*Girls' High School & College, Prayagraj*

*Worksheet No.6*

*Session - 2020-2021*

*Class - 3 ( A-F )*

*Subject – Mathematics*

*<u>Chapter- 3 – Subtraction</u>*

**<u>Instruction:</u>**- Parents are expected to ensure that the child first revises subtraction done in class 2  and then solves this worksheet.

Taking away some number or an object from a group is called **<u>subtraction.</u>**

When we talk of numbers, subtraction is taking away a smaller number from a bigger number.

The number from which we subtract is the <u>minuend</u>.

The number that is subtracted is the <u>subtrahend</u>.

The result of the subtraction is called the <u>difference</u>.

$$
\begin{array}{rl}
8888 & \leftarrow\text{Minuend} \\
-\,2222 & \leftarrow\text{Subtrahend} \\
\hline
6666 & \leftarrow\text{Difference}
\end{array}
$$

## *<u>Subtraction of 3-digit numbers ( without borrowing )</u>*

Let us subtract **145** from **957**.

**STEP 1:** Read ones column. **7 – 5**
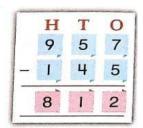   7  –  5  =  **2**. We write 2 in ones column.

**STEP 2:** Read tens column. **5 – 4**
   5  –  4  =  **1**. We write 1 in tens column.

**STEP 3:** Read hundreds column. **9 – 1**
   9  –  1  =  **8**. We write 8 in hundreds column.

| H | T | O |
|---|---|---|
| 9 | 5 | 7 |
| – 1 | 4 | 5 |
| 8 | 1 | 2 |

## *Subtraction of 3-digit numbers ( with borrowing )*

Let us subtract 375 from 529

```
 H   T   O
 4   12
 5   2   9
-3   7   5
 1   5   4
```

**STEP 1:** Read ones column. 9 – 5.
9 – 5 = 4. We write 4 in ones column.

**STEP 2:** Read tens column. 2 – 7.
But 7 > 2. So 7 cannot be subtracted from 2.
We borrow 1 hundred from hundreds place.
Now 1 hundred + 2 tens = 12 tens.
We cross out 2 and write 12.
Also we cross out 5 and write 4.
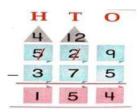Now, 12 – 7 = 5. We write 5 in tens column

**STEP 3:** Read hundreds column. 4 – 3
4 – 3 = 1. We write 1 in hundreds column.

## *Subtraction of 4-digit numbers ( without borrowing )*

Let us subtract 3542 from 4856

```
   Th   H   T   O
    4    8   5   6
 -  3    5   4   2
   _____
    1    3   1   4
   _____
```

Subtract ones.  = 6 – 2 = 4 ones.

Subtract tens.  = 5 – 4 = 1 ten.

Subtract hundreds.  = 8 – 5 = 3 hundreds.

Subtract thousands.  = 4 – 3 = 1 thousand.

The difference = 1314

## *Subtraction of 4-digit numbers( with borrowing )*

Let us subtract 4705 from 8132

| Th | H | T | O |
|----|-----|---|-----|
| 7 | 11 | 2 | 12 |
| 8 | 1 | 3 | 2 |
| − 4 | 7 | 0 | 5 |
| 3 | 4 | 2 | 7 |

STEP 1: 5 ones cannot be subtracted from 2 ones, so we borrow 1 ten from 3 tens. We cross out 3 and write 2. Also we cross out 2 and write 12.

12 ones – 5 ones = 7 ones

We write 7 in ones column.

STEP 2: 2 tens – 0 tens = 2 tens

We write 2 in tens column

STEP 3: 7 hundreds cannot be subtracted from 1 hundred, so we borrow 1 thousand from 8 thousands, we cross out 8 and write 7. Also we cross out 1 and write 11.

11 hundreds – 7 hundreds = 4 hundreds

We write 4 in hundreds column.

STEP 4: 7 thousands – 4 thousands = 3 thousands.

We write 3 in thousands column.

