

Name : _____

Grade : VI

Subject : Mathematics

Chapter : 1. Knowing Our Numbers

1 Mark each)

I. Multiple Choice Questions

- In Indian system of numeration, the number 58695376 is written as
a. 58,69,53,76 b. 58,695,376 c. 5,86,95,376 d. 586,95,376
- The expanded form of the number 9578 is
a. $9 \times 10000 + 5 \times 1000 + 7 \times 10 + 8 \times 1$ b. $9 \times 1000 + 5 \times 100 + 7 \times 10 + 8 \times 1$
c. $9 \times 1000 + 57 \times 10 + 8 \times 1$ d. $9 \times 100 + 5 \times 100 + 7 \times 10 + 8 \times 1$
- The greatest natural number I s
a. 1 crore b. 10 crores c. 10 Lakhs d. undefined
- Which of the following roman symbol is never repeated ?
a. I b. V c. X d. C
- The number formed by interchanging the digits 6 and 2 in 465271 is
a. 467521 b. 425671 c. 165274 d. None of these

1. b	2. c	3. d	4. b	5. b
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- The greatest of the numbers 123, 27, 65, 2342, 40000 is
a. 40000 b. 2342 c. 27 d. 650
- The greatest of the numbers 1000, 10000, 10, 1000000, is
a. 1000000 b. 100000 c. 10000 d. 1000
- The smallest of the numbers 1000, 50000, 111, 3222, 225 is
a. 111 b. 225 c. 1000 d. 3222
- The smallest of the numbers 2325, 2352, 2235, 2523, 2532 is
a. 2235 b. 2253 c. 2325 d. 2532
- Using the digits 1,2,3,4 without repetition, the greatest 4-digit number that can be made is
a. 4321 b. 4312 c. 4213 d. 4231

6. using the digits 1,5,7,2 without repetition, the greatest 4-digit number that can be made is
- a. 7521 b. 7512 c. 7215 d. 7251
7. Using the digits 3,5,7,0 without repetition the greatest 4-digit number that can be made is
- a. 7530 b. 7503 c. 7350 d. 7305
8. The smallest 4-digit number that can be made using the digits 1,8,5,3 without made using the digits 1,8,5,3 without repetition is
- a. 1583 b. 1538 c. 1385 d. 1358
9. The smallest 4-digit number that can be made using the digits 5,3,6,4 without repetition is
- a. 3546 b. 3564 c. 3456 d. 3465
10. The smallest 4-digit number that can be made using the digits 6,5,0,4 without repetition is
- a. 4560 b. 4056 c. 4065 d. 4506
11. Make the greatest 4-digit number by using any one digit of 2,6,5 twice.
- a. 6652 b. 6625 c. 6256 d. 6265
12. Make the greatest 4-digit number by using any one digit of 0,3,6 twice.
- a. 6630 b. 6603 c. 6360 d. 6306
13. Make the smallest 4-digit number by using any one digit of 4,3,2 twice.
- a. 2234 b. 2243 c. 2432 d. 2324
14. Make the smallest 4-digit number by using any one digit of 7,0,6 twice.
- a. 6007 b. 6070 c. 6700 d. None of these
15. Take two digits, say 1 and 2. Make the greatest 4-digits number using both the digits equal number of times.
- a. 1122 b. 2112 c. 2121 d. 2211
16. Take two digits, say 3 and 4. Make the smallest 4-digit number using both the digits equal number of times.
- a. 3344 b. 4433 c. 4343 d. 4334
17. Take two digits 0 and 1. Make the smallest 4-digit number using both the digits equal number of times.
- a. 1100 b. 1001 c. 1010 d. None of these
18. Take two digits, 0 and 1. Make the smallest 4-digit number using both the digits equal number of times.
- a. 1001 b. 1010 c. 1100 d. None of these

19. Make the greatest 4-digit number using any four different digits with the condition that 5 is at ones place.
- a. 9875 b. 9857 c. 9758 d. 9785
20. Make the smallest four – digit number using any four different digits such that 5 is at ones place.
- a. 1025 b. 1205 c. 1250 d. None of these
21. Arrange the following numbers in ascending order: 132, 2000, 7500, 525.
- a. 7500,2000,525,132 b. 132,525,2000,7500
c. 132,525,7500,2000 d. 7500,2000,132,525
22. Arrange the following numbers in descending order: 4000,8500,50600,7235.
- a. 50600,8500,7235,4000 b. 50600,8500,4000,7235
c. 50600,7235,8500,4000 d. 50600,7235,4000,8500.
23. The greatest 2-digit number is
- a. 98 b. 99 c. 79 d. 89
24. The smallest 2-digit number is
- a. 31 b. 21 c. 11 d. 10
25. The greatest 3 digit number is
- a. 991 b. 997 c. 999 d. 998
26. The smallest 3- digit number is
- a. 100 b. 101 c. 111 d. None of these
27. The greatest 4-digit number is
- a. 8888 b. 6789 c. 9876 d. 9999
28. The smallest 4-digit number is
- a. 1001 b. 1000 c. 1111 d. 9999
29. Which of the following numbers comes next to 900?
- a. 100 b. 998 c. 1000 d. None of these
30. Which of the following numbers comes just before 1000?
- a. 999 b. 1001 c. 990 d. 909
31. Which of the following numbers is equal to 1 lakh?
- a. 100000 b. 10000 c. 1000 d. 100
32. Which of the following numbers is equal to 1 crore?
- a. 10000000 b. 1000000 c. 100000 d. 10000

33. 1 million = how many lakh?

- a. 10 b. 100 c. 1000 d. 10000

34. 1 crore = how many million?

- a. 100000 b. 10000 c. 100 d. 10

35. 1 billion = how many million?

- a. 10 b. 100 c. 1000 d. 10000

36. 1 lakh = how many ten thousand?

- a. 1 b. 10 c. 100 d. 1000

37. 1 million = how many hundred thousand?

- a. 10 b. 100 c. 1 d. None of these

38. 1 Crore = how many ten lakhs?

- a. 100 b. 1 c. 10 d. None of these

39. Insert comma suitably in 67810138 by using international system.

- a. 67, 810, 138 b. 67,81,01,38 c. 6, 78, 10, 138 d. 678, 10, 138

40. 1 centimetre = ? Millimeters

- a. 10 b. 100 c. 1000 d. None of these

41. 1 metre = ? centimeters?

