

# 5. [Large Number +,-]

## Skill 5.1 Adding large numbers without carry over.

MM7 1 2 2 3 3 4 4  
MM8 1 1 2 2 3 3 4 4

- Always keep your working columns in line, aligning units with units, tens with tens, etc.
- Add from right to left.

Q.  $1276 + 4520 =$

A.  $1276 + 4520 = 5796$

$$\begin{array}{r} 1\ 2\ 7\ 6 \\ +\ 4\ 5\ 2\ 0 \\ \hline 5\ 7\ 9\ 6 \end{array}$$

*thousands*  
*hundreds*  
*tens*  
*units*

**Units:**  $6 + 0 = 6 \Rightarrow 6$  units

**Tens:**  $7 + 2 = 9 \Rightarrow 9$  tens

**Hundreds:**  $2 + 5 = 7 \Rightarrow 7$  hundreds

**Thousands:**  $1 + 4 = 5 \Rightarrow 5$  thousands

a)  $5420 + 362 =$

$$\begin{array}{r} 5\ 4\ 2\ 0 \\ +\ 3\ 6\ 2 \\ \hline 5\ 7\ 8\ 2 \end{array}$$

b)  $1674 + 125 =$

$$\begin{array}{r} 1\ 6\ 7\ 4 \\ +\ 1\ 2\ 5 \\ \hline \end{array}$$

c)  $2081 + 406 =$

$$\begin{array}{r} 2\ 0\ 8\ 1 \\ +\ 4\ 0\ 6 \\ \hline \end{array}$$

d)  $2316 + 350 =$

$$\begin{array}{r} 2\ 3\ 1\ 6 \\ +\ 3\ 5\ 0 \\ \hline \end{array}$$

e)  $1854 + 124 =$

$$\begin{array}{r} 1\ 8\ 5\ 4 \\ +\ 1\ 2\ 4 \\ \hline \end{array}$$

f)  $3224 + 360 =$

$$\begin{array}{r} 3\ 2\ 2\ 4 \\ +\ 3\ 6\ 0 \\ \hline \end{array}$$

g)  $2246 + 7401 =$

$$\begin{array}{r} 2\ 2\ 4\ 6 \\ +\ 7\ 4\ 0\ 1 \\ \hline \end{array}$$

h)  $3517 + 2262 =$

$$\begin{array}{r} 3\ 5\ 1\ 7 \\ +\ 2\ 2\ 6\ 2 \\ \hline \end{array}$$

i)  $1843 + 3026 =$

$$\begin{array}{r} 1\ 8\ 4\ 3 \\ +\ 3\ 0\ 2\ 6 \\ \hline \end{array}$$

j)  $7024 + 1721 =$

$$\begin{array}{r} 7\ 0\ 2\ 4 \\ +\ 1\ 7\ 2\ 1 \\ \hline \end{array}$$

k)  $3251 + 3641 =$

$$\begin{array}{r} 3\ 2\ 5\ 1 \\ +\ 3\ 6\ 4\ 1 \\ \hline \end{array}$$

l)  $4835 + 2163 =$

$$\begin{array}{r} 4\ 8\ 3\ 5 \\ +\ 2\ 1\ 6\ 3 \\ \hline \end{array}$$

**Skill 5.2** Subtracting large numbers without carry over.

MM7 1 1 2 2 3 3 4 4  
MM8 1 1 2 2 3 3 4 4

- Always keep your working columns in line, aligning units with units, tens with tens, etc.
- Subtract from right to left.

