out the total number of onions.
(1)

(2)

$3+3$

$$
\square \times \square=\square
$$

(3)

$3+3+3$
$\square \times \square=\square$
(4)


$$
[3+3+3+3] \square \square=\square
$$

Exercise Fill in the $\square$ to find out the total number of onions.
(5)

$3+3+3+3+3$
$\square \times \square=\square$
(6)

## 

$\left[\begin{array}{c}\text { [3+3+3+3+3+3]} \\ \\ \square\end{array} \square\right.$
(7)

## 

$3+3+3+3+3+3+3 \times \square=\square$
(8)

$3+3+3+3+3+3+3+3 \times \square=\square$
(9)

$3+3+3+3+3+3+3+3+3] \times \square=\square$

Let's look at 3 times table.


The answer
increases by 2.


Let's memorize 2 times table. After writing your answer, read them to memorize.

one times two is two

two times three is four

three times three is six

four times three is eight

five times three is ten

six times three is twelve

seven times three is forty

eight times three is sixteen
$9 \times 3=$ nine times three is eighteen


Let's find the total number of packets of peanuts from 1 to 4 bowls which of them have three ones.


Example Fill in the $\square$ to find out the total number of peanuts.

$\square$ to find out the total number of peanuts.
(1)


4

$\square$
(2)

$4+4$

(3)

$4+4+4$
$\square \times \square=$ $\square$
(4)

$\square$ to find out the total number of peanuts.
(5)

(6)

(7)


$$
4+4+4+4+4+4+4
$$


$\square$
(8)

(9)


$$
4+4+4+4+4+4+4+4+4 \times \square=\square
$$

## Let's look at 4 times table.



Because the multiplier is 4 .

Let's memorize 2 times table. After writing your answer, read them to memorize.


Let's look at the multiplication table of $2,3,4$ and 5 .

## This number stands for the number at

 the bottom of a multiplication.|  |  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| 3 | 3 | 6 | 9 | 12 | 15 |  | 21 | 24 | 27 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| This number stands for the number at the top of a multiplication. <br> This number stands for the answers of multiplications. |  |  |  |  |  |  |  |  |  |

This " 18 " stands for the answer for $3 \times 6$.

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | $\leftarrow 3 \times 6=18$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 4 | 6 | 8 | 10 | $\sqrt{4}$ | 14 | 16 | 18 |  |
| 3 |  | - |  | 7 | $\rightarrow$ | (18) | 21 | 24 | 27 |  |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 |  |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |  |

Let's write the multiplication table of $2,3,4$ and 5 .

This number stands for the number at the bottom of a multiplication.

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 4 | 6 |  |  |  |  |  |  |
| 3 | 3 |  |  |  |  |  |  |  |  |
| 4 | 4 |  |  |  |  |  |  |  |  |
| 5 | 5 |  |  |  |  |  |  |  |  |

This number stands for the number at the top of a multiplication.

This number stands for the answers of multiplications.

## We realize many things from the multiplication table.

There are two places which have " 6 " as the answer. $2 \times 3=6$ and $3 \times 2=6$.

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |


increases by 1 increases by 1 increases by 1 increases by 1 increases by 1 increases by 1 increases by 1 increases by 1
The answers of the "two times table" increase by 2 when the number of the bottom increases by 1.

increases by 2 increases by 2 increases by 2 increases by 2 increases by 2 increases by 2 increases by 2 increases by 2

Example
Write the answer in the $\square$ by checking the table of multiplication.