- a. 10 b. 100 c. 1000 d. None of these

42. 1 metre = ? millimeters

- a. 10 b. 100 c. 1000 d. None of these

43. 1 kilometre =? metres

- a. 1000 b. 10 c. 100 d. none of these

44. 1 km = ? mm

- a. 10,00,000 b. 1,00,000 c. 10,000 d. 1000

45. 49 to the nearest tens is

- a. 50 b. 40 c. 45 d. 55

46. 123 to the nearest tens is

- a. 130 b. 120 c. 125 d. 123

47. Which of the following rounding off is correct ?

- a. 841 → 800 b. 286 → 200 c. 9870 → 9800 d. 87 → 80

48. In Roman numerals L stands for

- a. 100 b. 50 c. 70 d. 90

49. In Roman numerals C stands for
a. 10 b. 100 c. 1000 d. 1
50. In Roman numerals D stand for
a. 100 b. 1000 c. 500 d. 10
51. In Roman numerals M stands for
a. 1000 b. 100 c. 10 d. None of these
52. 60 in Roman numerals is
a. LX b. LXX c. LXXX d. XL ₹
53. 80 in roman numerals is
a. LXXX b. LXX c. LX d. XXXL
54. 90 in Roman numerals is
a. XL b. XC c. CX d. LX
55. I made an expenditure of ₹ 2725 in November, 2009 and of ₹ 2275 in December, 2009.
What is the total expenditure made by me in November, 2009 and December, 2009 together?
a. ₹ 2000 b. ₹ 3000 c. ₹ 4000 d. ₹ 5000
56. The difference between the greatest number of 4-digit and the smallest number of 5-digit is
a. 1 b. 10 c. 100 d. 11
57. The monthly salary of Apala is 20975 and that of menu is 15875. The difference of their monthly salaries is.
a. ₹ 6000 b. ₹ 4900 c. ₹ 5000 d. ₹ 5100
58. To stitch a trouser 1 m 25 cm cloth is required. Out of 10 m cloth. How many trousers can be stitched?
a. 2 b. 4 c. 6 d. 8
59. Manish multiplied 100 by 89 instead of multiplying by 79. How much was his answer greater than the correct answer?
a. 100 b. 1000 c. 10000 d. None of these
60. Sangeeta types 25 pages per day. How many pages will she type in the month of November?
a. 900 b. 800 c. 700 d. 750

1.a	2. a	3. a	4. a	5. a	6. a	7. a	8. d	9. c	10. b
11. a.	12. a	13. a	14. a	15. d	16. a	17. a	18. a	19. a	20. a
21. b	22. a	23. b	24. d	25. c	26. a	27. d	28. b	29. c	30. a
31. a	32. a	33. a	34. d	35. c	36. b	37. a	38. c	39. a	40. a
41. b	42. c	43. a	44. a	45. a	46. b	47. a	48. b	49. b	50 c
51. a	52. a	53. a	54. b	55. d	56. a	57. d	58. d	59. b	60. d

1.
 - i. Write the difference between biggest 7-digit number and the smallest 8-digit number.
 - ii. Write in words the sum of the biggest 4 digit number and the smallest 2-digit number.
 - iii. Write in figures the sum of 1 and the biggest 8-digit number.
 - iv. Write in words, the sum of 1 and the biggest number of 5 digits.
 - v. What is the difference between one lakh and the biggest 5 digits.
2. Answer the following questions.
 - i. How many thousands make one lakh?
 - ii. How many lakhs make a million?
 - iii. How many millions make a crore?
 - iv. How many milligrams make a gram?
 - v. How many metres make a kilometer?
 - vi. How many milliliters make a litre?
 - vii. How many centrimetres make a metre?
3. Fill in the blanks:
 - i. The successor of the 4-digit greatest number is the _____ 5 - digit number.
 - ii. the place value of 1 in 7105623 is _____.
 - iii. The Place value of 0 in 7105623 is _____.
 - iv. The difference of two place values of 7 in 570076 is _____.
 - v. The difference of two place values of 2 in 3230452 is _____.
4. Write the :
 - i. Greatest 4 - digit number using different digits such that the digit-5 is always at ones place.
 - ii. Smallest 4-digit number using different digit such that the digit 9 is always at the units place.

- iii. Smallest 5- digit number using different digits such that the digit 7 is always at the hundreds place.
 - iv. Face value of 3 in 123456.
 - v. Difference between the place value and face value of 5 in 14352.
5. i. Write the smallest 5-digit number using all different digits.
 ii. Write the greatest 5-digit number using the digits 1,2,3,4 and 0.
 iii. Write the greatest 5-digit number using all the different digits.
 iv. write the smallest 5-digit number using the digits 0, 1 and 2.
 v. Write the greatest 5-digit number using the digits 0,1 and 2.
6. Match the following;

Column A	Column B
a. 10 lakh	i. 1000 times larger
b. 10 million	ii. 1000 times smaller
c. Kilo	iii. 1 Million
d. Milli	iv. 1 crore

7. Choose the correct answer for each of the following:
- i. the symbols V,L,and D are (never/always) repeated.
 - ii. If a symbol of smaller value is written to the (left / right) of greater value, its value is subtracted.
 - iii. for comparing two numbers having the same number of digits, we start comparing the digits from (leftmost/ rightmost) position.
 - iv. 1 kg = (1000g / 1000mg)
8. Answer the following questions :
- i. Write the smallest three digit number which does not change on reversing its digits.
 - ii. How many lakhs make a million?
 - iii. Which of these symbols are not used in Roman Numerals. O, I, M?
 - iv. What is the smallest 9-digit number called in words.
9. The greatest five-digit number using the digits 3, 1 and 0.
- i. 30001 ii. 10003 iii. 31000 iv. 13000
10. The place value of 2 in 91023045 is.
- i. 2000 ii. 20000 iii. 200 iv. 200000

11. Number of symbols used in Roman numbers is :

- i. 9 ii. 8 iii. 7 iv. 10

12. Number of ' lakhs' required to make a million

- i. 10 ii. 100 iii. 1000 iv. 10,000

13. Which of the following is the smallest three digit number that does not change even if the digits are written in reverse order?

- i. 110 ii. 101 iii. 330 iv. 909

1.	i. 1,	ii. Ten thousand nine,	iii. 10,00,00,000,	iv. One lakh		
2.	i. 100	ii. 10	iii. 10	iv. 1000 ,	v. 1000	vi. 10000
3.	i. Smallest,	ii. 1,00,000,	iii. 0	iv. 69,930,	v. 1,99,998	
4.	i. 9875	ii. 1029	iii. 10723	iv. 3	v. 45	
5.	i. 10234	ii. 42310	iii. 98765	iv. 10002	v. 21000	
6.	i. iii	ii. iv	iii. i	iv. ii	v. ii	
7.	i. never	ii. Left	iii. Leftmost	iv. 1000g		
8.	i. 101	ii. 10	iii. 0			
9.	iii	10. ii	11. iii	12. i	13. ii	

II. Multiple Choice Questions

1. The product of the place value of two 2's in 428721 is :

- a. 4 b. 40000 c. 400000 d. 4000000

2. $3 \times 10000 + 7 \times 1000 + 9 \times 100 + 0 \times 10 + 4$ is the same as:

- a. 3794 b. 39740 c. 37904 d. 379409

3. If 1 is added to the greatest 7 digits number, it will be equal to ;

- a. 10 thousand b. 1 lakh c. 10 lakh d. 1 crore

4. The expanded form the numbers 9578 is;

- a. $9 \times 10000 + 5 \times 1000 + 7 \times 100 + 8 \times 1$ b. $9 \times 1000 + 5 \times 100 + 7 \times 10 + 8 \times 1$
 c. $9 \times 1000 + 57 \times 10 + 8 + 1$ d. $9 \times 100 + 5 \times 100 + 7 \times 10 + 8 \times 1$