**Q.**  $2718 - 1403 =$

**A.**  $2718 - 1403 = 1315$

**Units:**  $8 - 3 = 5 \Rightarrow 5$  units

**Tens:**  $1 - 0 = 1 \Rightarrow 1$  ten

**Hundreds:**  $7 - 4 = 3 \Rightarrow 3$  hundreds

**Thousands:**  $2 - 1 = 1 \Rightarrow 1$  thousand

$$\begin{array}{r} 2718 \\ - 1403 \\ \hline 1315 \end{array}$$

*thousands*  
*hundreds*  
*tens*  
*units*

**a)**  $5899 - 473 =$

$$\begin{array}{r} 5899 \\ - 473 \\ \hline 5426 \end{array}$$

**b)**  $1473 - 302 =$

$$\begin{array}{r} 1473 \\ - 302 \\ \hline \end{array}$$

**c)**  $1384 - 261 =$

$$\begin{array}{r} 1384 \\ - 261 \\ \hline \end{array}$$

**d)**  $8641 - 240 =$

$$\begin{array}{r} 8641 \\ - 240 \\ \hline \end{array}$$

**e)**  $2756 - 304 =$

$$\begin{array}{r} 2756 \\ - 304 \\ \hline \end{array}$$

**f)**  $8792 - 3420 =$

$$\begin{array}{r} 8792 \\ - 3420 \\ \hline \end{array}$$

**g)**  $6207 - 3201 =$

$$\begin{array}{r} 6207 \\ - 3201 \\ \hline \end{array}$$

**h)**  $7493 - 2151 =$

$$\begin{array}{r} 7493 \\ - 2151 \\ \hline \end{array}$$

**i)**  $9867 - 6456 =$

$$\begin{array}{r} 9867 \\ - 6456 \\ \hline \end{array}$$

**j)**  $7085 - 4013 =$

$$\begin{array}{r} 7085 \\ - 4013 \\ \hline \end{array}$$

**k)**  $8782 - 6241 =$

$$\begin{array}{r} 8782 \\ - 6241 \\ \hline \end{array}$$

**l)**  $5694 - 3564 =$

$$\begin{array}{r} 5694 \\ - 3564 \\ \hline \end{array}$$

### Skill 5.3 Adding two large numbers with carry over.

- Always keep your working columns in line, aligning units with units, tens with tens, etc.
- Add from right to left.

Q.  $4627 + 1398 =$

A.  $4627 + 1398 = 6025$

$$\begin{array}{r}
 \overset{1}{4} \overset{1}{6} \overset{1}{2} 7 \\
 + 1398 \\
 \hline
 6025 \\
 \hline
 \end{array}$$

thousands hundreds tens units

**Units:**  $7 + 8 = 15$   
 $15 \text{ units} = 1 \text{ ten and } 5 \text{ units} \Rightarrow 5 \text{ units}$   
 Carry the 1 ten to the tens column.

**Tens:**  $2 + 9 + \text{carry } 1 = 12$   
 $12 \text{ tens} = 1 \text{ hundred and } 2 \text{ tens} \Rightarrow 2 \text{ tens}$   
 Carry the 1 hundred to the next column.

**Hundreds:**  $6 + 3 + \text{carry } 1 = 10$   
 $10 \text{ hundreds} = 1 \text{ thousand and } 0 \text{ hundred} \Rightarrow 0 \text{ hundred}$   
 Carry the 1 thousand to the next column.

**Thousands:**  $4 + 1 + \text{carry } 1 = 6$   
 $\Rightarrow 6 \text{ thousands}$

a)  $2873 + 651 =$

$$\begin{array}{r}
 \overset{1}{2} \overset{1}{8} 7 3 \\
 + 651 \\
 \hline
 3524 \\
 \hline
 \end{array}$$

b)  $7546 + 372 =$

$$\begin{array}{r}
 7546 \\
 + 372 \\
 \hline
 \\
 \hline
 \end{array}$$

c)  $261 + 1384 =$

$$\begin{array}{r}
 261 \\
 + 1384 \\
 \hline
 \\
 \hline
 \end{array}$$

d)  $5783 + 2791 =$

$$\begin{array}{r}
 5783 \\
 + 2791 \\
 \hline
 \\
 \hline
 \end{array}$$

e)  $3367 + 2945 =$

$$\begin{array}{r}
 3367 \\
 + 2945 \\
 \hline
 \\
 \hline
 \end{array}$$

f)  $1592 + 4318 =$

$$\begin{array}{r}
 1592 \\
 + 4318 \\
 \hline
 \\
 \hline
 \end{array}$$

g)  $6256 + 2938 =$

$$\begin{array}{r}
 6256 \\
 + 2938 \\
 \hline
 \\
 \hline
 \end{array}$$

h)  $2098 + 3147 =$

$$\begin{array}{r}
 2098 \\
 + 3147 \\
 \hline
 \\
 \hline
 \end{array}$$

i)  $5437 + 2659 =$

$$\begin{array}{r}
 5437 \\
 + 2659 \\
 \hline
 \\
 \hline
 \end{array}$$

j)  $46723 + 3581 =$

$$\begin{array}{r}
 46723 \\
 + 3581 \\
 \hline
 \\
 \hline
 \end{array}$$

k)  $31054 + 6294 =$

$$\begin{array}{r}
 31054 \\
 + 6294 \\
 \hline
 \\
 \hline
 \end{array}$$

l)  $58943 + 2387 =$

$$\begin{array}{r}
 58943 \\
 + 2387 \\
 \hline
 \\
 \hline
 \end{array}$$

**Skill 5.4 Subtracting large numbers with carry over (1).**

MM7 1 1 2 2 3 4  
MM8 1 1 2 2 3 4 4

- Always keep your working columns in line, aligning units with units, tens with tens, etc.
- Subtract from right to left.
- Whenever a number cannot be subtracted from another number to give a positive result then use:

EITHER

**Decomposition method** - Borrow from a higher place value and give to a lower place value.

Example:  $3541 - 194 = 3347$

**Units:**  $1 - 4 = ?$

Borrow 1 ten from the tens column (reduce the 4 tens to 3 tens) and give it as 10 units to the units column to make 11 units.

