CHAPTER-1

Knowing Our Numbers

2 MARKS QUESTIONS

1. Can you instantly find the greatest and the smallest numbers in each row?

1. 382, 4972, 18, 59785, 750.

Solutions: 59785 is the greatest and 18 is the smallest.

2. 1473, 89423, 100, 5000, 310.

Solutions: 89423 is the greatest and 310 is the smallest.

2. Use the given digits without repetition and make the greatest and smallest 4-digit numbers.

(a) 2, 8, 7, 4

Solutions:

Greatest 4-digit number: Arrange the digits in descending order: 8, 7, 4, 2 .

So, the greatest 4-digit number is 8742.

Smallest 4-digit number: Arrange the digits in ascending order: 2, 4, 7, 8

So, the smallest 4-digit number is 2478.

(b) 5, 4, 0, 3

Solutions:

Greatest 4-digit number: Arrange the digits in descending order: 5, 4, 3, 0

So, the greatest 4-digit number is 5430.

Smallest 4-digit number: Arrange the digits in ascending order: 0, 3, 4, 5

So, the smallest 4-digit number is 0345.

3. Arrange the following numbers in ascending order:

(a) 847, 9754, 8320, 571

Solutions: ascending order: 571, 847, 8320, 9754

(b) 9801, 25751, 36501, 38802

Solutions: ascending order: 9801, 25751, 36501, 38802

4. Place commas correctly and write the numerals:

(a) Seventy three lakh seventy five thousand three hundred seven.

Solutions: 73,75,307

(b) Nine crore five lakh forty one.

Solutions : 9,05,000,041

5. Insert commas suitably and write the names according to Indian System of Numeration :

(a) 87595762

Solutions : 87,59,57,622

(b) 8546283

Solutions : 85,46,283

6. Population of Sundarnagar was 2,35,471 in the year 1991. In the year 2001 it was found to be increased by 72,958. What was the population of the city in 2001?

Solutions:

Population of the city in 2001

= Population of the city in 1991 + Increase in population

=235471 + 72958 = 308429

7. The town newspaper is published every day. One copy has 12 pages. Everyday 11,980 copies are printed. How many total pages are printed everyday?

Solutions:

Each copy has 12 pages. Hence, 11,980 copies will have 12 × 11,980 pages. What would this number be? More than 1,00,000 or lesser. Now,

11980 × 12 =23960 +119800 =143760

Answer :Everyday 1,43,760 pages are printed

8. Shekhar is a famous cricket player. He has so far scored 6980 runs in test matches. He wishes to complete 10,000 runs. How many more runs does he need?

Solutions :

Shekhar scored = 6980 runs

He wants to complete = 10000 runs

Runs needed to score more = 10000 – 6980 = 3020

Hence, he needs 3020 more runs to score

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

Solutions :

Number of screws manufactured in a day = 2825

Since January month has 31 days,

The number of screws manufactured in January = 31 × 2825 = 87575

Hence, the machine produced 87575 screws in the month of January 2006.

10. The distance between the school and a student's house is 1 km 875 m. Everyday she walks both ways. Find the total distance covered by her in six day?

Solutions:

Distance covered between the school and her house = 1 km 875 m = 1000 + 875 = 1875 m

Since the student walks both ways,

The distance travelled by the student in one day = 2 × 1875 = 3750 m

Distance travelled by the student in 6 days = 3750 m × 6 = 22500 m = 22 km 500 m

∴ The total distance covered by the student in six days is 22 km and 500 m.

4 MARKS QUESTIONS

1. Write them using placement boxes and then write their expanded forms.

(i) 475320

Ans: Expanded form: 4×100,000+7×10,000+5×1,000+3×100+2×10+0x1

(ii) 9847215

Ans: 9×1,000,000+8×100,000+4×10,000+7×1,000+2×100+1×10+5×1

(iii) 97645310

Ans:
9×10,000,000+7×1,000,000+6×100,000+4×10,000+5×1,000+3×100+1×10+0×1

(iv) 30458094

Ans:
3×10,000,000+0×1,000,000+4×100,000+5×10,000+8×1,000+0×100+9×10+4×1

2. 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?