5. When rounded off to nearest thousands, the number 85642 is:

- a. 85600 b. 85700 c. 85000 d. 86000

6. The largest 4-digits number, using any one digit twice, from digits 5,9,2 and 6 is:
- a. 9652 b. 9562 c. 9659 d. 9965
7. In Indian system of numeration, the number 58695376 is written as;
- a. 58,69,53,76, b. 58,695,376 c. 5,86,95,376 d. 586,95,376
8. One million is equal to ;
- a. 1 lakh b. 10 lakh c. 1 crore d. 10 crore
9. The greatest number which on rounding off to nearest thousands gives 5000, is :
- 5001 b. 5539 c. 5999 d. 5499
10. Keeping the place of 6 in the number 6350947 same, the smallest number obtained by rearranging other digits is:
- a. 6975430 b. 6043579 c. 6034579 d. 6034759
11. Which of the following numbers in roman numerals is incorrect?
- a. LXXX b. LXX c. LX d. LLX
12. The largest 5-digit number having three different digits is:
- a. 98978 b. 9987 c. 99987 d. 98799
13. The smallest 4-digit number having three different digits is:
- a. 1102 b. 1012 c. 1020 d. 1002
14. One km is how many centimeter?
- a. 100000 b. 10000 c. 1000 d. 100
15. The population of town in the year 2000 was 200000. In the year 2005, it was found to be increased by 10359, what was the population of the town in 2005 ?
- a. 220359 b. 210000 c. 210359 d. 20359
16. A machine, on an average, manufactures 2825 screws a day. How many screws did it manufacture in the month of January ?
- a. 84750 b. 87575 c. 81925 d. 79100
17. A vessel has 4 litre & 500 ml of milk. In how many glasses, each of 25ml capacity, can it be Filled ?
- a. 150 b. 160 c. 170 d. 180
18. Which of the following is the Roman Numeral for 69 ?
- a. LXXI b. LXX c. CXIX d. CXXI

19. How many times does the digit 9 occur between 1 and 100?
 a. 11 b. 15 c. 18 d. 20
20. How many symbols are used to represent digits?
 a. 7 b. 8 c. 9 d. 10
21. (7268 - 2427) estimated of the nearest hundred is:
 a. 4800 b. 4900 c. 4841 d. 5000

1. c	2. c	3. d	4. b	5. d	6. d	7. c
8. b	9. d	10. c	11. d	12. c	13. d	14. a
15. c	16. b	17. d	18. b	19. d	20. d	21. a

III. Multiple Choice Questions

1. The product of the place values of two 2's in 4,28,721 is
 a. 4 b. 40,000 c. 4,00,000 d. 4,00,00,000
2. The face value of 4 in 8,92,47,605 is
 a. 4 b. 40,000 c. 47,605 d. 8,924
3. The product of the place value of two 5's in 6,53,250 is
 a. 25 b. 25,000 c. 2,50,000 d. 25,00,000
4. If 1 is added to the greatest 7-digit number, it will be equal to
 a. 10 thousand b. 1 lakh c. 10 lakh d. 1 crore
5. The difference of the smallest three digit number and the largest two digit number is
 a. 100 b. 1 c. 10 d. 99
6. When rounded off to nearest thousands, the number 85,642, is
 a. 85,600 b. 85,700 c. 85,000 d. 86,000
7. The greatest number which on rounding off to nearest thousands gives 5,000 is
 a. 5,001 b. 5,559 c. 5,999 d. 5,499
8. The smallest number which when rounded off to the nearest hundred as 600, is
 a. 550 b. 595 c. 604 d. 599
9. The difference between the greatest and smallest numbers which when rounded off a number to the nearest hundred as 6,700 is
 a. 100 b. 99 c. 98 d. 101

10. How many 8-digit numbers are there?
 a. 9,99,99,999 b. 8,99,99,999 c. 9,00,00,000 d. none of these
11. In Indian system of Numeration, the number 58695376 is written as
 a. 58,69,53,76 b. 58,695,376 c. 5,86,95,376 d. 586,95,376
12. The largest 4- digit number, using any one digit twice, form digits 5,9,2 and 6 is
 a. 9,652 b. 9,562 c. 9,659 d. 9,965
13. $3 \times 10,000 + 7 \times 1,000 + 9 \times 100 + 0 \times 10 + 4$ is the same as
 a. 3,794 b. 37,940 c. 37,904 d. 3,79,409
14. Which of the following numbers in roman numerals is incorrect?
 a. LXXX b. LXX c. LX d. LLX
15. The expanded form of the number 9578 is
 a. $9 \times 10,000 + 5 \times 1,000 + 7 \times 10 + 8 \times 1$
 b. $9 \times 10,000 + 5 \times 100 + 7 \times 10 + 8 \times 1$ c. $9 \times 1,000 + 57 \times 10 + 8 \times 1$
 d. $9 \times 100 + 5 \times 100 + 7 \times 10 + 8 \times 1$

1. c	2. a	3. d	4. d	5. b
6. d	7. d	8. a	9. b	10. c
11. c	12. d	13. c	14. d	15. b

I. Very Short Answer Type Questions

1. Can you tell how much one million is equal to ?
 1 Million = 10 lakhs
2. How many lakhs make a billion?
 1 billion = 10,000 lakhs.
3. How many billions make a trillion?
 1 Trillion = 1,000 billions.
4. What is the smallest 4-digit number having three different digits 0,1,2?
 1,002.

5. Write the smallest 3-digit number which does not change if the digits are written in reverse order.

The number is 101.

6. What is the small number obtained by keeping the place of 6 in number 63,50,947 same and rearranging the others?

The smallest number is 60,34,579

7. What is the greatest number which on rounding off to nearest thousand gives 5, 000?

The number is 5,499

8. Which digits have the same face value and place value in 9,20,78,634 ?

The digits are 0 and 4.

9. According to international system of Numeration, how will 11,12,323 be written?

It will be written as 1,112,323.

10. Write the expanded form of 39,746.

Expanded form of 39,746 = $3 \times 10000 + 9 \times 1000 + 7 \times 100 + 4 \times 10 + 6$.

11. Write Roman numeral for 98.

$$\begin{aligned} 98 &= 90 + 8 \\ &= (100 - 10) + 8 \\ &= XC + VIII = XCVIII \end{aligned}$$

12. Write Hindu Arabic numeral for XCIX.

$$\begin{aligned} XCIX &= XC + IX \\ &= 90 + 9 = 99 \end{aligned}$$

1. Arrange the following number in descending order: 8435,4835,13584,5348,25843,

Descending order is: $25843 > 13584 > 8435 > 5348 > 4835$.

2. Of the following numbers which is the greatest? Which is the smallest?

38051425, 30040700, 67205602,

We have, 38051425, 30040700 and 67205602. On comparing the given numbers, we get the greatest number = 67205602 and the smallest number = 30040700.

3. In a city, polio drops were given to 2,12,583 children on Sunday in March, 2008 and to 2,16,813 children in the next month. Find the difference of the number of children getting polio in the two months.

Given, polio Drops given in March 2008 = 212583 and polio drops given in April 2008 = 216813

Now, difference of the numbers of Children

$$= 216813 - 212583$$

$$= 4230$$

4. Out of 180000 tablets of vitamin A, 18734 are distributed among the students in a district.

Find the number of the remaining vitamin tablets.

We have,

$$\text{Total tablets of vitamin A} = 180000$$

$$\text{Tablets distributed among children} = 18734$$

$$\text{Now, remaining vitamin A tablets} = 180000 - 18734$$

$$= 161266$$

Hence, the Number of the remaining vitamin a tablets is 161266.

5. In the marriage of her daughter, leela spent ₹ 216766 on food and decoration, ₹ 122322 on jewellery, ₹ 88234 of furniture and ₹ 26780 on kitchen items. Find the total amount spent by her on the above items.

$$\text{Given, amount spent on food and decoration} = ₹ 216766$$

$$\text{Amount spent on jewellery} = ₹ 122322$$

$$\text{Amount spent on furniture} = ₹ 88234$$

$$\text{And amount spent on kitchen items} = ₹ 26780$$

$$\text{Total amount spent} = ₹ 216766 + 122322 + 88234 + 26780$$

$$= ₹ 454, 102$$

6. A garment factory produced 216315 shirts, 182736 trousers and 58704 jackets in a year.

What is the total production of all the three items in that year?

$$\text{Given, a garment factory produced shirt} = 216315$$

$$\text{Produced trousers} = 182736$$

$$\text{Produced jackets} = 58704.$$

$$\text{Total production of all the three items in that year} = \text{sum of all items} = 216315 +$$

$$182736 + 58704$$

$$= 457755.$$

Hence, the total production of all the three items in that year is 457755.

