

Radiant–Mathematics-5

1. NUMBERS AND NUMERATION

Exercise 1.1

- A. 1. 22,115 2. 55,321 3. 41,325 4. 1,34,009
5. 13,043 6. 3,77,844 7. 19,939 8. 21,00,015
- B. 1. 8,65,410 = Eight lakh, sixty five thousand, four hundred and ten
2. 9,98,561 = Nine lakh, Ninety Eight thousand five hundred and Sixty one
3. 56,712 = Fifty six thousand seven hundred and twelve
4. 70,105 = Seventy thousand one hundred and five
5. 35,004 = Thirty five thousand and four
6. 7,10,321 = Seven lakh ten thousand three hundred twenty one
7. 41,238 = Forty one thousand two hundred thirty Eight
8. 19,298 = Nineteen thousand two hundred Ninety eight
- C. 1. 12,157 = Twelve thousand one hundred fifty seven
2. 854,435 = Eight hundred fifty four thousand four hundred and thirty five
3. 21,700 = Twenty one thousand seven hundred
4. 557,321 = Five hundred fifty seven thousand three hundred and twenty one
5. 990,458 = Nine hundred Ninety thousand four hundred and fifty eight
6. 57,805 = Fifty seven thousand eight hundred and five
7. 29,582 = Twenty nine thousand five hundred eighty two
8. 40,316 = Forty thousand three hundred Sixteen
- D. 1. 10 thousands + 7 thousands + 8 hundreds + 9 tens + 4 ones = 17894
2. 60 thousands + 3 thousands + 1 hundreds + 5 tens + 0 ones = 63,150
3. 9 lakhs + 60 thousands + 7 thousands + 9 hundreds + 2 tens + 8 ones = 9,67,928
4. 30 thousands + 6 hundreds + 0 tens + 0 ones = 30,600
5. 5 lakhs + 15 thousands + 2 thousands + 1 hundred + 3 tens + 6 ones = 5,17,136
6. 80 thousands + 9 thousands + 1 hundred + 2 tens + 7 ones = 89,127
7. 7 lakhs + 70 thousands + 6 thousands + 8 hundreds + 6 tens + 0 ones = 7,76,860
8. 40 thousands + 6 thousands + 6 hundreds + 2 tens + 3 ones = 46,623
- E. 1. 43,791 = 4000 + 3000 + 700 + 90 + 1
2. 60,719 = 60000 + 0000 + 700 + 10 + 9
3. 21,387 = 20000 + 1000 + 300 + 80 + 7
4. 42,383 = 40000 + 2000 + 300 + 80 + 3
5. 5,55,130 = 500000 + 50000 + 5000 + 100 + 30 + 0
6. 513,567 = 500000 + 10000 + 3000 + 500 + 60 + 7
7. 78,312 = 70000 + 8000 + 300 + 10 + 2
8. 889,004 = 800000 + 8000 + 9000 + 0 + 0 + 4
- F. 1. 563,319 > 563,119 2. 2,10,600 > 2,10,599
3. 54,912 = 54,912 4. 81,003 < 81,300
5. 412,769 < 412,770 6. 32,178 = 32,178

7. 73,654 > 73,645 8. 943,834 < 943,843
 9. 8,34,786 < 8,43,786 10. 18,489 < 18,490
- G.** 1. 719801 = 7,19,801 = Seven lakh nineteen thousand eight hundred one
 = 719,801 = Seven hundred nineteen thousand eight hundred one
 2. 341209 = 3,41,209 = Three lakh forty one thousand two hundred nine
 = 341,209 = Three hundred forty one thousand two hundred nine
- H.** 1. 51,289 = Place value of 8 is = 80
 2. 519,715 = Place value of 7 is = 700
 3. 10,516 = Place value of 6 is = 6
 4. 561,493 = Place value of 5 is = 500000
 5. 59,312 = Place value of 5 is = 50000
 6. 2,61,505 = Place value of 1 is = 1000
 7. 3,28,014 = Place value of 0 is = 000
 8. 1,17,532 = Place value of 5 is = 500
 9. 9,31,126 = Place value of 9 is = 900000
 10. 4,32,142 = Place value of 3 is = 30000
- I.** 1. 242217 < 245112 < 245512 < 246517
 2. 630617 < 670632 < 670862 < 680189
 3. 371618 < 371816 < 465210 < 507002
- J.** 1. 734523 > 734520 > 734323 > 734253
 2. 852963 > 851800 > 850986 > 850098
 3. 517871 > 514165 > 512761 > 511561
- K.** 1. 31,615 31,616 31,617 36,618 36,619 631,620
 2. 4,28,432 4,28,433 4,28,434 4,28,435 4,28,436 4,28,437
 3. 46,754 46,755 46,756 46,757 46,758 46,759
 4. 5,17,179 5,17,180 517,181 517,182 517,183 5,17,184
 5. 75,836 75,837 75,838 75,839 75,840 75,841