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |

The answers of the "three times table" increase by

1) The answers of the "three times table" increase by

2) The answers of the "five times table" increase by

3) There are $\square$ places which have 8 as the answer.
4) There are $\square$ places which have 10 as the answer.
5) There are

Example Multiply.
(@) Good!
$5 \times 3=\square \Rightarrow 5 \times 3=15$

Exercise Multiply.
(1) $2 \times 4=\square$
(2) $3 \times 2=\square$
(3) $4 \times 3=\square$
(4) $5 \times 1=\square$
(5) $2 \times 7=\square$
(6) $3 \times 1=\square$
(7) $5 \times 2=\square$
(8) $4 \times 8=\square$
(9) $3 \times 9=\square$
(10) $2 \times 6=\square$
(11) $4 \times 1=\square$
(12) $5 \times 4=\square$
(13) $4 \times 9=\square$
(14) $2 \times 1=\square$
(15) $5 \times 8=\square$
(16) $4 \times 6=\square$

Exercise Multiply.


Example Tick in the $\square$ which is larger.


| $3 \times 3$ |
| :---: |
|  |


$\Rightarrow$
$3 \times 3$
$3 \times 2$

Exercise Tick in the $\square$ which is larger.
(1)


(2) $2 \times 5$
 $2 \times 6$

(3) $3 \times 4$

$3 \times 5$
(4) $2 \times 7$

$2 \times 6$



Exercise Tick in the $\square$ which is smaller.
(1)

(2) $5 \times 3 \quad 3 \times 3$
(3) $3 \times 4$
$2 \times 8$
(4) $4 \times 7$
$5 \times 6$

## 4 Find out the number of $\longrightarrow$ by multiplication.


$\square \times 5=\square$

$\square \times 3=\square$

| 1 | $3{ }^{4}$ | \&os <br> Good! |  |  | 2 | 34 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\theta 9$ |  |  |  | $\theta$ | - |  | O |
| 290 |  |  | 2 | $\bigcirc$ | 9 |  | $\theta$ |
| ${ }^{3} \mathrm{O} \theta$ |  |  | 3 | $\bigcirc$ | - |  | $\bigcirc$ |
| 498 |  |  | 4 |  |  |  |  |
| 59 O |  |  | 5 |  |  |  |  |

## $2 \times 5=10$

 $4 \times 3=12$We can find out the number of $P$
by multiply the number in the row and column.

## Let's make a "six times table" by

 the table of $P$.|  | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| 1 | $\Theta$ |  |  |  |
| 2 | $\Theta$ |  |  |  |
| 3 | $\Theta$ |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |


$2 \times 6=$

$3 \times 6=\square$
$4 \times 6=\square$

The answer increases by 6 when the number in the bottom of the multiplication increases by one.

## Let's make a "six times table" by the table of $\bigcirc$.

table of

$$
1 \times 6=6
$$

$$
2 \times 6=12
$$

$$
3 \times 6=18
$$

$$
4 \times 6=24
$$

$$
5 \times 6=\square
$$

$$
6 \times 6=\square
$$

$$
7 \times 6=\square
$$

$$
8 \times 6=\square
$$

$$
9 \times 6=\square
$$

|  |  | 2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | O | - | O | O | - | - |  |
|  |  | - | - | - | O | - |  |
|  |  |  |  | - | O | - |  |
|  |  | O | O | - | O | - |  |
|  |  |  | 9 | 9 | O | - |  |
|  |  | O | 9 | O | O |  |  |

We can find the answer for $\lceil 6 \times 5$ 」 by counting the number of $P$ in a row.

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | O | O | $\bigcirc$ | O | O | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | 0 |
| 2 | O |  | O | O | O | - | $\bigcirc$ | O | 0 |
| 3 | O | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | O | 앙 |
| 4 | O | $\bigcirc$ | $\bigcirc$ | O | $\bigcirc$ | O | 0 | O | O |
| 5 |  |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |
| 6 |  | - |  |  |  |  |  | O | O |

The answer of $5 \times 6$

Let's look at 6 times table.


$$
7 \times 6=42
$$



The answer increases by 6 . your answer, read them to memorize.

one times six is six
$2 \times 6=\square$
two times six is twelve

three times six is eighteen

four times six is twenty four
$5 \times 6=\square$
$6 \times 6=\square$
$7 \times 6=\square$
six times six is thirty six
$8 \times 6=\square$
seven times six is forty two
$9 \times 6=\square$
eight times six is forty eight


