



**VEDIC MATHS**  
**Level -1A**





## **Bhagat Singh**

Bhagat Singh was a charismatic Indian socialist revolutionary whose two acts of dramatic violence against the British in India and execution at age 23 made him a folk hero of the Indian independence movement.

**VEDIC MATHS**

**LEVEL - 1A**

## STUDENT DETAILS

Name of the Student : .....

Residential Address : .....

.....

.....

Telephone Number : .....

Course Instructor Name : .....

Telephone Number : .....

Mobile Number : .....

Center Address : .....

.....

.....

Telephone Number : .....

Mobile No : .....

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# STUDENT'S PROGRESS

## SIGNATURE

WEEK	DATE	HOMEWORK	REMARKS	PARENTS	CL
1st WEEK					
2nd WEEK					
3rd WEEK					
4th WEEK					
5th WEEK					
6th WEEK					
7th WEEK					
8th WEEK					
9th WEEK					
10th WEEK					
11th WEEK					
12th WEEK					

# LEVEL - 1

## COMPLEMENTS : INTRODUCTION

10 Complements

9 Complements

9

8

7

6

5

4

3

2

1

9

8

7

6

5

4

3

2

1

Find the Complement Number (Base 10)

2	
4	
6	
8	
1	
3	
5	
7	
9	
4	

4	
8	
3	
7	
2	
6	
1	
5	
7	
9	

3	
9	
1	
8	
2	
7	
4	
6	
5	
3	

8	
5	
2	
7	
6	
3	
4	
1	
2	
5	

1	
5	
2	
4	
8	
6	
5	
7	
3	
1	

**Find the Complement Number ( Base 9 )**

1	
5	
7	
9	
8	
4	
3	
2	
6	
5	

3	
1	
7	
6	
2	
5	
1	
7	
6	
1	

4	
1	
3	
2	
1	
6	
7	
9	
8	
0	

0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

5	
4	
3	
2	
1	
0	
9	
8	
7	
6	

**Write the Complement : (All from 9, last from 10)**

328

533

175

8457

6138

3986

45756

81466

14567

9714388

4339841

2846647

## Rapid Addition :

45

+ 9

64

+29

74

+16

67

+28

29

+63

55

+18

28

+12

36

+28

19

+42

39

+17

754

+99

346

+74

527

+38

894

+89

135

+87

178

+34

149

+52

548

+57

771

+49

857

+65

157

+68

## Rapid Addition :

459

+92

679

+71

345

+287

364

+198

586

+ 015

736

+174

515

+376

325

+197

586

+345

475

+189

737

+186

648

+399

759

+167

409

+153

354

+079

166

+157

904

+087

857

+076

483

+367

599

+278

894

+137

## Rapid Addition :

$$\begin{array}{r} 637 \\ +288 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 143 \\ +587 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 354 \\ +267 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 462 \\ +159 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 534 \\ +286 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 629 \\ +289 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 253 \\ +198 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 478 \\ +169 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 526 \\ +395 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 452 \\ +189 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 116 \\ +299 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 734 \\ +175 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 899 \\ +084 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 634 \\ +297 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 148 \\ +269 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 224 \\ +187 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 354 \\ +476 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 532 \\ +189 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 678 \\ +156 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 118 \\ +094 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 764 \\ +297 \\ \hline \\ \hline \end{array}$$