$11 - 4 = 7$  units

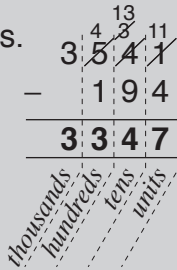
**Tens:**  $3 - 9 = ?$

Borrow 1 hundred from the hundreds column (reduce the 5 hundreds to 4 hundreds) and give it as 10 tens to the tens column to make 13 tens.

$13 - 9 = 4$  tens

**Hundreds:**  $4 - 1 = 3$  hundreds

**Thousands:**  $3 - 0 = 3$  thousands



OR

**Equal addition method** - Each time a number is added to the top it must also be added to the bottom but in different columns.

Example:  $3541 - 194 = 3347$

**Units:**  $1 - 4 = ?$

Add 10 units to the 1 and add 10 units (1 ten) to the 9 (bottom number in the tens column)

$11 - 4 = 7$  units

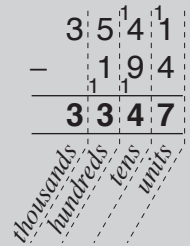
**Tens:**  $4 - (9 + 1) = ?$

Add 10 tens to the 4 and add 10 tens (1 hundred) to the 1 (bottom number in the hundreds column)

$14 - 10 = 4$  tens

**Hundreds:**  $5 - (1 + 1) = 3$  hundreds

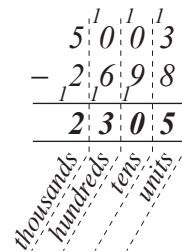
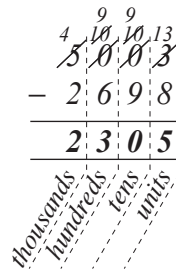
**Thousands:**  $3 - 0 = 3$  thousands



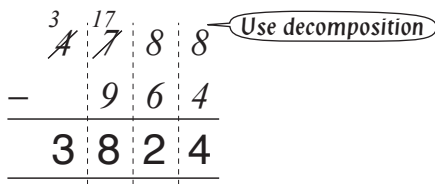
Q.  $5003 - 2698 =$

A.  $5003 - 2698 = 2305$

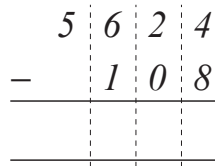
**Decomposition OR Equal addition**



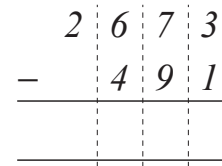
a)  $4788 - 964 =$  **3824**



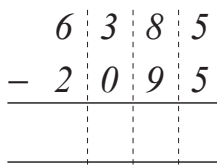
b)  $5624 - 108 =$   



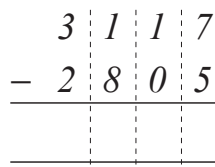
c)  $2673 - 491 =$   



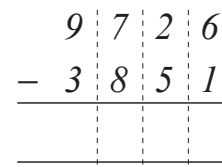
d)  $6385 - 2095 =$   



e)  $3117 - 2805 =$   



f)  $9726 - 3851 =$   



## Skill 5.4 Subtracting large numbers with carry over (2).

g)  $6319 - 254 =$      h)  $8536 - 914 =$      i)  $4467 - 318 =$

$$\begin{array}{r} 6 \ 3 \ 1 \ 9 \\ - \quad 2 \ 5 \ 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8 \ 5 \ 3 \ 6 \\ - \quad 9 \ 1 \ 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4 \ 4 \ 6 \ 7 \\ - \quad 3 \ 1 \ 8 \\ \hline \\ \hline \end{array}$$

j)  $9307 - 2453 =$      k)  $4083 - 1957 =$      l)  $7062 - 2948 =$

$$\begin{array}{r} 9 \ 3 \ 0 \ 7 \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4 \ 0 \ 8 \ 3 \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7 \ 0 \ 6 \ 2 \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

m)  $4208 - 657 =$      n)  $2009 - 121 =$      o)  $3564 - 285 =$

$$\begin{array}{r} 4 \ 2 \ 0 \ 8 \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2 \ 0 \ 0 \ 9 \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \quad \quad \quad \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

p)  $8357 - 489 =$      q)  $7231 - 645 =$      r)  $6534 - 3977 =$

$$\begin{array}{r} \quad \quad \quad \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \quad \quad \quad \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \quad \quad \quad \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

s)  $45328 - 8634 =$      t)  $31764 - 5936 =$      u)  $72004 - 4527 =$

$$\begin{array}{r} 4 \ 5 \ 3 \ 2 \ 8 \\ - \quad 8 \ 6 \ 3 \ 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3 \ 1 \ 7 \ 6 \ 4 \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7 \ 2 \ 0 \ 0 \ 4 \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

v)  $63148 - 7980 =$      w)  $52305 - 4615 =$      x)  $28007 - 3495 =$

$$\begin{array}{r} \quad \quad \quad \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \quad \quad \quad \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \quad \quad \quad \\ - \quad \quad \quad \\ \hline \\ \hline \end{array}$$