7. How many times 9 appear in this (10,000,000 - 1)

7 times.

8. Separate the periods of the numerical 89365478 by commas and write in words.

8,93,65,478

In words, we write it as :

Eight crore, ninety three lakh, sixty five thousand, four hundred seventy eight.

9. Arrange in ascending order;

571,8320,9754,874.

Ascending order is:

$571 < 847 < 8320 < 9754$.

10. Write 69 in Roman numerals.

LXIX

1. a. Here, ten thousand digit is 4 in both numbers, but thousands digit in 47645 is 7 and thousands digit in 48740 is 8. So, $8 > 7$

Hence, $48740 > 47645$

b. In 15896, ten thousands digit is 1 and ten thousands digit in 26760 is 2. So, $2 > 1$.

Hence, $26760 > 15896$.

2. In the given numbers, we see that 28706 is the smallest and 87604 is the greatest.

3. Here, given digits are 3,5,4,6 for the smallest number, we write the digits in ascending order.

So, the smallest four -digit number is 3456.

4. The ascending order of the given numbers are as follows:

$1462 < 1562 < 2605 < 3164$

5. Given, digits are 1,2,7,9,4. For greatest number, we write the digits in descending order.

So, The greatest five - digit number is 97421.

6. According to Indian system of numeration,

a. 24,64,056

b. 68,96,462

7. Expanded form of given numbers as

a. $76496 = 7 \times 10000 + 6 \times 1000 + 4 \times 100 + 9 \times 10 + 6$

b. $986256 = 9 \times 100000 + 8 \times 10000 + 6 \times 1000 + 2 \times 100 + 5 \times 10 + 6$

8. According to international system of numeration

a. 2,546,726

b. 7,869,420

9. The numeral form is 20,502,632.

10. The place value of 6 in 762540 = 60000

11. We know that, 1 kg = 1000 g, 5kg = 5000g

So, 5 kg 290 g = (500 + 290) g

= 5290 g

12. We know that,

1 km = 1000 m

And 1 m = 100 cm

1 km = 1000 m = 1000 x 100 cm

= 100000 cm

13. We know that,

1 m = 100 cm and 1 cm = 10 mm

1 m = 100 cm = 100 x 10 mm

= 1000 mm

14. a. in 3945, we know that, ones digit is 5, the rounded form of 3945 = 3650

b. in 4942, ones digit is 2 < 5 then, rounded form of 4942 = 4900

15. Here, rounded form of 945 = 900

And rounded form of 923 = + 600

So, estimated sum = 1500

16. Here, 945 is rounded off = - 600

560 is rounded off = 300

17. Here, 39 is rounded off = 40

And 42 is rounded off = x 40

Estimated product = 1600

18. Here, given numbers are 137 and 198.

137 = 100 + 30 + 7 = CXXXVII

198 = 100 + 90 + 8 = CXCVIII

19. We have,

a. XXIV = 20 + (5-1) = 24

b. XLVI = (50 - 10) + 5 + 1 = 46

Short Answer Type Questions

1. How many million make 3 crore?

We know that,

$$1 \text{ crore} = 10 \text{ million}$$

$$3 \text{ crore} = 3 \times 10 \text{ million}$$

$$= 30 \text{ million}$$

2. Chinmay had ₹ 610000. He gave ₹ 87500 to Jyoti, ₹ 126380 to Javed and ₹ 350000 to John.

How much money was left with him ?

$$\text{Given, Chinmay's total money} = ₹ 610000$$

$$\text{Money given to Jyoti by Chinmay} = ₹ 87500$$

$$\text{Money left given to Javed by Chinmay} = ₹ 126380$$

$$\text{And money given to John by Chinmay} = ₹ 350000$$

Money left with Chinmay

$$= \text{Total money} - \text{Distributed money}$$

$$= 610000 - (87500 + 126380 + 350000)$$

$$= 610000 - 563880 = ₹ 46120$$

Hence, ₹ 46120 was left with him.

3. The population of the town is 450772. In a survey, it was reported that one out of every 14 persons is illiterate, in all how many illiterate persons are there in the town?

$$\text{Given, total population of town} = 450772$$

One out of every 14 persons, is illiterate.

Now,

Total illiterate persons

$$= \text{Total population of town} / 14$$

$$= 450772 / 14 = 32198$$

Hence, the number of illiterate persons in the town is 32198.

4. Person had ₹1000000 with him. he purchased a colour T.V. for ₹16580, a motor cycle for ₹45890

and a flat for 870000. How much money was left with him ?

Given, total money = ₹1000000
 Money spent on a colour TV = ₹16580
 Money spent on a motor cycle = ₹45890
 And money spent on a flat = ₹870000
 Total amount spent = 16580 + 45890 + 870000 = ₹932470
 Money left with him = 1000000 - 932470 = ₹67530
 Hence, ₹67530 was left with him.

5. In 2001, the populations of Tripura and Meghalaya were 3,199,203 and 2,318,822, respectively. Write the populations of these two states in words.

Population of Tripura = 3,199,203

In words, three million, one hundred ninety nine thousand, two hundred three, and population of Meghalaya = 2,318,822.

In words, two million, three hundred eighteen thousand, eight hundred twenty two.

6. The diameter of Jupiter is 142800000 metres . insert commas suitably and write the diameter according to international system of Numeration.

Given, diameter of Jupiter = 142800000 m

The diameter of the Jupiter is 1,42,800,000 metre 142870000 in I SN :

Fourteen crore twenty eight lakhs .

7. Radius of the Earth is 6400 km and that of Mars is 4300000 m. whose radius is bigger and by how much?

Given, radius of the Earth = 6400 km
 = 6400000 m (1km = 1000 m)

And radius of Mars = 4300000 m

On comparing both the radii, we get

Radius of Earth > Radius of Mars

Difference between the two radii = 6400000 - 4300000 = 2100000 m.

Hence, the radius of Earth is bigger and by 2100000 m.

8. India's population has been steadily increasing from 439 millions in 1961 to 1028 million in 2001. Find the total increase in population from 1961 to 2001. Write the increase in population in Indian system of Numeration, using commas suitably.

Given, population of India in 1961 = 439 million = $439 \times 1000000 = 439000000$ (1 million = 1000000) and population of India in 2001 = 1028 million = $1028 \times 1000000 = 1028000000$ (1 million = 1000000)

Total increase in population from 1961 to 2001
 = Population in 2001 - Population in 1961
 = $1028000000 - 439000000 = 589000000$
 = $589 \times 1000000 = 589$ million

So, the increase population in Indian system of Numeration = 58,90,00,000

9. As per the census of 2001, the population of four states are given below, arrange the states in ascending and descending order to their population.

- a. Maharashtra 96878627
- b. Andhra Pradesh 76210007
- c. Bihar 82998509
- d. Uttar Pradesh 166197921

On arranging the population of four states in ascending order we get
 $76210007 < 82998509 < 96878627 < 166197921$.