**Rapid Addition :**

$$\begin{array}{r} 213 \\ +499 \\ \hline \end{array}$$

$$\begin{array}{r} 534 \\ +276 \\ \hline \end{array}$$

$$\begin{array}{r} 194 \\ +087 \\ \hline \end{array}$$

$$\begin{array}{r} 214 \\ +587 \\ \hline \end{array}$$

$$\begin{array}{r} 639 \\ +287 \\ \hline \end{array}$$

$$\begin{array}{r} 334 \\ +179 \\ \hline \end{array}$$

$$\begin{array}{r} 425 \\ +276 \\ \hline \end{array}$$

$$\begin{array}{r} 356 \\ +178 \\ \hline \end{array}$$

$$\begin{array}{r} 486 \\ +295 \\ \hline \end{array}$$

$$\begin{array}{r} 732 \\ +089 \\ \hline \end{array}$$

$$\begin{array}{r} 814 \\ +198 \\ \hline \end{array}$$

$$\begin{array}{r} 634 \\ +179 \\ \hline \end{array}$$

$$\begin{array}{r} 516 \\ +397 \\ \hline \end{array}$$

$$\begin{array}{r} 245 \\ +179 \\ \hline \end{array}$$

$$\begin{array}{r} 725 \\ +186 \\ \hline \end{array}$$

$$\begin{array}{r} 516 \\ +287 \\ \hline \end{array}$$

$$\begin{array}{r} 245 \\ +187 \\ \hline \end{array}$$

$$\begin{array}{r} 432 \\ +279 \\ \hline \end{array}$$

$$\begin{array}{r} 614 \\ +298 \\ \hline \end{array}$$

$$\begin{array}{r} 532 \\ +178 \\ \hline \end{array}$$

## Rapid Decimal Addition :

$$\begin{array}{r} 5.6 \\ +0.7 \\ \hline \end{array}$$

$$\begin{array}{r} 4.7 \\ +0.9 \\ \hline \end{array}$$

$$\begin{array}{r} 8.3 \\ +0.9 \\ \hline \end{array}$$

$$\begin{array}{r} 7.9 \\ +0.8 \\ \hline \end{array}$$

$$\begin{array}{r} 5.2 \\ +1.9 \\ \hline \end{array}$$

$$\begin{array}{r} 4.8 \\ +1.9 \\ \hline \end{array}$$

$$\begin{array}{r} 3.2 \\ +1.9 \\ \hline \end{array}$$

$$\begin{array}{r} 6.3 \\ +2.8 \\ \hline \end{array}$$

$$\begin{array}{r} 9.4 \\ +0.7 \\ \hline \end{array}$$

$$\begin{array}{r} 3.3 \\ +1.8 \\ \hline \end{array}$$

$$\begin{array}{r} 2.6 \\ +4.7 \\ \hline \end{array}$$

$$\begin{array}{r} 4.8 \\ +4.8 \\ \hline \end{array}$$

$$\begin{array}{r} 1.7 \\ +5.9 \\ \hline \end{array}$$

$$\begin{array}{r} 5.8 \\ +1.4 \\ \hline \end{array}$$

$$\begin{array}{r} 3.2 \\ +1.8 \\ \hline \end{array}$$

$$\begin{array}{r} 1.2 \\ +3.9 \\ \hline \end{array}$$

$$\begin{array}{r} 5.5 \\ +1.6 \\ \hline \end{array}$$

$$\begin{array}{r} 7.3 \\ +0.8 \\ \hline \end{array}$$

$$\begin{array}{r} 2.4 \\ +1.7 \\ \hline \end{array}$$

$$\begin{array}{r} 1.9 \\ +2.9 \\ \hline \end{array}$$

## Rapid Decimal Addition :

$$\begin{array}{r} 6.43 \\ +0.89 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5.64 \\ +0.87 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7.51 \\ +0.69 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3.43 \\ +0.67 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5.43 \\ +1.87 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6.12 \\ +1.99 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7.37 \\ +0.86 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3.36 \\ +2.78 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2.65 \\ +0.79 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5.43 \\ +0.98 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8.62 \\ +1.88 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 1.19 \\ +1.97 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6.28 \\ +1.89 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6.49 \\ +5.88 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3.87 \\ +2.97 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2.49 \\ +4.55 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 1.55 \\ +2.46 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3.36 \\ +1.85 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8.23 \\ +0.99 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6.33 \\ +1.88 \\ \hline \\ \hline \end{array}$$