## Let's make a "seven times table" by the table of



|  | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 | $B$ |  |  |  |
| 7 |  |  |  |  |

$2 \times 7=\square$

$3 \times 7=$

$4 \times 7=\square$

The answer increases by 7 when the number in the bottom of the multiplication increases by one .

$$
1 \times 7=7
$$

$$
2 \times 7=14
$$

$$
3 \times 7=21
$$

$$
4 \times 7=28
$$

$$
5 \times 7=\square
$$

$$
6 \times 7=\square
$$

$$
7 \times 7=\square
$$

$$
8 \times 7=\square
$$

$$
9 \times 7=\square
$$

table of

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | 9 | 9 | - | - |  |  | 9 |
|  | Oe | 9 | O | - |  |  | 9 |
|  | $\bigcirc$ |  |  |  |  |  | 9 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

We can find the answer for「5 $\times 7$ 」 by counting the number of $\theta$ in a row.

| , | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\bigcirc$ | O | $\bigcirc$ | O | O | O |  | - |  |
| 2 | O | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | 0 |
| 3 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | O | O | O | $\bigcirc$ | O |  |
| 4 | O | O | - | O | $\bigcirc$ | - | O | - |  |
| 5 | O | O | $\bigcirc$ | O | $\bigcirc$ | - | $\bigcirc$ | O |  |
| 6 | $\bigcirc$ | $\bigcirc$ | O | $\bigcirc$ | O | O | $\bigcirc$ |  |  |
| 7 |  |  |  |  |  |  |  | O |  |

The answer of

Let's look at 7 times table.


The answer increases by 7 .

Let's memorize 7 times table. After writing your answer, read them to memorize.

one times seven is seven

two times seven is fourteen

three times seven is twenty one

four times seven is twenty eight
$5 \times 7=\square$
$6 \times 7=\square$
$7 \times 7=\square$
six times seven is forty two
$8 \times 7=\square$
$9 \times 7=\square$
eight times seven is fifty six

## 

by multiplication.


There are 5 groups of $3>$. So, it is $5 \times 3$.


## Let's find out the number of

 The number sentence is $2 \times 8$.

## (8) $\times 2$

We get the same answer even if we change the order of multiplication. Let's find the answer of $2 \times 8$ using this rule.

## What is the number sentence we get

 if we change the order of $2 \times 8$.
## (8) $\times(2)=\square \times \square$

$$
(8) \times(2)=2) \times 8
$$



Good!
$8 \times 2$ is in the "two times table", so we know the answer.

## Let's find the answer of multiplication.



$$
(8) \times(2)=2) \times 8
$$

$$
\begin{aligned}
& 2 \times \times(8)=\square \\
& (8) \times(2)=\square
\end{aligned}
$$

$2 \times 8$ is in the "two times table". $8 \times 2$ and $2 \times 8$ have the same answer.


We can find the "eight times table" using the rule of multiplication.


Let's make the "eight times table" using the rule of multiplication.

|  |  | 23 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | - | - |  |  |  |  |  |  |
|  | 9 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

We get the same answer even if we change the order of multiplication. So, if you want to find the answer for $2 \times 8$, you should multiply $8 \times 2$.
$1 \times 8=$
$2 \times 8=\square \times \square=\square=\square$
$3 \times 8=\square=\square$
$4 \times 8=\square=\square$
$5 \times 8=\square$
$7 \times 8=\square$
group of 8, so it
is 8.

Let' find the answer of $8 \times 8 \& 8 \times 9$ by the table of

$$
\begin{aligned}
& 1 \times 8=8 \\
& 2 \times 8=16 \\
& 3 \times 8=24 \\
& 4 \times 8=32 \\
& 5 \times 8=40 \\
& 6 \times 8=48 \\
& 7 \times 8=56 \\
& 8 \times 8=\square \\
& 9 \times 8=\square
\end{aligned}
$$

table of


$$
\text { The increment, " } 8 \text { ", is the }
$$

same as the multiplicand
(the number at the bottom).