Exercise 1.2

- A.** 1. 41,692,657 = Forty one million six hundred Ninety two thousand six hundred and forty seven
 2. 10,462,847 = Ten million four hundred sixty two thousand eight hundred and forty seven
 3. 6,894,283 = Six million, Eight hundred ninety four thousand two hundred Eighty three
 4. 37,109,400 = Thirty seven million one hundred nine thousand and four hundred
 5. 5,17,39,038 = Five crore seventeen lakh thirty nine thousand and thirty eight
 6. 51,39,209 = Fifty one lakh thirty nine thousand two hundred and nine
 7. 12,76,309 = Twelve lakh seventy six thousand three hundred and nine
 8. 8,36,02,144 = Eight crore thirty six lakh two thousand one hundred forty four
- B.** 1. 56,034,078 2. 7,13,040,86 3. 825,314 4. 31,18,225
 5. 7,05,36,051 6. 74,11,405 7. 6,240,722 8. 162,416
- C.** 1. 31,98,402 = thirty one lakh ninety eight thousand four hundred and two
 2. 4,27,81,500 = four crore twenty seven lakh eighty one thousand five hundred

3. 7,61,20,002 = seven crore sixty one lakh twenty thousand and two
4. 60,00,472 = sixty lakh four hundred seventy two
5. 2,35,81,050 = two crore thirty five lakh eighty one thousand and fifty
6. 7,10,34,910 = seven crore ten lakh thirty four thousand nine hundred and ten

D.

1. 912,402 = Nine hundred twelve thousand four hundred and two
2. 8,123,568 = Eight million one hundred twenty three, thousand five hundred and sixty eight
3. 1,193,002 = One million one hundred ninety three thousand and two
4. 8,540,014 = Eight million five hundred forty thousand and fourteen
5. 5,807,418 = Five million eight hundred seven thousand four hundred and eighteen
6. 6,310,842 = Six million three hundred and ten thousand eight hundred and forty two

E. Fill in the columns with the correct numbers as per the Indian System :

Numbers	Ten Crores (TC)	Crores (C)	Ten Lakhs (TL)	Lakhs (L)	Ten thousands (Tth)	Thousands (Th)	Hundreds (H)	Tens (T)	Ones (O)
2,34,49,861		2	3	4	4	9	6	8	6
51,14,220			5	1	1	4	2	2	0
81,20,040			8	1	2	0	0	4	0
5,91,283				5	9	1	2	8	3
59,61,29,814	5	9	6	1	2	9	8	1	4
7,29,06,243		7	2	9	0	6	2	4	3

F. Fill in the columns with the correct numbers as per the international system :

Numbers	Hundred Million (HM)	Ten Million (TM)	Million (M)	Hundred Thousands (H.Th)	Ten thousands (Tth)	Thousands (Th)	Hundreds (H)	Tens (T)	Ones (O)
3,813,502			3	8	1	3	5	0	2
136,693				1	3	6	6	9	3
8,152,095			8	1	5	2	0	9	5
631,507,318	6	3	1	5	0	7	3	1	8
4,51,083				4	5	1	0	8	3
6,281,641			6	2	8	1	6	4	1

Exercise 1.3

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|----|-----------|-------------|-------|------------|
| A. | 1. 200000 | 2. 60000000 | 3. 30 | 4. 4000000 |
| | 5. 100 | 6. 5000 | 7. 4 | 8. 20000 |
| B. | 1. 1000 | 2. 8000000 | 3. 40 | 4. 300000 |
| | 5. 200 | 6. 90000 | 7. 7 | 8. 20000 |

Exercise 1.4

- A.
- $32,62,179 = 3000000 + 200000 + 60000 + 2000 + 100 + 70 + 9$
 - $2152004 = 2000000 + 100000 + 50000 + 2000 + 0 + 0 + 4$
 - $81,12,567 = 8000000 + 100000 + 10000 + 2000 + 500 + 60 + 7$
 - $76,54,962 = 7000000 + 600000 + 50000 + 4000 + 900 + 60 + 2$
 - $5282,918 = 5000000 + 200000 + 80000 + 2000 + 900 + 10 + 8$
 - $7,54,903 = 700000 + 50000 + 4000 + 900 + 0 + 3$
 - $550169 = 500000 + 50000 + 0 + 100 + 60 + 9$
 - $1,39,22,763 = 10000000 + 3000000 + 900000 + 20000 + 2000 + 700 + 60 + 3$
- B.
- | | | |
|--------------|--------------|----------------|
| 1. 64,21,368 | 2. 53,91,276 | 3. 14,60,421 |
| 4. 81,34,026 | 5. 36,51,891 | 6. 2,37,05,108 |