(Andhra Pradesh) (Bihar) (Maharashtra) (Uttar Pradesh)

Again, rearranging the population of four states in descending order, we get

$166197921 > 96878627 > 82998509 > 76210007$,

(Uttar Pradesh) (Maharashtra) (Bihar) (Andhra Pradesh)

10. Make greatest and smallest 4 digit numbers by using any one digit twice:

- a. 3,8,7
- b. 9,0,5

a. Greatest no. = 8873

Smallest no = 3378

d. Greatest no = 9950

Smallest no = 5009

11. Use digit 7 at ones place and make smallest and greatest number of 4 digits.

a. Greatest b. Smallest

a. Greatest No. =

b. Smallest No =

12. The cost of 20 tons of steel is 350000, find cost of 2 kg of steel.

Cost of 20 tons of steel = ₹ 350000

Cost of 1 kg steel = $\frac{350000}{2000} = ₹ 17.5$

Cost of 2 kg of steel = 2×17.5

= ₹ 35

1. Write in expanded form :

a. 74836 b. 574021 c. 8907010

Expanded form of given numbers are

a. $74836 = 7 \times 10000 + 4 \times 1000 + 8 \times 100 + 3$

b. $574021 = 5 \times 100000 + 7 \times 10000 + 4 \times 1000 + 0 \times 100 + 2 \times 10 + 1 \times 1$

c. $8907010 = 8 \times 1000000 + 9 \times 100000 + 0 \times 10000 + 7 \times 1000 + 0 \times 100 + 1 \times 10 + 0 \times 1$

2. Estimate the product 758×6784 using the general rule.

We have 758×6784

Rounded off 758 to nearest hundreds = 800

and rounded off 6784 nearest thousands = 7000.

So, estimated product $800 \times 700 = 560000$

3. How many lakhs make five billions?

We know that,

10 lakh = 1 million

100 lakh = 10 million

100 lakh = 1 crore

1000 million = 100 crore

1 billion = 100 crore = 100×100 lakh

= 10000 lakh

So, 5 billion = $5 \times 10000 = 50000$ lakh.

4. The population of a town was 78787 in the year 1991 and 95833 in the year 2001. Estimate the increase in population by rounding off each population to nearest hundreds

Here, population of a town in 1991 = 78787

Rounded off 78787 of nearest hundreds = 78800

And population of a town in 2001 = 95833

Rounded off 95833 to nearest hundreds = 95800.

Increase in population = $95800 - 78800 = 17000$.

5. Find the difference between the largest number of seven digits and the smallest number of eight digits.

The largest 7 digits number = 9999999

The smallest 8 digits number = 10000000

Now, difference between the smallest 8 digit number and the largest 7 digits numbers
 $= 10000000 - 9999999 = 1$

6. Find The sum of the greatest and the greatest six digit numbers formed by the digits 2,0,4,7,6,5, using each digit only once.

Given digit are 2,0,4,7, 6 and 5.

Using each digit only once,

The greatest six- digit number = 765420.

The smallest six - digit number = 204567

Now, the sum of these numbers = $765420 + 204567 = 969987$

7. A factory has a container filled with 35874 L of cold drink. In how many bottles of 200 mL capacity each, can it be filled ?

Given, total cold drink in the container = 35874 L

= 3587400 mL = (1 L = 1000 mL)

Capacity of a bottle = 200 mL

Number of bottles = $\frac{\text{capacity of a container}}{\text{Capacity of a bottle}}$

= $\frac{3,58,74,000}{200}$

= 1,79,370

8. Make the greatest and the smallest 5 digits numbers using different digits in which 5 appears at ten's places.

According to the question, 5 must appear at ten' place.

Now, for the greatest number, digit (0-9) should be arranged in descending order, i.e
9,8,7,6,5,4,3,2,1,0

The greatest number of 5 digits = 98756

And for the smallest number, digit (0-9) Should be arranged in ascending order, i.e,
0,1,2,3,4,5,6,7,8,9.

The smallest number of 5 digit = 10253.

9. How many grams should be added to 2 kg 300 g to make it 5 kg 68 g?

We will get the required weight by subtracting 2 kg 300 g from 5 kg 68g.

Kg	g
5	068
- 2	300
2	768

Hence, 2768 g or 2 kg 768 g should be added to 2 kg 300 gm to make it 5 kg 68 g.

10. A box contains 50 packets of biscuits each weighing 120g. How many such boxes can be loaded in a van which cannot carry beyond 900 kg?

Given, total number of packet = 50

Weight of each packet = 120 g

Weight of a box = 50 x 120 g = 6000 g = 6 kg (1000 g = 1 kg)

Required number of boxes = 900/ 6 = 150

11. A vessel has 13 litres 200 mL of fruit juice. In how many glasses each of capacity 60 mL can it be filled?

Given,

Capacity of fruit juice a vessel = 13 litres 200 mL
= 13200 mL (1 Lit = 1000 mL)

Number of glasses that can't be filled

$$= \frac{\text{Total fruit juice}}{\text{Capacity of one glass}}$$

$$= \frac{13200}{60} = 220$$

1. Determine the difference between the place value and the face value of 5 in 7,86,54,321.

The 5 is in ten thousand's place. Therefore.

Place value of 5 is x 10,000 = 50,000.

Face value of 5 is 5.: required difference = 50, 000-5 = 49,995

2. Determine the product of the place values of two fives in 4,50,758.

First 5 is in ten's place of the number. Therefore,

$$\text{Place value of 5} = 5 \times 10 = 50$$

Second 5 is in ten thousand's place. Therefore,

$$\text{Place value of 5} = 5 \times 10,000 = 50,000$$

$$\text{Required product} = 50 \times 50,000 = 25,00,000$$

3. Determine the difference of the place values of two 7's in 257,839,705.

First 7 is in hundred's place of number. Therefore,

$$\text{Place value of 7} = 7 \times 1000,000$$

$$= 7,000,000$$

$$\text{Required difference} = 7,000,000 - 700$$

$$= 6,999,300$$

4. Fill in the blanks;

1. By reversing the order of digits of the greatest number made by five different non-zero digits, the new number is the _____ number of five digits.

2. Length of river 'Narmada' is about 1,290 km, its length in metres is _____.

3. By adding 1 to the greatest _____ digit number, we get ten lakh.

4. The number 66 in Roman numerals is _____.

1. Smallest	ii. 12,90,000 m	iii. 6	iv. LXVI
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5. Find the sum of the greatest and the least six digit numbers formed by the digits 2,0,4,7,6,5 using each digit only once.

We have digits 2,0,4,7,6,5 which we can use only once, therefore,

$$\text{Greatest six digit number} = 7,65,420$$

$$\text{Smallest six digit number} = 2,04,567$$

$$\text{Sum of greatest number} = \text{smallest number} = 7,65,420 + 2,04,567.$$

$$\text{Now,} \quad 7,65,420$$

$$+ \quad 2,04,567$$

$$9,69,987$$

Next Generation School

6. A book exhibition was held for four days in a school. the number of tickets sold at the counter on the first, second, third and final day was respectively 1,094, 1,812, 2,050 and 2,751.

