Subtraction using all from 9 and last from 10 or Nikhilam sutra.

Q1. 1000 – 573 =?

Solution: One could subtract each figure in 573 from 9 and then subtract the last figure from 10.

Step 1. 3 – 0 = 3 & 10 – 3 = 7

Step 2. 7 – 0 = 7 & 9 – 7 = 2

Step 3. 5 – 0 = 5 & 9 – 5 = 4

Thus, the answer is: (1000 – 573) = 427

Q2. 1000 – 476 =?

Solution: We simply subtract each figure in 473 from 9 and the last figure from 10.

Step 1. 6 – 0 = 6 & 10 – 6 = 4

Step 2. 7 – 0 = 7 & 9 – 7 = 2

Step 3. 4 – 0 = 4 & 9 – 4 = 5

So, the answer is 1000 – 473 = 524

Q3. 5872 – 2987 =?

Solution: We simply subtract each figure in from 9 and the last figure from 10.

Step 1. 7 – 2 = 5 & 10 – 5 = 5

Step 2. 8 – 7 = 1 & 9 – 1 = 8

Step 3. 9 – 8 = 1 & 9 – 1 = 8

Step 4. 5 – 2 = 3 & here we can subtract easily from the normal method so, again subtract 1 from the 3 so 3 – 1 = 2.

So, the answer is 5872 – 2987 = 2885.

Q4. 67843 – 49387 =?

Solution: We simply subtract each figure in from 9 and the last figure from 10.

Step 1: 7 – 3 = 4 & 10 – 4 = 6

Step 2: 8 – 4 = 4 & 9 – 4 = 5

Step 3: 8 – 3 = 5 & here we can subtract easily from the normal method so, again subtract 1 from the 5 so 5 – 1 = 4.

Step 4: Here one step has been terminated now start subtraction from the 10 and the remaining from the 9.

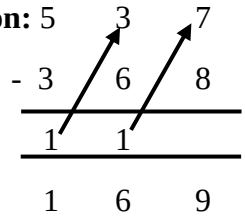
Step 5: 9 – 7 = 2 & 10 – 2 = 7

Step 6: 6 – 4 = 2 and here we can subtract easily from the normal method so, again subtract 1 from the 5 so 2 – 1 = 3.

Subtraction using Base Method

Q1. 537 – 368

Solution:



In the base case method, we cannot perform direct subtraction.

Step 1: Start from the right to the left. Here we cannot subtract 8 from 7 so firstly check what should be added to 8 to get 7. It is not possible because 7 < 8.

Step 2: What should be added to 8 to get 17, add the 9.

Step 3: Firstly add 6 + 1 = 7, now what should be added to 7 to get 3? It is not possible because 3 < 7.

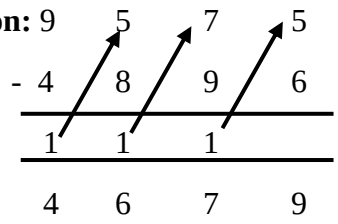
Step 4: What should be added to 7 to get 13, add the 6.

Step 5: Firstly add 3 + 1 = 4, now what should be added to 4 to get 5? Add the 1.

Thus, the answer is: (537 – 368) = 169.

Q1. 9575 – 4896

Solution:



In the base case method, we cannot perform direct subtraction.

Step 1: Start from the right to the left. Here we cannot subtract 6 from 5 so firstly check what should be added to 6 to get 5. It is not possible because 5 < 6.

Step 2: What should be added to 6 to get 15, add the 9.

Step 3: Firstly add 9 + 1 = 10, now what should be added to 10 to get 7? It is not possible because 7 < 9.

Step 4: What should be added to 10 to get 17, add the 7.

Step 5: Firstly add 8 + 1 = 9, now what should be added to 9 to get 5? It is not possible because 5 < 9.

Step 6: What should be added to 9 to get 15, add the 6.

Step 7: : Firstly add 4 + 1 = 5, now what should be added to 5 to get 9? Add the 4.

Thus, the answer is: (9575 – 4896) = 4679.