8.954  
+1.976

---

---

3.451  
+1.769

---

---

6.235  
+1.879

---

---

3.745  
+2.697

---

---

9.324  
+0.896

---

---

9.526  
+0.989

---

---

5.327  
+0.986

---

---

4.532  
+2.678

---

---

4.852  
+1.259

---

---

7.435  
+1.889

---

---

8.024  
+1.789

---

---

1.631  
+1.789

---

---

2.376  
+2.968

---

---

2.732  
+3.479

---

---

1.567  
+0.777

---

---

5.432  
+2.998

---

---

6.859  
+3.499

---

---

7.634  
+0.577

---

---

8.432  
+1.698

---

---

0.442  
+3.679

---

---

$$\begin{array}{r} 2.0054 \\ +0.8879 \\ \hline \end{array}$$

$$\begin{array}{r} 1.2306 \\ +0.8999 \\ \hline \end{array}$$

$$\begin{array}{r} 2.3349 \\ +0.7788 \\ \hline \end{array}$$

$$\begin{array}{r} 1.3345 \\ +0.7897 \\ \hline \end{array}$$

$$\begin{array}{r} 2.3451 \\ +0.6789 \\ \hline \end{array}$$

$$\begin{array}{r} 4.3569 \\ +0.8496 \\ \hline \end{array}$$

$$\begin{array}{r} 0.2439 \\ +2.9792 \\ \hline \end{array}$$

$$\begin{array}{r} 3.4634 \\ +0.7897 \\ \hline \end{array}$$

$$\begin{array}{r} 4.1435 \\ +2.9876 \\ \hline \end{array}$$

$$\begin{array}{r} 3.2134 \\ +0.8979 \\ \hline \end{array}$$

$$\begin{array}{r} 7.8400 \\ +2.9900 \\ \hline \end{array}$$

$$\begin{array}{r} 5.6200 \\ +1.4800 \\ \hline \end{array}$$

$$\begin{array}{r} 3.5600 \\ +1.8700 \\ \hline \end{array}$$

$$\begin{array}{r} 2.4500 \\ +0.7800 \\ \hline \end{array}$$

$$\begin{array}{r} 6.9324 \\ +1.6789 \\ \hline \end{array}$$

$$\begin{array}{r} 4.9340 \\ +2.4790 \\ \hline \end{array}$$

$$\begin{array}{r} 4.3214 \\ +0.7989 \\ \hline \end{array}$$

$$\begin{array}{r} 2.9200 \\ +0.9800 \\ \hline \end{array}$$

$$\begin{array}{r} 5.4321 \\ +1.7980 \\ \hline \end{array}$$

$$\begin{array}{r} 1.8234 \\ +1.9766 \\ \hline \end{array}$$

## Rapid Subtraction :

34

-07

---

---

71

-09

---

---

22

-19

---

---

52

-28

---

---

27

-08

---

---

53

-19

---

---

91

-32

---

---

63

-26

---

---

62

-34

---

---

22

-19

---

---

76

-28

---

---

36

-29

---

---

92

-47

---

---

90

-18

---

---

55

-27

---

---

93

-14

---

---

47

-28

---

---

56

-17

---

---

77

-18

---

---

43

-29

---

---

## Rapid Subtraction :

$\begin{array}{r} 226 \\ -198 \\ \hline \end{array}$	$\begin{array}{r} 705 \\ -397 \\ \hline \end{array}$	$\begin{array}{r} 342 \\ -269 \\ \hline \end{array}$	$\begin{array}{r} 878 \\ -179 \\ \hline \end{array}$	$\begin{array}{r} 125 \\ -096 \\ \hline \end{array}$
$\begin{array}{r} 938 \\ -499 \\ \hline \end{array}$	$\begin{array}{r} 413 \\ -126 \\ \hline \end{array}$	$\begin{array}{r} 555 \\ -197 \\ \hline \end{array}$	$\begin{array}{r} 632 \\ -158 \\ \hline \end{array}$	$\begin{array}{r} 728 \\ -379 \\ \hline \end{array}$
$\begin{array}{r} 815 \\ -278 \\ \hline \end{array}$	$\begin{array}{r} 716 \\ -598 \\ \hline \end{array}$	$\begin{array}{r} 423 \\ -178 \\ \hline \end{array}$	$\begin{array}{r} 927 \\ -878 \\ \hline \end{array}$	$\begin{array}{r} 816 \\ -678 \\ \hline \end{array}$
$\begin{array}{r} 321 \\ -143 \\ \hline \end{array}$	$\begin{array}{r} 936 \\ -179 \\ \hline \end{array}$	$\begin{array}{r} 743 \\ -178 \\ \hline \end{array}$	$\begin{array}{r} 111 \\ -099 \\ \hline \end{array}$	$\begin{array}{r} 233 \\ -188 \\ \hline \end{array}$

**Rapid Subtraction :**

**704**

**-187**

---

**814**

**-169**

---

**463**

**-287**

---

**213**

**-194**

---

**444**

**-298**

---

**453**

**-278**

---

**362**

**-287**

---

**133**

**-087**

---

**515**

**-349**

---

**726**

**-249**

---

**932**

**-176**

---

**846**

**-357**

---

**652**

**-179**

---

**516**

**-377**

---

**432**

**-178**

---

**815**

**-138**

---

**932**

**-475**

---

**616**

**-397**

---

**456**

**-189**

---

**543**

**-179**

---

**Rapid Subtraction :**

$\begin{array}{r} 834 \\ -288 \\ \hline \hline \end{array}$	$\begin{array}{r} 742 \\ -276 \\ \hline \hline \end{array}$	$\begin{array}{r} 932 \\ -765 \\ \hline \hline \end{array}$	$\begin{array}{r} 415 \\ -127 \\ \hline \hline \end{array}$	$\begin{array}{r} 393 \\ -196 \\ \hline \hline \end{array}$
$\begin{array}{r} 725 \\ -567 \\ \hline \hline \end{array}$	$\begin{array}{r} 511 \\ -265 \\ \hline \hline \end{array}$	$\begin{array}{r} 853 \\ -698 \\ \hline \hline \end{array}$	$\begin{array}{r} 628 \\ -199 \\ \hline \hline \end{array}$	$\begin{array}{r} 632 \\ -159 \\ \hline \hline \end{array}$
$\begin{array}{r} 643 \\ -286 \\ \hline \hline \end{array}$	$\begin{array}{r} 848 \\ -579 \\ \hline \hline \end{array}$	$\begin{array}{r} 615 \\ -329 \\ \hline \hline \end{array}$	$\begin{array}{r} 913 \\ -276 \\ \hline \hline \end{array}$	$\begin{array}{r} 814 \\ -129 \\ \hline \hline \end{array}$
$\begin{array}{r} 532 \\ -178 \\ \hline \hline \end{array}$	$\begin{array}{r} 363 \\ -198 \\ \hline \hline \end{array}$	$\begin{array}{r} 522 \\ -199 \\ \hline \hline \end{array}$	$\begin{array}{r} 316 \\ -158 \\ \hline \hline \end{array}$	$\begin{array}{r} 114 \\ -098 \\ \hline \hline \end{array}$

