

Ch-1 Number system

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class - VI sec - C school no - 5856

DT - 21-5-22 sub - Mathematics

1 The difference between the largest 5-digit number & the largest 5-digit number with three distinct digits is

- (a) 10 (b) 10012 (c) 12 (d) 123

2 The largest 4-digit number using any one digit twice from digits 5, 9, 2 & 6 is

- (a) 9652 (b) 9562 (c) 9659 (d) 9965

3 The largest 5-digit number having three different digits is

- (a) 98978 (b) 99897 (c) 99987 (d) 98799

4 Compare the numbers - 9524420 & 9528420

Ans 9528420  $\rightarrow$  9524420

5 What is the smallest 3-digit number with unique digits?

Ans The smallest 3-digit number with unique digits is

6 What is the smallest 3-digit number which doesn't change if



digits are written in reverse.  
Ans The smallest 3-digit number which doesn't change if digits are written in reverse is -

7 Arrange the numbers 5949107, 3578160, 3808761, 1596496, 9524420, 5446837, 6174985 in ascending order.

Ans 1596496, 3578160, 3808761, 5446837, 5949107, 6174985, 9524420

8 Arrange the numbers 5977333, 2049014, 9798934, 3440557, 844696, 5655237, 3446116 in descending order.

Ans 9798934, 5977333, 5655237, 3446116, 3440557, 2049014, 844696

9 Answer the following

(i) Write the smallest 5 digit number having two different digits.

Ans The smallest 5 digit number having two different digits is - 10000

(ii) Write the smallest 6 digit number having three different digits.

Ans The smallest 6 digit number having three different digits is - 012



(iii) Write the largest 7-digit number having three different digits.

A The largest 7-digit number having three different digits is -  
9876543

10 state true or false

(i) The largest six digit telephone number that can be formed by using digits 5, 3, 4, 7, 0, 8 only once is 878403.  $\checkmark$

(ii) The largest 4-digit number formed by the digits 6, 7, 0, 9 using each digit only once is 9760.  $\checkmark$

(iii) The smallest 4-digit number is the successor of the largest 3-digit number.  $\checkmark$

11. find the smallest & largest no

(i) 382, 4972, 18, 59785, 750

Ans smallest - 18 largest - 59785

(ii) 1473, 89423, 100, 5000, 310

Ans smallest - 100 largest - 89423

(iii) 1834, 75284, 111, 2333, 450

Ans smallest - 111 largest - 75284

(iv) 2853, 7691, 9999, 12002, 124

Ans smallest - 124 largest - 12002



12 Arrange the following in ascending order

(i) 4017, 25134, 6732, 19547, 15012  
Ans 4017, 6732, 15012, 19547, 25134

(ii) 5674, 2019, 56107, 76906, 2199  
Ans 2019, 2199, 5674, 56107, 76906

13 Arrange the following numbers in descending order

(i) 65137, 3019, 43850, 26197, 28091  
Ans 65137, 43850, 26197, 28091, 3019

(ii) 7326, 2417, 4972, 62253, 73317  
Ans 73317, 62253, 7326, 4972, 2417

14 A machine manufactures screws in a day - 2825

Month of January has days - 31

The machine produces screws - 2825

$\times 31 = 2825$

$$\begin{array}{r} \cancel{28} \times 31 \\ 2825 \\ + 84750 \\ \hline 87575 \end{array}$$

