## Subtraction Equation

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> Subtraction equation is a mathematical operation that involves the subtraction operator.
$>$ Mathematical equation that shows two numbers being subtracted is equal to two other number being subtracted.
$>$ There is an equal sign in between, both side must equal the same number.
For example,
$7-5=8-6$ is an example for subtraction equation.

$$
\begin{aligned}
& 7-5=2 \\
& 8-6=2
\end{aligned}
$$

The numbers may be different, but after subtraction the answer will be the same.
This is also called balanced equation.


Both side has same answer that is 2 .

$$
7-5=8-6=2
$$


$15-7=20-12$ is an example for subtraction equation.

$$
15-7=
$$



Both side has same answer that is 8 .

$$
15-7=20-12=8
$$

## Examples for balanced equation

1) $49-45=34-30$

## L.H.S

$$
49-45=?
$$

## R.H.S

$$
34-30=\text { ? }
$$

| 49 | 9-5 $=4$ | - 34 | $4-0=4$ |
| :---: | :---: | :---: | :---: |
| 45 | $4-4=0$ | 30 | $3-3=0$ |
| 04 |  | 04 |  |
| $49-45=4$ |  | $\mathbf{3 4 - 3 0}=4$ |  |

## Examples for balanced equation

1) $75-70=25-20$
$75-70=5$
$25-20=5$
$75-70=25-20=5$
2) $82-75=15-8$
$82-75=7$
$15-8=7$
$82-75=15-8=7$
3) $59-49=25-15$
$59-49=10$
$25-15=10$
$59-49=25-15=10$
4) $92-81=53-42$
$92-81=11$
$53-42=11$
$92-81=53-42=11$

## Example 1:

Find the missing number $9-\square=4-0$

## Solution :

In the left hand side, we have

$$
9-
$$

$\square$
But In the right hand side, we have

$$
4-0 \longmapsto 4-0 \text { equals to } 4 \longmapsto 4-0=4
$$

In a balanced equation, both left and right hand side answers will be the same.
Therefore, $9-\square=4$
From 9, what number should be subtracted to get 4? That is 5.
$9-5=4$

$$
9-5=4-0
$$

## Example 2:

Find the missing number $29-\square=45-35$

## Solution :

In the left hand side, we have

$$
29-
$$

$\qquad$
But In the right hand side, we have

$$
45-35 \longmapsto 45-35 \text { equals to } 10 \longmapsto 45-35=10
$$

In a balanced equation, both left and right hand side answers will be the same.
Therefore, $29-\square=10$
From 29, what number should be subtracted to get 10? That is 19.

$$
29-19=10
$$