## Rapid Decimal Subtraction :

9.3

-0.8

---

---

5.2

-0.9

---

---

8.2

-0.6

---

---

4.3

-0.7

---

---

9.7

-1.8

---

---

3.2

-1.5

---

---

9.3

-5.7

---

---

7.2

-1.4

---

---

3.8

-0.9

---

---

6.3

-1.4

---

---

5.3

-1.8

---

---

2.5

-1.6

---

---

3.4

-2.7

---

---

6.2

-3.6

---

---

4.4

-1.5

---

---

2.1

-1.9

---

---

3.2

-1.6

---

---

5.4

-1.8

---

---

3.2

-1.5

---

---

2.1

-0.8

---

---

## Rapid Decimal Subtraction :

$$\begin{array}{r} 3.46 \\ -0.78 \\ \hline \end{array}$$

$$\begin{array}{r} 3.33 \\ -0.99 \\ \hline \end{array}$$

$$\begin{array}{r} 6.34 \\ -0.86 \\ \hline \end{array}$$

$$\begin{array}{r} 8.22 \\ -0.67 \\ \hline \end{array}$$

$$\begin{array}{r} 9.33 \\ -0.88 \\ \hline \end{array}$$

$$\begin{array}{r} 7.53 \\ -1.78 \\ \hline \end{array}$$

$$\begin{array}{r} 6.11 \\ -0.67 \\ \hline \end{array}$$

$$\begin{array}{r} 3.24 \\ -1.75 \\ \hline \end{array}$$

$$\begin{array}{r} 9.13 \\ -0.56 \\ \hline \end{array}$$

$$\begin{array}{r} 4.43 \\ -1.58 \\ \hline \end{array}$$

$$\begin{array}{r} 9.45 \\ -1.89 \\ \hline \end{array}$$

$$\begin{array}{r} 7.45 \\ -2.67 \\ \hline \end{array}$$

$$\begin{array}{r} 6.36 \\ -1.87 \\ \hline \end{array}$$

$$\begin{array}{r} 7.35 \\ -0.56 \\ \hline \end{array}$$

$$\begin{array}{r} 2.22 \\ -0.66 \\ \hline \end{array}$$

$$\begin{array}{r} 7.35 \\ -2.98 \\ \hline \end{array}$$

$$\begin{array}{r} 8.63 \\ -1.79 \\ \hline \end{array}$$

$$\begin{array}{r} 9.13 \\ -0.78 \\ \hline \end{array}$$

$$\begin{array}{r} 8.25 \\ -1.97 \\ \hline \end{array}$$

$$\begin{array}{r} 3.67 \\ -1.89 \\ \hline \end{array}$$

8.342  
-0.989

---

---

3.303  
-0.998

---

---

4.245  
-0.767

---

---

9.543  
-0.776

---

---

7.521  
-0.789

---

---

2.111  
-0.654

---

---

5.789  
-0.890

---

---

8.314  
-0.698

---

---

5.212  
-0.689

---

---

3.512  
-1.983

---

---

6.412  
-0.598

---

---

9.513  
-0.579

---

---

5.133  
-0.486

---

---

6.245  
-1.769

---

---

9.322  
-0.976

---

---

1.642  
-0.976

---

---

4.121  
-0.769

---

---

3.423  
-1.959

---

---

8.413  
-0.976

---

---

8.622  
-1.899

---

---

7.0221  
-0.7789

---

---

5.5214  
-0.8597

---

---

6.0070  
-2.9985

---

---

3.4216  
-0.9789

---

---

9.4311  
-0.9972

---

---

3.1204  
-0.9896

---

---

2.1111  
-1.9847

---

---

5.3221  
-0.7888

---

---

6.2403  
-0.8784

---

---

6.3202  
-0.6863

---

---

5.3200  
-1.9900

---

---

8.1800  
-1.9400

---

---

9.2700  
-2.9800

---

---

8.0500  
-3.0900

---

---

9.2300  
-1.8900

---

---

7.3100  
-1.8300

---

---

6.2140  
-1.1890

---

---

5.1030  
-2.8960

---

---

6.6600  
-1.9900

---

---

5.4245  
-1.9140

---

---

## Rapid Multiplication :

$2413 \times 2$

$7342 \times 2$

$8136 \times 2$

$7526 \times 2$

$8105 \times 2$

$6782 \times 2$

$4108 \times 3$

$9165 \times 3$

$8213 \times 3$

$5407 \times 3$

$7658 \times 3$

$9123 \times 3$

$4589 \times 4$

$9618 \times 4$

$2150 \times 4$

$5762 \times 4$

$7965 \times 4$

$3124 \times 4$

## Rapid Multiplication :

$5120 \times 6$

$6571 \times 6$

$8156 \times 6$

$3215 \times 6$

$8412 \times 7$

$9124 \times 7$

$6721 \times 7$

$5080 \times 7$

$3647 \times 7$

$8156 \times 7$

$5671 \times 8$

$2739 \times 8$

$6789 \times 8$

$8134 \times 8$

$5461 \times 8$

$8678 \times 8$

$632316 \times 9$

$87651 \times 9$

## Multiplication tables :

$$826 \times 5$$

$$620 \times 5$$

$$204 \times 5$$

$$842 \times 5$$

$$802 \times 5$$

$$4628 \times 5$$

$$2684 \times 5$$

$$6842 \times 5$$

$$4602 \times 5$$

$$8484 \times 5$$

$$6482 \times 5$$

$$4242 \times 6$$

$$84882 \times 5$$

$$86224 \times 5$$

$$6240 \times 5$$

$$28486 \times 5$$

$$8642 \times 5$$

$$61048 \times 5$$

$$28482 \times 5$$

$$84426 \times 5$$

**Multiplication tables :**

$719 \times 5$

$157 \times 5$

$597 \times 5$

$517 \times 5$

$973 \times 5$

$579 \times 5$