## Let's look at 8 times table.



Let's memorize 8 times table. After writing your answer, read them to memorize.

one times eight is eight

two times eight is sixteen

three times eight is twenty four

four times eight is thirty two

five times eight is forty
$6 \times 8=\square$

seven times eight is fifty six

eight times eight is sixty four
$9 \times 8=\square$
nine times eight is seventy two

## Let's find the number of $P$ by multiplication.



The number sentence is $2 \times 9$.

## (2) $\times 9$



We get the same answer even if we change the order of multiplication. Let's find the answer of $2 \times 9$ using this rule.

What is the number sentence we get if we change the order of $2 \times 9$.

$$
2 \times(9)=\square \times \square
$$

$9 \times 2$ is in the "two times table", so we know the answer.

## Let's find the answer of multiplication.


$2) \times 9=9 \times 2$
$(9 \times(2)=\square$
$(2) \times 9)=\square$
$2 \times 9$ is in the "two times table".
$9 \times 2$ and $2 \times 9$ have the same answer.


We can find the "nine times table" using the rule of multiplication.

Let's make the "nine times table" using the rule of multiplication.

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oe | - | O |  |  |  |
|  |  | - | O |  |  |  |
|  |  |  | - |  |  |  |
|  |  | - | - |  |  |  |
|  |  |  |  |  |  |  |
|  |  | O |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

We get the same answer even if we change the order of multiplication. So, if you want to find the answer for $8 \times 2$, you should multiply $2 \times 8$.


## Let' find the answer of $9 \times 9$ by the table of



Let's look at 9 times table.


The answer increases by 8 .

Let's memorize 9 times table. After writing your answer, read them to memorize.

one times nine is nine
$2 \times 9=\square$
$3 \times 9=\square$
$4 \times 9=\square$
$5 \times 9=\square$
$6 \times 9=\square$
$7 \times 9=\square$
$8 \times 9=\square$
$9 \times 9=$
nine times eight is eighty one

$$
\begin{aligned}
& 1 \times 1=\square \\
& 2 \times 1=\square \\
& 3 \times 1=\square \\
& 4 \times 1=\square \\
& 5 \times 1=\square \\
& 6 \times 1=\square \\
& 7 \times 1=\square \\
& 8 \times 1=\square \\
& 9 \times 1=\square
\end{aligned}
$$

$$
1 \times 1=1
$$

$$
2 \times 1=2
$$

$$
3 \times 1=3
$$

$$
4 \times 1=4
$$

$$
5 \times 1=5
$$

$$
6 \times 1=6
$$

$$
7 \times 1=7
$$

$$
8 \times 1=8
$$

table of

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

The increment, " 1 ", is the
same as the multiplicand (the number at the bottom).

$$
9 \times 1=9
$$

## Let's look at 1 times table.



## 000009

$1 \times 6=6$

0000000

$$
1 \times 7=7
$$

| 00000000 | 000000000 |
| :---: | :---: |
| $1 \times 8=8$ | $1 \times 9=9$ |



The increment, " 1 ", is the same as the multiplicand
(the number at the bottom).

Let's memorize 8 times table. After writing your answer, read them to memorize.

one times one is one

two times one is two

three times one is three

four times one is four
$5 \times 1=\square$
$6 \times 1=\square$

six times one is six
five times one is five

eight times one is eight
$9 \times 1=\square$
nine times one is nine

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1 |  |  |  |  |  |  |  |  |  |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 6 |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |

## When the multiplier increased by one, then answer

 increased by the same number of the multiplicand in multiplication.Example
Write the answer in the $\square$ by checking the table of multiplication.

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 |

The answers of the "six times table" increases by
Exercise Write the answer in the $\square$ by checking the table of multiplication.

1) The answers of the "seven times table" increase by

2) The answers of the "nine times table" increase by

3) There are $\square$ places which have 24 as the answer.
4) There are $\square$ places which have 42 as the answer.
5) There are $\square$ places which have 18 as the answer.