Exercise 1.5

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|------------------------------|------------------------------|
| 1. $52,175,871 > 52,054,521$ | 2. $36,621,900 > 35,612,900$ |
| 3. $432,410 < 443,140$ | 4. $254,187 > 254,178$ |
| 5. $8,04,504 = 8,04,504$ | 6. $6,21,110 < 6,31,254$ |
| 7. $312,054 < 312,654$ | 8. $706,413 = 706,413$ |

Exercise 1.6

- A.
- | | | | | | |
|----------------|-------------|-------------|--------------|-----------|-----------|
| 1. 8,761,029 | 8,761,030 | 8,761,031 | 2. 2,210,177 | 2,210,178 | 2,210,179 |
| 3. 6,541,399 | 6,541,400 | 6,541,401 | 4. 32,14,119 | 32,14,120 | 32,14,121 |
| 5. 2,12,67,008 | 2,12,67,009 | 2,12,67,010 | | | |
| 6. 4,123,179 | 4,123,980 | 4,123,981 | | | |
- B.
- | | | | | | |
|--------------|-----------|-----------|----------------|-------------|-------------|
| 1. 45,98,798 | 45,98,799 | 45,98,800 | 2. 4,877,399 | 4,877,400 | 4,877,401 |
| 3. 7,805,309 | 4,805,310 | 4,805,311 | 4. 3,68,21,131 | 3,68,21,132 | 3,68,21,133 |
| 5. 5,203,098 | 5,203,099 | 5,203,100 | 6. 29,99,999 | 30,00,000 | 30,00,001 |
| 7. 4,540,806 | 4,540,807 | 4,540,808 | 8. 7,328,813 | 7,328,814 | 7,328,815 |

2. ROMAN NUMBERS

Exercise 2.1

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|----|----------------|-----------------|------------------|
| A. | 1. 250 = CCL | 2. 900 = CM | 3. 313 = CCCXIII |
| | 4. 620 = DCXX | 5. 20 = XX | 6. 320 = CCCXX |
| | 7. 35 = XXXV | 8. 410 = CDX | |
| B. | 1. MDCL = 1650 | 2. CDXX = 420 | 3. XXIV = 24 |
| | 4. CCIV = 204 | 5. CCC = 300 | 6. XXV = 25 |
| | 7. CCX = 210 | 8. CDXXII = 422 | |

Exercise 2.2

- A. 1. 1707 = MDCCVII 2. 2564 = MMDLXIV
 3. 3350 = MMMCCCL 4. 1903 = MCMIII
 5. 1298 = MCCXCVIII 6. 1340 = MCCCXL
- B. 1. MMDCXLV = 2645 2. MCDXLV = 1445
 3. MCDXCVI = 1496 4. DCCLXXVI = 776
 5. CCXCIX = 299 6. MDCXXIV = 1624
 7. MCMV = 1905 8. MMCDXX = 9420
 9. DCCLXVI = 766 10. MMDXXV = 2525
- C. 1. XC > XL 2. XLIV < LXIV 3. XXVII < LX
 4. LVIII < C 5. MCCD > CMDC 6. LV = LV
- D. 1. XXV + XL = LXV 2. LXII + XII = LXXIV
 3. LXX + XXX = C 4. L - XXXIX = XI
 5. C - L = L 6. MD - CL = MCCL
- E. 1. VVV (X) 2. XI 3. LLIV (X) 4. XM (X)
 5. CCCL 6. DDD (X) 7. XXII 8. LC (X) 9. ICCI (X)
- G. 1. XXXIV 1344
 2. DCCLXVIII 1250
 3. CIX 642
 4. CCCL 34
 5. MCCL 2322
 6. CDXLIX 978
 7. MMCCCXXII 768
 8. CMLXXVIII 109
 9. MCCCXLIV 350
 10. DCXLII 449

3. ADDITION AND SUBTRACTION

Exercise 3.1

1. (a)
$$\begin{array}{r} 43522 \\ + 33165 \\ \hline 76687 \end{array}$$
 (b)
$$\begin{array}{r} 26713 \\ + 6960 \\ \hline 33673 \end{array}$$
 (c)
$$\begin{array}{r} 31275 \\ + 10298 \\ \hline 41573 \end{array}$$
- (d)
$$\begin{array}{r} 364525 \\ + 209428 \\ \hline 573953 \end{array}$$
 (e)
$$\begin{array}{r} 553218 \\ 20237 \\ 4073 \\ + 154 \\ \hline 577682 \end{array}$$
 (f)
$$\begin{array}{r} 835629 \\ 76324 \\ + 23537 \\ \hline 935490 \end{array}$$