$193 \times 5$

$991 \times 5$

$3557 \times 5$

$9135 \times 5$

$5119 \times 5$

$5131 \times 5$

$3157 \times 5$

$1715 \times 5$

$3953 \times 5$

$7755 \times 5$

$5577 \times 5$

$1175 \times 5$

$3553 \times 5$

$5579 \times 5$

**Multiplication tables :**

$845673 \times 5$

$632167 \times 5$

$743215 \times 5$

$342567 \times 5$

$723568 \times 6$

$5843219 \times 6$

$3697569 \times 6$

$42567452 \times 6$

$1854373 \times 6$

$3725146 \times 6$

$6321569 \times 6$

$7894 \times 7$

$9432 \times 7$

$5678 \times 7$

$6432 \times 7$

$9354 \times 7$

$7345 \times 7$

$1394 \times 7$

$2567 \times 7$

$4285 \times 7$

**Multiplication tables :**

$$53246 \times 8$$

$$872145 \times 8$$

$$943215 \times 8$$

$$314567 \times 8$$

$$234561 \times 8$$

$$9843267 \times 8$$

$$8432541 \times 8$$

$$7325694 \times 8$$

$$3254794 \times 8$$

$$7529 \times 8$$

$$9432 \times 9$$

$$6345 \times 9$$

$$1439 \times 9$$

$$4329 \times 9$$

$$73216 \times 9$$

$$1357 \times 9$$

$$4314 \times 9$$

$$7679 \times 9$$

$$1348 \times 9$$

$$4739 \times 9$$

## Multiplication of Power of 5 :

$324 \times 5$

$546 \times 5$

$324 \times 5$

$646 \times 5$

$723 \times 5$

$843 \times 5$

$624 \times 5$

$832 \times 5$

$3782 \times 5$

$9052 \times 5$

$4321 \times 5$

$8532 \times 5$

$9425 \times 5$

$4689 \times 5$

$689543 \times 5$

$1086750 \times 5$

$4612 \times 5$

$8467 \times 5$

$5678134 \times 5$

$8765416 \times 5$

**Multiplication by 25 :**

$42820 \times 25$

$8645 \times 25$

$8146 \times 25$

$4678 \times 25$

$6754 \times 25$

$8756 \times 25$

$4136 \times 25$

$7146 \times 25$

$8146 \times 25$

$4674 \times 25$

$6417 \times 25$

$8165 \times 25$

$6812 \times 25$

$5675 \times 25$

$6845 \times 25$

$8933 \times 25$

$856781 \times 25$

$4675211 \times 25$

$6457156 \times 25$

$4675116 \times 25$

**Multiplication by 125 :**

$4675 \times 125$

$6746 \times 125$

$4675 \times 125$

$8124 \times 125$

$8675 \times 125$

$9162 \times 125$

$6654 \times 125$

$8165 \times 125$

$2346 \times 125$

$8617 \times 125$

$4675 \times 125$

$4565 \times 125$

$5681 \times 125$

$4213 \times 125$

$7273 \times 125$

$6784 \times 125$

$1089 \times 125$

$6754 \times 125$

$4681467 \times 125$

$8146756 \times 125$

The sum of last digit being 10 and the first being the same :

$34 \times 36$

$41 \times 49$

$15 \times 15$

$53 \times 57$

$32 \times 38$

$61 \times 69$

$42 \times 48$

$65 \times 45$

$84 \times 86$

$28 \times 22$

$17 \times 13$

$77 \times 73$

$96 \times 94$

$63 \times 67$

$55 \times 55$

$73 \times 77$

$86 \times 84$

$26 \times 24$

$95 \times 95$

$82 \times 88$

The sum of last digit being 10 and the first being the same :

$64 \times 66$

$27 \times 23$

$83 \times 87$

$76 \times 74$

$12 \times 18$

$54 \times 56$

$31 \times 39$

$62 \times 68$

$38 \times 32$

$56 \times 54$

$62 \times 68$

$46 \times 44$

$93 \times 97$

$35 \times 35$

$23 \times 27$

$93 \times 97$

$47 \times 43$

$21 \times 29$

$81 \times 89$

$61 \times 69$

The sum of last digit being 10 and the first being the same :

$4.7 \times 4.3$

$8.4 \times 8.6$

$5.9 \times 5.1$

$9.1 \times 9.9$

$7.6 \times 7.4$

$2.5 \times 2.5$

$7.1 \times 7.9$

$5.2 \times 5.8$

$6.5 \times 6.5$

$4.8 \times 4.2$

$8.1 \times 8.9$

$2.6 \times 2.4$

$3.8 \times 3.2$

$6.1 \times 6.9$

$8.3 \times 8.7$

$4.5 \times 4.5$

$9.3 \times 9.7$

$2.8 \times 2.2$

$1.7 \times 1.3$

$3.4 \times 3.6$

The sum of last digit being 10 and the first being the same :

$227 \times 223$

$586 \times 584$

$351 \times 359$

$482 \times 488$

$124 \times 126$

$295 \times 295$

$363 \times 367$

$637 \times 633$

$456 \times 454$

$195 \times 195$

$307 \times 303$

$994 \times 996$

$361 \times 369$

$748 \times 742$

$395 \times 395$

$622 \times 628$

$26 \times 24$

$43 \times 47$

$31 \times 39$

$19 \times 11$

The sum of first digit being 10 and the last being the same :

