

Class 5 Maths

Large Numbers

1. Place Value Challenge

1. In the number 8,54,72,931, what is the place value of 7?
2. Find the difference between the place value and face value of 5 in 6,35,40,128.
3. In 7,89,45,213, which digit is in the ten thousands place?
4. Write the sum of the place values of 3 and 4 in the number 4,73,52,691.
5. In the number 9,48,63,275, how much greater is the place value of 6 than the place value of 3?

2. Indian and International System

1. Write 56,078,912 in the Indian system.
2. Write 3,45,67,891 in the International system.
3. Write the number name for 8,34,56,210 in the Indian system.
4. Write the number name for 72,540,901 in the International system.
5. Which is greater? 4,75,32,190 or 47,532,190

3. Expanded Form Reasoning

1. Write the number represented by

$$6,00,00,000 + 40,00,000 + 8,00,000 + 70,000 + 5,000 + 200 + 9$$

2. Write the expanded form of 5,28,76,409 using place values.
3. A number has 7 crores 3 ten lakhs 6 lakhs 4 ten thousands 9 thousands 2 hundreds and 5 ones. Write the number.
4. If $2,00,00,000 + 40,00,000 + 6,00,000 + 90,000 + 8,000 + 500 + 3$, write the standard number.
- The expanded form of a number is $3,00,00,000 + 50,00,000 + 7,00,000 + 40,000 + 9,000 + 600 + 20 + 4$. Find the number.

4. Comparing Large Numbers

Use $>$, $<$, or $=$

1. 8,45,32,190 ___ 8,45,23,910
2. 7,65,40,125 ___ 7,65,40,125
3. 6,90,12,870 ___ 6,09,92,870
4. 9,01,56,312 ___ 9,10,56,312
5. 5,43,21,987 ___ 5,43,12,987

5. Ordering Large Numbers

Arrange in ascending order.

1. 7,45,32,109
- 7,45,23,190
- 7,45,31,209
- 7,45,30,129

2. 6,54,21,098

6,45,90,231

6,54,02,981

6,54,21,089

6. Number Formation Puzzle

Using the digits 3, 7, 9, 1, 8, 4, 6

1. Form the greatest 7-digit number.
2. Form the smallest 7-digit number.
3. Form the greatest number less than 9,00,00,000 using these digits once.
4. Form the smallest number greater than 1,00,00,000 using the digits 2, 0, 5, 8, 4, 1, 7.

7. Missing Digit Challenge

1. 7,45,3□2,190 is divisible into the correct place value pattern.
Find the missing digit if the ten thousands place must be 8.
2. The number 9,3□,45,120 is written in the Indian system.
Find the missing digit if the number is greater than 9,35,45,120 but less than 9,40,45,120.
3. Fill the missing digit:

6,□5,72,109

So that the number is greater than 6,45,72,109 but less than 6,95,72,109.

8. Logical Problems

1. The greatest 7-digit number is increased by 1.

What is the new number and how many digits does it have?

2. A number is 1 less than the smallest 8-digit number.

Write the number.

3. The difference between the greatest 7-digit number and the smallest 7-digit number is?

4. A number has:

- 6 in the crore place
- 2 in the lakh place
- 9 in the thousand place
- 4 in the tens place

All other digits are zero. Write the number.

5. A number is written as $8,00,00,000 + 50,00,000 + 7,000 + 90 + 3$.

Find the number.

ANSWERS

1. Place Value

1. 7 is in the ten thousands place

Place value = 70,000

2. Face value of 5 = 5

Place value = 5,00,000

Difference = 4,99,995

3. Digit in ten thousands place = 4

4. Place value of 3 = 3,00,000

Place value of 4 = 4,00,00,000

Sum = 4,03,00,000

5. Place value of 6 = 60,000

Place value of 3 = 3,000

Difference = 57,000

2. Systems of Numeration

1. 56,078,912 → 5,60,78,912

2. 3,45,67,891 → 34,567,891

3. Step 1: Read the number according to Indian place values

8,34,56,210

8 crore | 34 lakh | 56 thousand | 210

Step 2: Write the number name

Eight crore thirty-four lakh fifty-six thousand two hundred ten

4. Step 1: Identify the place values

72,540,901

72 million | 540 thousand | 901

Step 2: Write the number name

Seventy-two million five hundred forty thousand nine hundred one

5. Which is greater?

4,75,32,190 or 47,532,190

Step 1: Convert both numbers to the same system (International)

4,75,32,190
= 47,532,190

47,532,190
= 47,532,190

Step 2: Compare

Both numbers are exactly the same value.

Final Answer

4,75,32,190 = 47,532,190

They are equal because they represent the same number written in different systems of numeration.

3. Expanded Form

1. 6,48,75,209

2.

$$5,00,00,000 + 20,00,000 + 8,00,000 + 70,000 + 6,000 + 400 + 9$$

3. 7,36,49,205

4. 2,46,98,503

5. 3,57,49,624

4. Comparison

1. <

2. =

3. >

4. <

5. >

5. Ordering

Ascending

1. 7,45,23,190 7,45,30,129 7,45,31,209 7,45,32,109

2. 6,45,90,231 6,54,02,981 6,54,21,089 6,54,21,098

6. Number Formation

1. Greatest = 9,87,64,31

2. Smallest = 1,34,67,89

3. To stay **less than 9 crore**, the first digit must be **8 or smaller**.

Use the largest possible digits after **8**.

Digits used: **8, 9, 7, 6, 4, 3, 1**

Arrange remaining digits in descending order.

Answer: 8,976,431

4. To be **greater than 1 crore**, the first digit must be **1**.

Arrange the remaining digits in **ascending order**, but **0 cannot come first**, so place it after 1.

Digits after 1: 0, 2, 4, 5, 7, 8

Answer: 1,02,45,78

7. (a) 7,45,3□2,190

The ten thousands place is the missing box.

To make the ten thousands digit 8, fill the box with 8.

Answer:

7,45,382,190

(b) 9,3□,45,120

The number must be

Greater than **9,35,45,120**

Less than **9,40,45,120**

So the lakh value must be **between 35 and 40**.

Therefore the missing digit is **6, 7, 8, or 9**.

Example valid numbers:

9,36,45,120

9,37,45,120

9,38,45,120

9,39,45,120

Answer

Missing digit = 6, 7, 8, or 9

(c) 6,□5,72,109

The number must be:

Greater than **6,45,72,109**

Less than **6,95,72,109**

The missing digit is in the **ten lakh place**.

So the number must be between **45 lakh and 95 lakh**.

Possible digits: **5, 6, 7, 8**

Examples

6,55,72,109

6,65,72,109

6,75,72,109

6,85,72,109

8. Logical

1. Greatest 7 digit number = 99,99,999

Add 1

= 1,00,00,000

(8-digit number)

2. Smallest 8 digit number

$$= 1,00,00,000$$

One less

$$= 99,99,999$$

3. Difference

$$99,99,999 - 10,00,000 = 89,99,999$$

4. Step 1: Write the place values

Crore place = 6 \rightarrow 6,00,00,000

Ten lakh place = 0

Lakh place = 2 \rightarrow 2,00,000

Ten thousand place = 0

Thousand place = 9 \rightarrow 9,000

Hundreds place = 0

Tens place = 4 \rightarrow 40

Ones place = 0

Step 2: Write the number

6,02,09,040

Final Answer: 6,02,09,040

5. Answer is 8,50,07,093