

SESSION : 13
CLASS : IV
SUBJECT : MATHEMATICS
CHAPTER NUMBER : 2
CHAPTER NAME : NUMBERS
**SUBTOPIC : FORMATION OF NUMBERS USING
GIVEN DIGITS, EXERCISE-2(F)**

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE

- Enable the students to understand how to form numbers using given digits.

Formation Of Numbers Using Given Digits

1. To form the largest number using the given digits only once (without repetition), **arrange the given digits in descending order.**

Example :

- (a) The greatest 6-digit number formed by using 2, 0, 5, 7, 3, 9 is

9, 7 5, 3 2 0

- (b) The greatest 7-digit number formed by using 1, 2, 8, 9, 4, 3, 0 is

9 8, 4 3, 2 1 0

Formation Of Numbers Using Given Digits

2. To form the smallest number using the given digits only once.

(a). **Arrange the digits in ascending order when none of the given digits is zero.**

Examples :

(i) Smallest number of 6-digit using 2, 1, 3, 5, 8, 9 is

1, 2 3, 5 8 9

(ii) Smallest 7-digit number using 7, 4, 3, 2, 8, 1, 9 is

1 2, 3 4, 7 8 9

Formation Of Numbers Using Given Digits

2. To form the smallest number using the given digits only once.

(b) When one of the digits is zero, put zero at the second place from the left and arrange the remaining digits in ascending order.

Examples :

(i) Smallest 6-digit number using 7, 0, 8, 2, 4, 5 is

2, 0 4, 5 7 8

(ii) Smallest 7-digit number using 8, 5, 1, 0, 7, 4, 2 is

1 0 , 2 4 , 5 7 8

Formation Of Numbers Using Given Digits

3. To form the largest number by repeating the digits,

- ❖ first write the digits in descending order.
- ❖ repeat the greatest digit (i.e. the first number) in all the places.

Remember : Its not written to use all the given digits

Examples :

Largest 6-digit number using 6, 8, 3, 5 :

Here $8 > 6 > 5 > 3$

L	TTh	Th	H	T	O
8	8	8	8	8	8

Formation Of Numbers Using Given Digits

4. To form the largest number using all given digits and with repetition:

- Write the smallest digit in ones, next greater digit in tens place and so on till all the given numbers are arranged.
- Repeat the greatest digit in all the remaining places.

Examples :

Largest 7-digit number using 2, 5, 0 is

TL	L	TTh	Th	H	T	O
5	5	5	5	5	2	0

Ans- **5,55,520**

Formation Of Numbers Using Given Digits

5. To form the smallest number by repeating the digits,

- ❖ first write the digits in ascending order.
- ❖ repeat the smallest digit (i.e. the first number) in all the places.

Remember : Its not written to use all the given digits

Examples :

Smallest 6-digit number using 9, 5, 8, 2 :

Here $2 < 5 < 8 < 9$

L	TTh	Th	H	T	O
2	2	2	2	2	2

Formation Of Numbers Using Given Digits

6. To form the smallest number using all given digits and with repetition:

- Write the largest digit in ones, next smaller digit in tens place and so on till all the given numbers are arranged.
- Repeat the smallest digit in all the remaining places.

Examples :

smallest 7-digit number using 2, 5, 8, 1 is

TL	L	TTh	Th	H	T	O
1	1	1	1	2	5	8

Ans- **1 1, 1 1 ,2 5 8**

Formation Of Numbers Using Given Digits

Exercise – 2(F)

1. Write the smallest 6-digit number using the following digits only once.

Solution

(a) 3, 7, 5, 2, 9, 0

2,03,579

(b) 8, 0, 4, 1, 6, 3

1,03,468

(c) 9, 2, 4, 6, 5, 0

2,04,569

Formation Of Numbers Using Given Digits

Exercise – 2(F)

2. Write the largest 7-digit number using the following digits any number of times.

Remember : Its not written to use all the given digits

Solution

(a) 5, 8, 4, 1

8 8, 8 8, 8 8 8

(b) 9, 0, 3

9 9, 9 9, 9 9 9

(c) 5, 8

8 8, 8 8, 8 8 8

Formation Of Numbers Using Given Digits

Exercise – 2(F)

3. Write the largest 6-digit number using the following digits with repetition.

Remember : Its not written to use all the given digits

Solution

(a) 7, 5, 6, 4

7,77,777

(b) 7, 8, 0, 1

8,88,888

(c) 9, 3, 1

9,99,999

Formation Of Numbers Using Given Digits

Exercise – 2(F)

4. Write the smallest 7-digit number using the following digits with repetition.

Remember : Its not written to use all the given digits

Solution

(a) 3, 4, 8, 2, 0

20,00,000

(b) 1, 9, 6, 4

11,11,111

(c) 3, 4, 7

33,33,333

HOME ASSIGNMENT:

- **Practice Ch-1 for the class test.**

LEARNING OUTCOME:

Students are able to know how to form numbers using different digits.

THANKING YOU
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