$42 \times 62$

$36 \times 76$

$54 \times 54$

$33 \times 73$

$63 \times 43$

$33 \times 73$

$41 \times 61$

$51 \times 51$

$58 \times 58$

$19 \times 99$

$11 \times 91$

$48 \times 68$

$74 \times 34$

$33 \times 73$

$27 \times 87$

$63 \times 43$

$82 \times 22$

$69 \times 49$

$85 \times 25$

$92 \times 12$

The sum of first digit being 10 and the last being the same :

$86 \times 26$

$13 \times 93$

$11 \times 91$

$35 \times 75$

$13 \times 93$

$36 \times 76$

$23 \times 83$

$61 \times 49$

$67 \times 47$

$57 \times 57$

$84 \times 24$

$79 \times 39$

$28 \times 88$

$26 \times 86$

$95 \times 15$

$93 \times 17$

$74 \times 34$

$89 \times 29$

$17 \times 93$

$69 \times 49$

The sum of first digit being 10 and the last being the same :

$247 \times 847$

$728 \times 328$

$913 \times 113$

$311 \times 711$

$619 \times 419$

$941 \times 141$

$917 \times 117$

$867 \times 267$

$186 \times 986$

$945 \times 145$

$366 \times 766$

$594 \times 594$

$111 \times 911$

$181 \times 981$

$822 \times 222$

$613 \times 413$

$756 \times 356$

$199 \times 999$

$722 \times 322$

$133 \times 933$

The sum of first digit being 10 and the last being the same :

$1.1 \times 9.1$

$7.4 \times 3.4$

$2.6 \times 8.6$

$3.3 \times 7.3$

$2.2 \times 8.2$

$1.2 \times 9.8$

$8.5 \times 2.5$

$6.4 \times 4.4$

$6.5 \times 4.5$

$3.6 \times 7.6$

$9.4 \times 1.6$

$9.3 \times 1.3$

$5.5 \times 5.5$

$5.6 \times 5.6$

$7.2 \times 3.8$

$2.8 \times 8.8$

$8.9 \times 2.9$

$1.5 \times 9.5$

$8.1 \times 2.1$

$2.3 \times 8.3$

## Rapid Division :

$2464 \div 2$

$14342 \div 2$

$7632 \div 2$

$8412 \div 2$

$14672 \div 2$

$13632 \div 2$

$9456 \div 2$

$1843 \div 2$

$2936 \div 3$

$5264 \div 3$

$81396 \div 3$

$15975 \div 3$

$9480 \div 3$

$18243 \div 3$

$11133 \div 3$

$20800 \div 4$

$12364 \div 4$

$9292 \div 4$

$39200 \div 4$

$40920 \div 4$

## Rapid Division :

$14412 \div 4$

$33600 \div 6$

$60126 \div 6$

$96306 \div 6$

$63183 \div 6$

$80583 \div 6$

$39162 \div 6$

$41237 \div 7$

$47061 \div 7$

$50547 \div 7$

$56994 \div 7$

$63784 \div 7$

$47128 \div 8$

$39192 \div 8$

$10200 \div 8$

$22976 \div 8$

$25376 \div 9$

$44019 \div 9$

$56511 \div 9$

$80919 \div 9$

**Special Method : Division by 5 :**

$$4495 \div 5$$

$$4640 \div 5$$

$$6250 \div 5$$

$$4455 \div 5$$

$$3995 \div 5$$

$$3445 \div 5$$

$$4440 \div 5$$

$$2380 \div 5$$

$$43615 \div 5$$

$$18580 \div 5$$

$$22755 \div 5$$

$$15625 \div 5$$

$$459615 \div 5$$

$$11155 \div 5$$

$$17445 \div 5$$

$$22945 \div 5$$

$$4487305 \div 5$$

$$3781155 \div 5$$

$$4906185 \div 5$$

$$4394845 \div 5$$

**Division by 25 :**

$$31250 \div 25$$

$$72325 \div 25$$

$$82225 \div 25$$

$$114725 \div 25$$

$$189025 \div 25$$

$$203075 \div 25$$

$$195525 \div 25$$

$$203125 \div 25$$

$$455875 \div 25$$

$$158575 \div 25$$

$$190575 \div 25$$

$$59995 \div 25$$

$$1863525 \div 25$$

$$1724275 \div 25$$

$$222275 \div 25$$

$$2434025 \div 25$$

$$43630325 \div 25$$

$$4686050 \div 25$$

$$32211275 \div 25$$

$$4966775 \div 25$$

**Division by 125 :**

$86125 \div 125$

$73625 \div 125$

$144375 \div 125$

$151125 \div 125$

$405750 \div 125$

$660375 \div 125$

$862375 \div 125$

$124875 \div 125$

$7364500 \div 125$

$8403875 \div 125$

$9864000 \div 125$

$11218125 \div 125$

$9577625 \div 125$

$6903875 \div 125$

$7798625 \div 125$

$9870125 \div 125$

$14070125 \div 125$

$57365750 \div 125$

$86215125 \div 125$

$12180375 \div 125$

## VINCULUM

Introduction :