Find the total number of tickets sold on all four days.

$$\begin{aligned}
 \text{Tickets sold on first day} &= 1,094 \\
 \text{Tickets sold on second day} &= 1,812 \\
 \text{Tickets sold on third day} &= 2,050 \\
 \text{Tickets sold on fourth day} &= 2,751 \\
 \text{Total tickets sold} &= \text{Tickets sold on first day} + \text{Second day} + \text{Third day} + \\
 &\quad \text{fourth day} \\
 &= 1,094 + 1,812 + 2,050 + 2,751
 \end{aligned}$$

$$\begin{array}{r}
 \text{Now,} \\
 1,094 \\
 1,812 \\
 2,050 \\
 + 2,751 \\
 \hline
 7,707
 \end{array}
 \quad \text{Total Tickets sold were 7,707,}$$

7. In an election, the successful candidate registered 5,77,500 votes and his nearest rival secured 3,48,700 votes, By what margin did the successful candidate win the election?

$$\begin{aligned}
 \text{Votes registered by candidate} &= 5,77,500 \\
 \text{Votes registered by his rival} &= 3,48,700 \\
 \text{Margin with which candidate won} &= 5,77,500 - 3,48,700 \\
 \text{Now,} & \\
 & 5,77,500 \\
 & - 3,48,700 \\
 & \boxed{2,28,800}
 \end{aligned}$$

So, candidate won by 2,28,800 votes.

8. A machine, on an average, manufactures 2,825 screws in a day, How many screws did it produce in the month of January 2006?

$$\begin{aligned}
 \text{Screws manufactured per day} &= 2,825 \\
 \text{We know January has 31 days, hence} & \\
 \text{Number of days} &= 31 \\
 \text{So, screw produced in January} &= 2,825 \times 31 \\
 \text{Now,} & \\
 & \begin{array}{r}
 2825 \\
 \times 31 \\
 \hline
 2825 \\
 + 8475 \times \\
 \hline
 87575
 \end{array}
 \end{aligned}$$

Thus, screws produced in the month of January is 87,575.

9. Cold drink in the container = 35,874 litres
 = 35,874 x 1,000 mL
 = 3,58,74,000 mL
 Capacity of each bottle = 200 mL
 Hence, number of bottle filled is $3,58,74,000 \div 200$ mL

Now,

$$\begin{array}{r} 179370 \\ 200 \overline{)35874000} \\ \underline{1587} \\ 1400 \\ \underline{1874} \\ 1800 \end{array}$$

Thus 1,79,370 bottles are filled.

10. The population of a town was 78,787 in the year 1991 and 95,833 in the year 2001. Estimate the increase in population by rounding off each population to nearest hundred.

Population of town in 1991 = 78,787

Here, 78,787 rounds off to nearest hundreds = 78,800.

Population of town in 2001 = 95,833

Here, 95,833 rounds off to nearest hundreds 95,800

Estimated increase in population = $95,800 - 78,800$.

Now,

$$\begin{array}{r} = 95,800 \\ - 78,800 \\ \hline \end{array}$$

17,000

Thus, estimated increase in population is 17,000.

11. Estimate the product $758 \times 6,784$ using the general rule.

Clearly, one factor is three digit number and other is four digit number. So, we round off first factor to nearest hundreds and second to nearest thousands.

Here, 758 rounds off to 800

6,784 rounds off to 7,000

Estimated product = $7,000 \times 800$

Now,

$$\begin{array}{r}
 7000 \\
 \times 800 \\
 \hline
 0000 \\
 0000 \times \\
 \underline{56000 \times \times} \\
 5600000
 \end{array}$$

Estimated product = 56,00,000

II. Long Answer Type Questions

1. Insert commas suitably and write the names according to Indian system of Numeration:

i. 87595762

ii. 8546283

iii. 99900046

iv. 98432701

i. 8,75,95,762

Eight crore seventy - five lakh ninety - five thousand seven hundred sixty-two.

ii. 85,46,283

Eighty-five lakh forty-six thousand two hundred eight -three

iii. 9,99,00,046

Nine crore ninety nine forty - six

iv. 9,84,32,701

Nine crore eighty - four lakh - two thousand seven hundred one.

2. Match the expression in column I with their values in column II.

Column I	Column II
1. Six hundred four millions three hundred three thousand four hundred six	a. 550
2. Six crore four lakh thirty three thousand four hundred six	b. 640
3. XLV	c. 500
4. CDV	d. 600

5. Estimated value of 548 to the nearest tens	e. 6,04,33,406
6. Estimated value of 548 to the nearest hundreds	f. 604,303,406
7. Estimated value of 642 to the nearest hundreds	g. 45
8. Estimated value of 642 to the nearest tens	h. 405

1.f	2. e	3. g	4. h
5. a	6. c	7. d	8. b

3. Insert commas suitably and write the names according to international system of Numeration.

i. 78921092 ii. 7452283 iii. 99985102 iv. 48049831

i. 78,921,1092

Seventy - eight million nine hundred twenty - one thousand ninety-two.

ii. 7,452,283

Seven million four hundred fifty -two thousand two hundred eight- three.

iii. 99, 985, 102

Ninety - nine million nine hundred eighty-five thousand one hundred two.

iv. 48,049,831

Forty - eight million forty - nine thousand eight hundred thirty - one

4. Write in expanded form:

i. 3,08,927 ii. 24,05,609 iii. 5,36,18,493 iv. 6,06,06,006

v. 9,10,10,510

i. 3,08,927 = $(3 \times 100000) + (8 \times 1,000) + (9 \times 100) + (2 \times 10) + (7 \times 1)$

ii. 24,05,609 = $(2 \times 10000000) + (4 \times 100000) + (5 \times 1000) + (6 \times 100) + (9 \times 1)$

iii. 5,36,18,493 = $(5 \times 10000000) + (3 \times 1000000) + (6 \times 100000) + 1 \times 10000) + (8 \times 1000) + (4 \times 100) + (9 \times 10) + (3 \times 1)$

iv. 6,06,06,006 = $(6 \times 10000000) + (6 \times 100000) + (6 \times 1000) + (6 \times 1)$

v. 9,10,10,510 = $(9 \times 10000000) + (1 \times 1000000) + (1 \times 10000) + (5 \times 100) + (1 \times 10)$

5. Arrange the following numbers in ascending order;

i. 10,23,45,694,83,54,208,65,39,542,6,35,47,21,1,23,45,678

ii. 18,08,090,18,08,088,1,8,888,1,90,909,1,60,60,666

i. Out of given numbers, we see that there are one 9 digit number, two 8 - digit numbers and two 7 digit numbers.

a. So 9 digit numbers is 10,23,45,694.

8-digit numbers are 6,35,47,201, and 1,23,45,678

Clearly, $1,23,45,678 < 6,35,47,201$ and, 7 digit numbers are:

83,54,208 and 65,39,542

Clearly, $65,39,542 < 83,54,208$.

Hence, the given numbers in ascending order are

$65,39,542 < 83,54,208 < 1,23,45,678 < 6,35,47,201 < 10,23,45,694$

ii. Out of given numbers, we see that there are two 6 digit numbers two 7 digit numbers and one 8 digit number.

So, 6 digit number are 1,81,888 and 1,90,909

Clearly $1,81,888 < 1,90,909$

7 - digit numbers are 18,08,090 and 18,08,088

Clearly, $18,08,090 > 18,08,088$

and, 8 digit number is 1,60,60,666.

Hence, the given numbers in ascending order are $1,81,888 < 1,90,909, 18,08,088 < 18,08,090, < 1,60,60,666$

6. Round off each of the following numbers to nearest hundreds:

i. 7,289 ii. 8,074 iii. 14,627 iv. 4,20,387 v, 28,826

i. In 7,289, the tens digit is $8 > 5$

The required rounded number = 7,300.

ii, In 8,074, the tens digit is $7 > 5$

The required rounded number = 8,100

iii. in 14,627, the ten's digit is $2 < 5$.

The required rounded number = 14,600

iv. in 4,20,387, the tens digit is $8 > 5$.