So the machine manufactures 87575 screws in the month of January 2006



15 Difference between 2 numbers - 983563  
The greater number is - 2398357  
The smaller number is - 1398357

$$\begin{array}{r} - 983563 = 1398357 \\ - \quad 983563 \\ \hline 4114794 \end{array}$$

so the smaller number is 4114794

16 mass of 8 packets - 42 kg 400 gm  
mass of each packet - 42400 ÷ 8

$$\begin{array}{r} 5300 \\ 8 \overline{) 42400} \\ \underline{- 40} \end{array}$$

$$\begin{array}{r} 24 \\ \underline{- 24} \end{array}$$

$$\begin{array}{r} 00 \\ \underline{- 0} \\ 00 \end{array} = 5 \text{ kg } 300 \text{ gm}$$

$$\begin{array}{r} 0 \\ \underline{- 0} \\ 0 \end{array}$$

so the mass of each packet is 5 kg 300 gm

17 Amount of money Mr Singh saves  
per month - ₹ 250

Money saved by Mr. Singh in 1 year  
1 year = 12 month = 12 × 250 = 3000



$$\begin{array}{r} 250 \\ \times 12 \\ \hline 500 \\ 2500 \\ \hline 3000 \end{array}$$

money he will save in 3 years =  
 $3000 \times 3 = 9000$   
so he will save 9000 money in  
3 years

18 Money Merchant had - ~~778592~~

Each radio costs ~~71200~~

40 such radio costs - 248000

total money remain with her -

$$\begin{array}{r} 78892 \\ - 48000 \\ \hline 30892 \end{array}$$

so ~~30892~~ left with her

19 weight of a medicine box 4 kg 800g

total no of boxes can be loaded -

$$\begin{array}{r} 800000 \text{ kg} - 8000 \times 1000 = 800000 \\ 800000 \div 4500 = \frac{800000}{4500} \end{array}$$

$$\begin{array}{r}
 177 \\
 45 \overline{) 8000} \\
 \underline{- 45} \phantom{00} \\
 350 \phantom{0} \\
 \underline{- 315} \phantom{0} \\
 350 \\
 \underline{- 315} \\
 35
 \end{array}$$

so 177 boxes can be loaded in the Van

20 Shankar scored runs - 6980  
 he wishes to complete - 10000  
 runs needed more - 10000

$$\begin{array}{r}
 10000 \\
 \underline{- 6980} \\
 3020
 \end{array}$$

so he needed 3020 runs more

2) If you have the vessel container - 4500ml  
 glasses can be filled each of 25ml  
 is =  $4500 \text{ml} \div 25 = 180$

$$\begin{array}{r}
 180 \\
 25 \overline{) 4500} \\
 \underline{- 25} \phantom{00} \\
 200 \phantom{0} \\
 \underline{- 200} \phantom{0} \\
 00 \\
 \underline{- 00} \\
 0
 \end{array}$$



Glasses can be filled of 50 ml

$$= 4500 \div 50 =$$

$$\begin{array}{r} 90 \\ 50 \overline{) 4500} \\ \underline{450} \\ 00 \\ \underline{0} \\ 0 \end{array}$$

So 180 glasses can be filled of 25 ml & 90 glasses can be filled of 50 ml

22 The first four digits of mobile numbers - 9987

The last three digits of mobile numbers - 355

missing digits - 64210

The phone number 9987642355

so the phone number is - 9987642

355

23 Number of tickets sold all

four day - 1094, 1812, 2050, 2751

Total tickets sold all four

days -  $2751 + 2050 + 1812 + 1094 =$

$$\begin{array}{r} 2751 \quad 1812 \quad 4801 \\ 42050 \quad +1094 \quad +2906 \\ \hline 4801 \quad 2906 \quad 7707 \end{array}$$



22 7707 ticket sold all four days

25 A student by mistakenly multiplied

$$\begin{array}{r}
 7236 \\
 \times 65 \\
 \hline
 36180 \\
 +434160 \\
 \hline
 470340
 \end{array}$$

The student needs to multiply

$$\begin{array}{r}
 7236 \\
 \times 56 \\
 \hline
 43416 \\
 +361800 \\
 \hline
 405216
 \end{array}$$

~~so~~ the number multiplied by mistake-ly is greater than the actual number

$$\begin{array}{r}
 470340 \\
 -405216 \\
 \hline
 65124
 \end{array}$$

so the by mistakenly number is greater by 65124 than the actual number