$$1 = 10 - 9 = 1 \overline{9}$$

$$2 = 10 - 8 = 1 \overline{8}$$

$$3 = 10 - 7 = 1 \overline{7}$$

$$4 = 10 - 6 = 1 \overline{6}$$

$$5 = 10 - 5 = 1 \overline{5}$$

$$6 = 10 - 4 = 1 \overline{4}$$

$$7 = 10 - 3 = 1 \overline{3}$$

$$8 = 10 - 2 = 1 \overline{2}$$

$$9 = 10 - 1 = 1 \overline{1}$$

Find Vinculum for the following numbers

$$73 = \quad =$$

$$19 = \quad =$$

$$45 = \quad =$$

$$74 = \quad =$$

$$95 = \quad =$$

$$26 = \quad =$$

$$94 = \quad =$$

$$15 = \quad =$$

$$82 = \quad =$$

$$94 = \quad =$$

$$77 = \quad =$$

$$54 = \quad =$$

$$63 = \quad =$$

$$26 = \quad =$$

$$53 = \quad =$$

$$77 = \quad =$$

$$48 = \quad =$$

$$25 = \quad =$$

$$36 = \quad =$$

$$37 = \quad =$$

$$42 = \quad =$$

$$89 = \quad =$$

## VINCULATE UNIT'S PLACE :

$15 =$

$98 =$

$43 =$

$81 =$

$64 =$

$75 =$

$73 =$

$99 =$

$65 =$

$26 =$

$19 =$

$83 =$

$11 =$

$65 =$

$43 =$

$86 =$

$74 =$

$74 =$

$86 =$

$53 =$

$49 =$

$13 =$

## VINCULATE UNIT'S PLACE :

$15 =$

$43 =$

$64 =$

$73 =$

$65 =$

$19 =$

$11 =$

$43 =$

$74 =$

$86 =$

$49 =$

$98 =$

$81 =$

$75 =$

$99 =$

$26 =$

$83 =$

$65 =$

$86 =$

$74 =$

$53 =$

$13 =$

**VINCULATE 10'S PLACE :**

**814 =**

**105 =**

**735 =**

**642 =**

**789 =**

**214 =**

**632 =**

**723 =**

**118 =**

**174 =**

**389 =**

**429 =**

**554 =**

**342 =**

**184 =**

**613 =**

**459 =**

**145 =**

**915 =**

**115 =**

**968 =**

**784 =**

**VINCULATE 100'S PLACE :**

$3821 =$

$7234 =$

$1684 =$

$9345 =$

$3842 =$

$2321 =$

$9723 =$

$9434 =$

$1065 =$

$5326 =$

$3456 =$

$9347 =$

$9423 =$

$3278 =$

$3218 =$

$1435 =$

$9246 =$

$7284 =$

$7242 =$

$7234 =$

## DEVINCULATE UNIT'S PLACE :

$1 \overline{3} =$

$2 \overline{9} =$

$6 \overline{7} =$

$8 \overline{2} =$

$9 \overline{4} =$

$1 \overline{9} =$

$2 \overline{6} =$

$9 \overline{3} =$

$2 \overline{5} =$

$3 \overline{2} =$

$4 \overline{8} =$

$3 \overline{6} =$

$8 \overline{3} =$

$9 \overline{4} =$

$2 \overline{1} =$

$4 \overline{3} =$

$3 \overline{8} =$

$5 \overline{7} =$

$2 \overline{2} =$

$1 \overline{9} =$

## DEVINCULATE 10'S PLACE :

$3 \overline{2} 4 =$

$9 \overline{0} 2 =$

$8 \overline{4} 6 =$

$3 \overline{7} 9 =$

$5 \overline{6} 2 =$

$9 \overline{3} 4 =$

$3 \overline{5} 2 =$

$1 \overline{9} 4 =$

$5 \overline{7} 3 =$

$7 \overline{2} 5 =$

$2 \overline{3} 6 =$

$8 \overline{9} 2 =$

$7 \overline{1} 9 =$

$8 \overline{6} 3 =$

$4 \overline{1} 8 =$

$5 \overline{3} 1 =$

$2 \overline{8} 5 =$

$3 \overline{4} 0 =$

$1 \overline{6} 5 =$

$4 \overline{5} 4 =$

## DEVINCULATE 100'S PLACE :

$7 \overline{8} 8 2 =$

$3 \overline{6} 1 2 =$

$4 \overline{7} 1 4 =$

$6 \overline{2} 3 2 =$

$5 \overline{3} 9 2 =$

$2 \overline{1} 8 2 =$

$2 \overline{7} 1 4 =$

$1 \overline{8} 4 2 =$

$7 \overline{4} 7 2 =$

$8 \overline{6} 3 1 =$

$4 \overline{2} 8 4 =$

$5 \overline{9} 3 5 =$

$7 \overline{3} 2 4 =$

$1 \overline{9} 7 2 =$