Example
Find the total number of things by writing a number sentence of multiplication The total number of onions.

$\sqrt{b}$


Good!


Exercise Find the total number of things by writing a number sentence of multiplication

1) The total number of $Q$ eggs.

2) The total number of bottles.


Exercise
Find the total number of things by writing a number sentence of multiplication.

5) The total number of
 bananas.
 6) The total number of $\mathbb{\sim}$ birds. $\square=\square$
7) The total number of tins.


Exercise
Find the total number of things by writing a number sentence of multiplication.
8) The total number of

9) The total number of peanuts. $\square=\square$

11) The total number of $Q$ eggs. $\quad \square=\square$


Example Multiply.

# $6 \times 3=\square \Rightarrow 6 \times 3=18$ 

Exercise Multiply.
(1) $6 \times 4=\square$
(2) $7 \times 2=\square$
(3) $8 \times 3=\square$
(4) $9 \times 1=\square$
(5) $6 \times 7=\square$
(6) $7 \times 1=\square$
(7) $9 \times 2=\square$
(8) $8 \times 8=\square$
(9) $7 \times 9=\square$
(10) $6 \times 6=\square$
(11) $8 \times 1=\square$
(12) $9 \times 4=\square$
(3) $8 \times 9=\square$
(44) $6 \times 1=\square$
(5) $9 \times 8=\square$
(6) $8 \times 6=\square$

Exercise Multiply.


Exercise Multiply.
(37) $6 \times 2=\square$
(39) $1 \times 7=\square$
(41) $1 \times 2=\square$
(43) $2 \times 8=\square$
(45) $1 \times 9=\square$
(47) $8 \times 7=\square$
(49) $8 \times 2=\square$
(51) $1 \times 6=\square$
(3) $9 \times 3=\square$
(55) $6 \times 8=\square$
(38) $7 \times 4=\square$
(40) $3 \times 3=\square$
(42) $9 \times 9=\square$
(44) $5 \times 3=\square$
(64) $8 \times 5=\square$
(4) $6 \times 5=\square$
(10) $9 \times 5=\square$
(2) $6 \times 3=\square$
(4) $4 \times 7=\square$

6 $7 \times 3=\square$

Example Tick in the $\square$ which is larger.


CS GOod!

Exercise Tick in the $\square$ which is larger.
(1)


(2) $7 \times 2$
 $7 \times 3$

(3)

$8 \times 6$
(4) $9 \times 7$
$9 \times 6$

Exercise Tick in the $\square$ which is smaller.
(1)


$9 \times 3$

(3) $7 \times 4$
$6 \times 8$
(4) $8 \times 7 \quad 9 \times 5$

Let's read the multiplication table aloud to memorize all of them from $1 \times 1$ to $9 \times 9$.

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 |

We read $1 \times 1$ as one times one.
You can read it with your friends.

## Let's find out the rule of multiplication.

In multiplication, the answer increases the same as the number at the bottom of the number sentence.
increase by 1

increase by 2

This means if the number at the bottom increases by 1, the answer increases by 2 in the two times table.


## Write the answer in the $\square$ by using this rule.

The answer of $4 \times 3$ is
The answer of $2 \times 6$ is

more than the answer of $3 \times 3$.
less than the answer of $3 \times 6$.

Good!
The answer of $4 \times 3$ is more than the answer of $3 \times 3$.
The answer of $2 \times 6$ is

The multiplicand of $4 \times 3$ is one more than that of $3 \times 3$. The answer of $4 \times 3$ is 3 more than the answer of $3 \times 3$. The multiplicand of $2 \times 6$ is one more than that of $3 \times 6$. The answer of $2 \times 6$ is 3 more than the answer of $3 \times 6$.

## Example

Write the answer in the $\square$

The answer of $4 \times 3$ is
 more than the answer of $3 \times 3$.


The answer of $4 \times 3$ is more than the answer of $3 \times 3$.