The required rounded number = 4,20,400

v. in 28,826, the tens digit is $2 < 5$.

The required rounded number = 28,800.

7. Estimate the following products using general rule:

- i. 578×161 ii. $5,281 \times 3,491$ iii. $1,291 \times 592$ iv. $9,250 \times 29$

i. Clearly, both the factors are three digit number, so we round off both the factors to nearest hundreds.

Here, 578 rounds off to 600 and 161 rounds off to 200 .

Now,

$$\begin{array}{r} 600 \\ \times 200 \\ \hline 000 \\ 000 \times \\ \hline 1200 \times \times \\ \hline 120000 \end{array}$$

Estimated product = 1,20,000.

ii. Clearly, both the factors are four digit numbers, so we round off both the factors to nearest thousands.

Here, 5,281 Rounds off to 5,000 and 3,491 rounds off to 3,000

So

$$\begin{array}{r} 5000 \\ \times 3000 \\ \hline 0000 \\ 0000 \times \\ \hline 15000 \times \times \\ \hline 15000000 \end{array}$$

Estimated product = 1,50,00000.

iii. Clearly, one factor is three digit number and other four digit number so we round off both the factors.

Here, 1,291 rounds off to 1,300 and 592 rounds off to 600

So

$$\begin{array}{r} 1300 \\ \times 600 \\ \hline 0000 \\ 0000 \times \\ \hline +7800 \times \times \\ \hline 780000 \end{array}$$

Estimated product = 7,80,000.

iv. here, one factor is four digit number and other two digit number, so we round off both the factors.

Here, 9,250 rounds off to 9,300 and 29 rounds off to 30

$$\begin{array}{r}
 9300 \\
 \times 30 \\
 \hline
 0000 \\
 27900 \times \\
 \hline
 279,000 \\
 \hline
 \text{Estimate product} = 2,79,000
 \end{array}$$

8. Estimate the following by rounding off each number to its greatest place.

i. $439 + 334 + 4,317$ ii. $8,325 - 491$

iii. $1,08,734 - 47,599$ iv. 9×795

v. 87×317

i. 439 rounds off to 400

334 rounds off to 300

$439 + 334 + 4,000.$

$439 + 334 + 4,317$

$= 400 + 300 + 4,00 + 4,000 = 47,00$

Required estimation = 4,700.

ii. 8,325 rounds off to 8000

491 rounds off to 500

$8,325 - 491$

$= 8,000 - 500 = 7,500$

Required estimation = 7,500

iii. 1,08,734 rounds off to 1,00,000

47,599 rounds off to 50,000

$1,08,734, - 47,599$

$= 1,00,000 - 50,000 = 50,000$

Required estimation = 50,000

iv. 9 rounds off to 10

795 rounds off to 800

$$9 \times 795 = 10 \times 800 = 8000$$

$$\text{Required estimation} = 8,000$$

v. 87 rounds off to 90

317 rounds off to 300

$$87 \times 31 = 90 \times 300 = 27,000$$

$$\text{Required estimation} = 27,000$$

9. Express each of the following as a Roman numeral:

i. 164

ii. 226

iii. 596

iv. 759

$$\text{i. } 164 = 100 + 60 + 4$$

$$= \text{CLXIV}$$

$$\text{ii. } 226 = 200 + 20 + 6$$

$$= \text{CCXXVI}$$

$$\text{iii. } 341 = 300 + 40 + 1$$

$$\text{CCCXLI}$$

$$\text{iv. } 596 = 500 + 90 + 6$$

$$= \text{DXCVI}$$

$$\text{v. } = 700 + 50 + 9$$

$$= \text{DCCLIX}$$

10. Write each of the following as a Hindu - Arabic numeral:

i. XXXIV

ii. LIV

iii. CCLXV

iv. CDLXIV

v. DCCLXVI

$$\text{i. } \text{XXXIV} = 30 + (5 - 1)$$

$$= 30 + 4 = 34$$

$$\text{ii. } \text{LIV} = 50 + (5 - 1)$$

$$= 50 + 4 = 54$$

$$\text{iii. } \text{CCLXV} = 300 + 50 + 10 + 5$$

$$300 + 65 = 365$$

$$\text{iv. } \text{CDLXIV} = 400 + 50 + 10 + (5 - 1)$$

$$= 460 + 4 = 464$$

$$\text{v. } \text{DCCLXVI} = 500 + 200 + 60 + (5 + 1)$$

$$= 700 + 60 + 6 = 766$$

1. Estimate each of the following by rounding off each number of nearest tens ;

- a. 11963 – 9369 b. 76877 – 7783 c. 10732 – 4354 d. 78203 – 16407

a. We have , 11963 – 9369

Rounded off 11963 to nearest tens = 11960

And rounded off 9369 to nearest tens = 9370

So, estimated difference = 11960 – 9370 = 2590

b. We have , 76877 – 7783

Rounded off 76877 to nearest tens = 76880

And rounded off 7783 to nearest tens = 7780

So, estimated difference = 76880 – 7780 = 69100

c. We have, 10732 – 4354

Rounded off 10732 to nearest tens = 10730

and rounded off 4354 to nearest tens = 4350

so, estimated difference = 10730 – 4350 = 6380.

d. We have, 78203 – 16407

rounded off 78203 to nearest tens = 78200

and rounded off 16407 to nearest tens = 16410

so, estimated difference = 78200 – 16410 = 61790

2. Estimate each of the following products by rounding off each number of nearest tens;

- a. 87 x 32 b. 311x113 c. 3239 x 28 d. 1385 x 789

a. We have , 87 x 32

Rounded off 87 to nearest tens = 90

And rounded off 32 to nearest tens = 30

So, estimated product = 90 x 30 = 2700

b. We have, 311 x 113

Rounded of 311 to nearest tens = 310

And rounded off 113 of nearest tens = 110

So, estimated product = 310 x 110 = 34100.

c. We have, 3239 x 28

Rounded off 3239 to nearest tens = 3240

And rounded off 28 to nearest tens = 30

So, estimated product = 3240 x 30 = 97200

d. We have, 1385×789

Rounded off 1385 to nearest tens = 1390

And rounded off 789 to nearest tens = 790

So, estimated product = $1390 \times 790 = 1,098,100$.

3. Estimate each of the following by rounding off each number to nearest hundreds

a. $874 + 478$ b. $793 + 397$ c. $11244 + 3507$ d. $17677 + 13589$

a. We have, $874 + 478$

Rounded off 874 to nearest hundreds = 900

And rounded off 478 to nearest hundreds = 500

So, estimated sum = $900 + 500 = 1400$.

b. We have, $793 + 397$

Rounded off 793 to nearest hundreds = 800

And rounded off 397 to nearest hundreds = 400

So, estimated sum = $800 + 400 = 1200$.

c. We have, $11244 + 3507$

Rounded off 11244 to nearest hundreds = 11200

And rounded off 3507 to nearest hundreds = 3500

So, estimated sum = $11200 + 3500 = 14700$

d. We have, $17677 + 13589$

Rounded off 17677 to nearest hundreds = 17700

And rounded off 13589 to nearest hundreds = 13600

So, estimated sum = $17700 + 13600 = 31300$.

4. A mobile number consists of ten digits. The first four digits of the number are 9,9,8 and 7.

The last three digits are 3,5 and 5. The remaining digits are distinct and make the mobile number, the greatest possible number. What are these digits?

Given , first four numbers = 9,9,8 and 7

And last three numbers = 3,5 and 5

Greatest possible mobile number = 9987642355

A mobile no. consists of 10- digits)

Hence, the remaining digits are 6,4 and 2.