$8 \overline{2} 8 4 =$

$7 \overline{3} 5 4 =$

$2 \overline{7} 9 1 =$

$2 \overline{8} 1 5 =$

$9 \overline{5} 2 1 =$

$8 \overline{5} 3 4 =$

# DEVINCULATE :

$4\ 3\ \bar{2}\ 1\ 5 =$

$6\ 1\ \bar{5}\ 2\ 6 =$

$1\ 1\ \bar{6}\ 8\ 7 =$

$7\ 4\ \bar{5}\ 2\ 1 =$

$9\ 4\ \bar{3}\ 3\ 1 =$

$8\ 3\ \bar{9}\ 4\ 3 =$

$5\ 2\ \bar{1}\ 4\ 5 =$

$3\ 9\ \bar{8}\ 4\ 5 =$

$7\ 7\ \bar{2}\ 4\ 5 =$

$6\ 8\ \bar{4}\ 5\ 2 =$

$6\ \bar{3}\ 4\ \bar{5}\ 1 =$

$1\ \bar{4}\ 5\ \bar{3}\ 2 =$

$9\ \bar{3}\ 2\ \bar{4}\ 1 =$

$1\ \bar{8}\ 4\ \bar{1}\ 5 =$

$1\ \bar{3}\ 8\ \bar{1}\ 5 =$

$9\ \bar{4}\ 2\ \bar{2}\ 2 =$

$8\ \bar{6}\ 1\ \bar{3}\ 3 =$

$7\ \bar{2}\ 3\ \bar{5}\ 6 =$

$8\ \bar{3}\ 7\ \bar{2}\ 5 =$

$1\ \bar{6}\ 1\ \bar{5}\ 2 =$

DEVINCULATE :

$4 \bar{5} 9 \bar{3} 2 1 =$

$8 \bar{4} 3 \bar{6} 7 4 =$

$2 \bar{5} 9 \bar{2} 1 4 =$

$1 \bar{8} 4 \bar{9} 3 1 =$

$1 \bar{3} 4 \bar{4} 3 2 =$

$1 \bar{9} 3 \bar{2} 7 6 =$

$1 \bar{8} 4 \bar{6} 3 7 =$

$9 \bar{3} 2 \bar{5} 6 1 =$

$8 \bar{9} 3 \bar{4} 3 2 =$

$1 \bar{8} 9 \bar{4} 3 1 =$

$4 \bar{6} 3 \bar{3} 5 2 =$

$6 \bar{8} 7 \bar{1} 4 5 =$

$7 \bar{4} 3 \bar{2} 1 5 =$

$3 \bar{2} 1 \bar{5} 9 4 =$

$4 \bar{8} 3 \bar{2} 1 5 =$

$6 \bar{7} 4 \bar{5} 7 4 =$

$9 \bar{3} 2 \bar{7} 4 5 =$

$3 \bar{2} 1 \bar{4} 5 6 =$

$9 \bar{8} 2 \bar{4} 5 1 =$

$7 \bar{4} 5 \bar{6} 7 2 =$

## VINCULATE ADDITION & SUBTRACTION :

$$8 + \bar{9} =$$

$$6 + \bar{3} =$$

$$8 - \bar{5} =$$

$$\bar{5} - \bar{4} =$$

$$2 + \bar{7} =$$

$$1 + \bar{3} =$$

$$\bar{9} + \bar{1} =$$

$$8 + \bar{4} =$$

$$3 + \bar{2} =$$

$$6 + \bar{2} =$$

$$3 - \bar{2} =$$

$$9 - \bar{1} =$$

$$5 - \bar{2} =$$

$$8 + \bar{4} =$$

$$4 - \bar{2} =$$

$$\bar{6} + \bar{9} =$$

$$9 + \bar{5} =$$

$$8 + \bar{3} =$$

$$7 + \bar{5} =$$

$$\bar{5} + \bar{2} =$$

## VINCULATE ADDITION & SUBTRACTION :

$$4 + \overline{6} =$$

$$\overline{5} - \overline{1} =$$

$$8 - \overline{5} =$$

$$6 + \overline{7} =$$

$$7 + \overline{4} =$$

$$9 + \overline{2} =$$

$$\overline{5} + \overline{6} =$$

$$9 + \overline{3} =$$

$$3 + \overline{2} =$$

$$4 + \overline{3} =$$

$$9 - \overline{4} =$$

$$5 - \overline{3} =$$

$$7 - \overline{2} =$$

$$\overline{5} + \overline{5} =$$

$$8 - \overline{2} =$$

$$7 - \overline{3} =$$

$$4 - \overline{2} =$$

$$\overline{6} - \overline{1} =$$

$$\overline{8} - \overline{4} =$$

$$\overline{2} + 2 =$$

## VINCULATE ADDITION & SUBTRACTION :

$$8\bar{2} - \bar{4} =$$

$$9\bar{3} + \bar{5} =$$

$$5\bar{4} + \bar{3} =$$

$$1\bar{9} - \bar{6} =$$

$$6\bar{4} - \bar{7} =$$

$$3\bar{3} - \bar{8} =$$

$$8\bar{9} + \bar{4} =$$

$$5\bar{2} - \bar{5} =$$

$$4\bar{3} - \bar{6} =$$

$$3\bar{1} - \bar{2} =$$

$$3\bar{6} + \bar{1} =$$

$$4\bar{7} - \bar{4} =$$

$$6\bar{3} + \bar{7} =$$

$$5\bar{8} + \bar{3} =$$

$$6\bar{4} - \bar{5} =$$

$$9\bar{3} + \bar{3} =$$

$$8\bar{1} - \bar{6} =$$

$$7\bar{3} - \bar{4} =$$

$$9\bar{9} + \bar{6} =$$

$$8\bar{5} + \bar{3} =$$