## Exercise

Write the answer in the $\square$

1) The answer of $5 \times 7$ is $\square$ more than the answer of $4 \times 7$.
2) The answer of $2 \times 9$ is
 less than the answer of $3 \times 9$.
3) The answer of $4 \times 4$ is $\square$ less than the answer of $5 \times 4$.
4) The answer of $6 \times 3$ is $\square$ less than the answer of $7 \times 3$.
5) The answer of $9 \times 2$ is $\square$ more than the answer of $8 \times 2$.
6) The answer of $4 \times 6$ is

7) The answer of $6 \times 8$ is

8) The answer of $5 \times 5$ is

9) The answer of $3 \times 7$ is


Let's find out another rule of multiplication.

In multiplication, you will get the same answer even if you change the order of multiplication.

| $\mathbf{y}$ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 |



The answers corresponding to diagonal position are the same.
$1 \times 2$ and $2 \times 1$, $2 \times 3$ and $3 \times 2$, $4 \times 7$ and $7 \times 4$, there are many pairs of answers which have the same answer.


Write the answer in the by using this rule.

The answer of $4 \times 3$ is the same as the answer of $3 \times$

The answer of $4 \times 3$ is the same as the answer of $3 \times$
$\square$

The answer of $4 \times 3$ is the same as the answer of $3 \times$


The answer of $4 \times 3$ is the same as the answer of $3 \times$


Good! Exercise Write the answer in the $\square$.
(1) The answer of $2 \times 7$ is the same as the answer of $7 \times$
(2) The answer of $5 \times 4$ is the same as the answer of $4 \times$
(3) The answer of $6 \times 2$ is the same as the answer of

(4) The answer of $8 \times 5$ is the same as the answer of $\square \times 8$.
(5) The answer of $7 \times 3$ is the same as the answer of $3 \times$
(6) The answer of $4 \times 8$ is the same as the answer of $8 \times$

(7) The answer of $3 \times 5$ is the same as the answer of $5 \times$
(8) The answer of $8 \times 7$ is the same as the answer of $\square$
(9) The answer of $9 \times 4$ is the same as the answer of


Example Write the answer in the $\square$.

The multiplication which becomes 14 are


The multiplication which becomes 14 are
$2 \times 7$ and $7 \times 2$ Exercise Write the answer in the $\square$.
(1)The multiplication which becomes 15 are

(2)The multiplication which becomes 27 are

(3)The multiplication which becomes 32 are

(4)The multiplication which becomes 42 are

(5) The multiplication which becomes 54 are

(6)The multiplication which becomes 12 are

(7) The multiplication which becomes 24 are


Let's compare the "two times table", "three times table" and "five times table".

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |

If we look at the multiplication table in a column,
the sum of the two times table and the three times
table are the same as the five times table.

Let's find out using the table of


What is the sum of $2 \times 3$ and $3 \times 3$.


| 5 | 5 | 10 | 15 |
| :--- | :--- | :--- | :--- |

Good!

Let's look at $2 \times 3,3 \times 3$ and $5 \times 3$.


The sum of the top of $2 \times 3$ and $3 \times 3$ is the same as number at the top of $5 \times 3$.

Let's check if the answers of the sum of the two answers of multiplication by $2 \times 4,3 \times 4$ and $5 \times 4$.


|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 |
| $\downarrow$ |  |  |  |  |  |  |  |  |  |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |

The sum of 2 times table and 3 times table are the 5 times table.

## Example Write the correct answer in the

$\square$
The sum of 2 times table and 3 times table are the $\square$ times table.


The sum of 2 times table and 3 times table are the times table.


Exercise Write the correct answer in the $\square$

1) The sum of 2 times table and 4 times table are
the $\square$ times table.
2) The sum of 1 times table and 7 times table are the $\square$ times table.
3) The sum of 4 times table and 5 times table are the $\square$ times table.
4) The sum of 2 times table and 5 times table are the $\square$ times table.