## *Subtraction stories*

Many situations around us involve subtraction of numbers. Such situations are called subtraction stories.

**EXAMPLE** . 2462 children were attending a camp. After one week 1231 children left the camp. How many children are there in the camp now?

SOLUTION:

|  | Th | H | T | O |
|---|---|---|---|---|
| Number of children in the camp | 2 | 4 | 6 | 2 |
| Number of children who left the camp | − 1 | 2 | 3 | 1 |
| Difference = | 1 | 2 | 3 | 1 |

Ans. 1231 children are left in the camp.

### Properties of subtraction

Property 1: When we subtract 0 from a number, the difference is the number itself.

Let A be any number, then     $A - 0 = A$

Let us subtract 0 from 4536

4536 – 0 = 4536

We get back the same number 4536

Property 2: When a number is subtracted from the same number, the difference is 0. (Zero)

Let A be any number, then   $A - A = 0$

Let us subtract 5234 from 5234

5234 – 5234  = 0

We get zero (0)

### Addition and subtraction together

Example – simplify: 2439 – 1056 + 555

Solution: First number has no sign before it . It is taken as '+'.

Add the numbers with plus sign and then subtract the number with minus sign.

```
    2 4 3 9              2 9 9 4
  +   5 5 5            - 1 0 5 6
  ─────────            ─────────
    2 9 9 4              1 9 3 8        Ans. 1938.
  ─────────            ─────────
```

## Exercise

(Q1) Subtract the following ( without borrowing )

```
(a)  H  T  O      (b)  H  T  O      (c)  H  T  O      (d)  H  T  O
     5  6  8           8  9  7           9  4  5           6  9  7
  -  1  2  5        -  2  7  2        -  4  0  3        -  5  2  6
   ─────────         ─────────         ─────────         ─────────

   ─────────         ─────────         ─────────         ─────────
```

(Q2)Subtract the following ( with borrowing )

```
(a)  H  T  O      (b)  H  T  O      (c)  H  T  O      (d)  H  T  O
        ◯  ◯             ◯  ◯             ◯  ◯             ◯  ◯
     6  5  3           5  6  8           7  8  0           9  6  1
  -  2  1  7        -  3  5  9        -  3  7  2        -  2  4  4
   ─────────         ─────────         ─────────         ─────────

   ─────────         ─────────         ─────────         ─────────
```

(Q3) Subtract the following ( without borrowing )

```
(a)  Th  H  T  O    (b)  Th  H  T  O    (c)  Th  H  T  O
      7  8  4  6          8  7  6  7          7  5  9  4
  -   3  5  0  4      -   3  2  3  1      -   3  5  7  0
    ────────────       ────────────        ────────────

    ────────────       ────────────        ────────────
```

(Q4)Subtract the following ( with borrowing )

(a)
| Th | H | T | O |
|----|---|---|---|
| 6 | 8 | 2 | 2 |
| − 2 | 5 | 3 | 6 |
|    |   |   |   |

(b)
| Th | H | T | O |
|----|---|---|---|
| 8 | 1 | 5 | 4 |
| − 2 | 5 | 1 | 9 |
|    |   |   |   |

(c)
| Th | H | T | O |
|----|---|---|---|
| 5 | 8 | 7 | 2 |
| − 3 | 5 | 6 | 8 |
|    |   |   |   |

(Q5) Fill in the blanks.

a. _____ - 0 = 2106

b. 4119 - _____ = 4119

c. 6340 – 6340 = _____

d. _____ - 5214 = 0

e. 5236 - _____ = 0

(Q6) Simplify-

a. 2140 + 7018 – 3156

b. 4901 – 2234 + 4415

c. 6582 – 2375 + 2180

(Q7) Solve the following word problems:

a. There are 3435 males and 2312 females in a small town. How many more males than females does the town have?

b. A box has 4926 apples. 1028 of these are rotten. Find the number of good apples.

c. In a stadium there are 4500 seats. On a particular day, 3392 persons saw the match. How many seats were vacant?

_____ *END* _____