|  |
| --- |
| **Vedic Mathematics – A Creative Universe** |

|  |
| --- |
| Vedic Mathematics is a collection of Techniques/Sutras to solve mathematical arithmetic in easy and faster way. Using regular mathematical steps, solving problems sometimes are complex and time consuming. But using Vedic Mathematics’ General Techniques (applicable to all sets of given data) and Specific Techniques (applicable to specific sets of given data), numerical calculations can be done very fast. Today we will learn how to write multiplication table of large numbers in an easier and faster way. Let us take the number 9, whose multiplication table we are going to write now. We all know that 9 is 1 less than 10. So, write it down as follows: |
| **T** | **O** |
| **0** | **9** |
| **1** | **8** |
| **2** | **7** |
| **3** | **6** |
| **4** | **5** |
| **5** | **4** |
| **6** | **3** |
| **7** | **2** |
| **8** | **1** |
| **9** | **0** |



|  |
| --- |
| In below case, you can see that in one’s place, 1 is getting reduced from each number. In Ten’s place, we are adding +1 against each number. Both the 1’s in Ones and Tens place are taken from the above expression i.e., **9 = 10 - 1**. First, we will write the numbers in Ones place starting from 9 to 0. Then we will write the numbers in Tens place starting from 0 to 9. So, here comes the table of 9. |



|  |  |
| --- | --- |
| **T** | **O** |
| **1** | **9** |
| **3** | **8** |
| **5** | **7** |
| **7** | **6** |
| **9** | **5** |
| **11** | **4** |
| **13** | **3** |
| **15** | **2** |
| **17** | **1** |
| **19** | **0** |
| Now let’s take 19 as the number whose multiplication table we will write.  T O  **19 = 20 – 1**  Here we are subtracting 1 in one’s place and adding 2 in tens place. At first, we will write the numbers in one’s place starting from 9 to 0. Then we will write the numbers in Tens place starting from 1 and then go on adding 2 to the next number. So, here comes the table of 19. |
| **T** | **O** |
| **2** | **9** |
| **5** | **8** |
| **8** | **7** |
| **11** | **6** |
| **14** | **5** |
| **17** | **4** |
| **20** | **3** |
| **23** | **2** |
| **26** | **1** |
| **29** | **0** |

|  |
| --- |
| Now let’s take 29 as the number whose multiplication table we will write.  T O  **29 = 30 – 1**  Here we are subtracting 1 in one’s place and adding 3 in tens place. At first, we will write the numbers in one’s place starting from 9 to 0. Then we will write the numbers in Tens place starting from 2 and then go on adding 3 to the next number. So, here comes the table of 29. |

**Homework:** Using the same technique try writing the multiplication tables of 39, 49, 59, 9 and so on.