5. For making 16 shirt, 44 metres of cloth is needed. How much cloth in required for each shirt?

$$\begin{aligned} \text{Cloth required for 16 shirts} &= 44 \text{ m} \\ \text{Cloth required for each shirts} &= (44 \text{ m}) \div 16 \end{aligned}$$

$$\begin{aligned} &= 2 \text{ m } 75 \text{ cm} \\ &16 \overline{) 44} \\ &\underline{32} \\ &12 \\ &\underline{12} \\ &0 \end{aligned}$$

i.e., 12 x 100 cm = 1200 cm

$$\begin{aligned} &16 \overline{) 1200} \\ &\underline{112} \\ &80 \\ &\underline{80} \\ &0 \end{aligned}$$

6. A car cover 1002 km in 16 hour, at what speed per hour does the car move?

$$\begin{aligned} &16 \overline{) 1002} \text{ km} \\ &\underline{-96} \\ &42 \\ &\underline{-32} \\ &10 \end{aligned}$$

$$10\text{km} = 10 \times 1000 \text{ m} = 10,000 \text{ m}$$

Now

$$\begin{aligned} &16 \overline{) 1000} \\ &\underline{-96} \\ &40 \\ &\underline{-32} \\ &80 \\ &\underline{-80} \\ &0 \end{aligned}$$

Speed of car = 62 km and 625 m per hour

1. Floor of a room measures 4.5 m x 3 m .

Find the minimum number of complete square marble slabs of equal size required to cover the entire floor.

To find the minimum number of square slabs to cover the floor, we have to find the greatest size of each such slab.

For this purpose, we have to find the HCF of 450 and 300.

$$\text{Since, } 4.5 \text{ m} = 450 \text{ m and } 3 \text{ m} = 300 \text{ cm}$$

$$\text{Now, HCF of } 450 \text{ and } 300 = 150$$

$$\text{Required size of the slab} = 150 \text{ cm} \times 150 \text{ cm}$$

$$\begin{aligned} \text{Number of required slabs} &= \frac{\text{Area of the floor}}{\text{Area of one slab}} \\ &= \frac{450 \times 300}{150 \times 150} = 6 \end{aligned}$$

Hence, the number of slabs is required 6.

2. There was a stock of 17380200 quintal of wheat in a godown of the food corporation of India.

Out of this stock, 2756744 quintal of wheat was sent to Delhi and 4863108 quintal to UP.

How much is the balance stock now?

We have,

$$\begin{aligned} \text{Total stock of wheat} &= 17380200 \text{ quintal} \\ \text{Quantity of wheat sent to Delhi} &= 2756744 \text{ quintal} \\ \text{Quantity of wheat sent to UP} &= 4863108 \text{ quintal} \\ \text{Total Quantity of wheat taken} & \\ \text{out of the godown} &= 2756744 + 4863108 = 7619852 \text{ quintal} \\ \text{Balance stock of wheat in godown} &= (17380200 - 7619852) \\ &= 9760348 \text{ quintal} \end{aligned}$$

Hence, 9760348 quintal balanced stock wheat in godown

3. Find the sum of greatest and the smallest six - digit numbers formed by digits 2,0,4,7,6,3, using each digit only once.

Given digits are 2,0,4,7,6,3.

Using each digit only once.

The greatest six -digit number is 764320.

The smallest six- digit number is 203467.

$$\text{Now, Sum of these numbers} = 764320 + 203467 = 967787$$

4. A box contains 50 packets of biscuits, each weighing 120 g. How many such boxes can be loaded in a van, which cannot carry beyond 900 kg?

$$\text{Given, total number of packets} = 50$$

$$\text{Weight of each packet} = 120 \text{ g}$$

$$\text{Weight of a box} = 50 \times 120 \text{ g} = 6000 \text{ g} = 6 \text{ kg}$$

$$1000 \text{ g} = 1 \text{ kg}$$

$$\text{Required number of boxes} = \frac{900}{6} = 150$$

5. Reshma's school is $\frac{8}{10}$ km away from her house. Daily she walks a distance and then takes a bus to travel $\frac{1}{2}$ km to reach the school.

- a. How far does she walk?
 b. Why does she walk some distance daily?

a. Distance between her house to the school = $\frac{8}{10}$ km

Distance covered by bus = $\frac{1}{2}$ km

She walks distance = $\left(\frac{8}{10} - \frac{1}{2}\right) = \frac{8-5}{10} = \frac{3}{10}$ km
 $= \frac{3 \times 1000}{10} = 300$ m

b. She walks some distance daily, because

- i. it strengthens her heart.
- ii. it is lower disease risk.
- iii. it keeps her weight balance.

6. India's population has been steadily increasing from 439 millions in 1961 to 1028 millions in 2001. Find the total increase in population from 1961 to 2001. Write the increase in population in the Indian system of numeration, using commas suitably.

Given, population of India in 1961 = 439 millions
 $= 439 \times 1000000 = 439000000$
 [1 million = 1000000]

And population of India in 2001 = 1028 millions
 $= 1028 \times 1000000 = 1028000000$
 [1 million = 1000000]

Total increase in population from 1961 to 2001 = Population in 2001 - population in 1961
 $= 1028000000 - 439000000 = 589000000$
 $589 \times 1000000 = 589$ millions

So, the increase in population in the Indian system of numeration = 58,90,00,000

7. A person had ₹ 10,00,000 with him, he purchased a colour TV for ₹ 16,580, a motorcycle for ₹ 45,890 and a flat for ₹ 8,70,000. How much money was left with him?

Given, total money = ₹ 10,00,000
 Money spent on a colour TV = ₹ 16,580
 Money spent on a motorcycle = ₹ 45,890
 And money spent on a flat = ₹ 8,70,000
 Total amount spent = 16,580 + 45,890 + 8,70,000
 $= ₹ 9,32,470$

$$\begin{aligned} \text{Money left with him} &= 10,00,000 - 9,32,470 \\ &= ₹ 67,530 \end{aligned}$$

Hence, ₹ 67,530 was left him.

8. In a five - digit number, digit at ten's place is 4, digit at unit's place is one fourth of ten's place digit, digit at hundred's place is 0 , digit at thousand's place is 5 times of the digit at unit's place and ten thousand's Place digit is double the digit at ten's place. Find the number.

According to the question.

$$\begin{aligned} \text{Digit at ten's place} &= 4 \\ \text{Digit at unit's place} &= \frac{1}{4} \text{ of ten's place digit} = \frac{1}{4} \times 4 = 1 \\ \text{Digit at hundred's place} &= 0 \\ \text{Digit at thousand's place} &= 5 \times \text{Digit of unit's place} \\ &= 5 \times 1 = 5 \\ \text{Digit at ten thousand's place} &= 2 \times \text{digit of ten's place} \\ &= 2 \times 4 = 8 \\ \text{Required number} &= 85041 \end{aligned}$$

9. A garment factory produced 216315 shirts, 182736 trouser and 58, 704 jackets in a year.

What is the total production of all the three items in that year?

According to the question.

$$\begin{aligned} \text{A garment factory produced shirts} &= 216315 \\ \text{Produced trousers} &= 182736 \\ \text{Produced jackets} &= 58704 \\ \text{Total production of all the three item in that year} &= \text{sum of all items} \\ &= 216315 + 182736 + 58704 = 457755 \end{aligned}$$

Hence, the total production of all the three items in that year is 457755.



Next Generation School