Solutions:

No. of votes secured by the successful candidate = 577500

No. of votes secured by his rival = 348700

Margin by which he won the election = 577500 – 348700 = 228800 votes

∴ The successful candidate won the election by 228800 votes

3. A student multiplied 7236 by 65 instead of multiplying by 56. By how much was his answer greater than the correct answer? (Hint: Do you need to do both the multiplications?)

Solutions:

Difference between 65 and 56, i.e. (65 – 56) = 9

The difference between the correct and incorrect answer = 7236 × 9 = 65124

Hence, by 65124, the answer was greater than the correct answer.

4. 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 1094, 1812, 2050 and 2751. Find the total number of tickets sold on all the four days?

Solutions:

Number of tickets sold on 1st day = 1094

Number of tickets sold on 2nd day = 1812

Number of tickets sold on 3rd day = 2050

Number of tickets sold on 4th day = 2751

Hence, the total number of tickets sold on all four days = 1094 + 1812 + 2050 + 2751 = 7707 tickets

5. Place commas correctly and write the numerals:

(a) Seventy three lakh seventy five thousand three hundred seven

(b) Nine crore five lakh forty one

(c) Seven crore fifty two lakh twenty one thousand three hundred two

(d) Fifty eight million four hundred twenty three thousand two hundred two

(e) Twenty three lakh thirty thousand ten

Solutions:

(a) The numeral of seventy three lakh seventy five thousand three hundred seven is 73,75,307

(b) The numeral of nine crore five lakh forty one is 9,05,00,041

(c) The numeral of seven crore fifty two lakh twenty one thousand three hundred two is 7,52,21,302

(d) The numeral of fifty eight million four hundred twenty three thousand two hundred two is 5,84,23,202

(e) The numeral of twenty three lakh thirty thousand ten is 23,30,010

7 MARKS QUESTIONS

1. A merchant had Rs 78,592 with her. She placed an order for purchasing 40 radio sets at Rs 1200 each. How much money will remain with her after the purchase?

Solutions:

Total money the merchant had = Rs 78592

The number of radio sets she placed an order for purchasing = 40 radio sets

Cost of each radio set = Rs 1200

So, cost of 40 radio sets = Rs 1200 × 40 = Rs 48000

Money left with the merchant = Rs 78592 – Rs 48000 = Rs 30592

Hence, money left with the merchant after purchasing radio sets is Rs 30592.

2. Estimate each of the following using the general rule:

(a) 730 + 998 (b) 796 – 314 (c) 12904 + 2888 (d) 28292 – 21496.

Solutions:

(a) 730 + 998

Round off to hundreds

730 rounds off to 700

998 rounds off to 1000

Hence, 730 + 998 = 700 + 1000 = 1700

(b) 796 – 314

Round off to hundreds

796 rounds off to 800

314 rounds off to 300

Hence, 796 – 314 = 800 – 300 = 500

(c) 12904 + 2888

Round off to thousands

12904 rounds off to 13000

2888 rounds off to 3000

Hence, 12904 + 2888 = 13000 + 3000 = 16000

(d) 28292 – 21496

Round off to thousands

28292 round off to 28000

21496 round off to 21000

Hence, 28292 – 21496 = 28000 – 21000 = 7000

3. Estimate the following products using the general rule:

(a) 578 × 161

(b) 5281 × 3491

(c) 1291 × 592

(d) 9250 × 29.

Solutions:

(a) 578 × 161

Rounding off by general rule

578 and 161 rounded off to 600 and 200, respectively

600

× 200

_____

120000

_____

(b) 5281 × 3491

Rounding off by general rule

5281 and 3491 rounded off to 5000 and 3500, respectively

5000

× 3500

_____

17500000

_____

(c) 1291 × 592

Rounding off by general rule

1291 and 592 rounded off to 1300 and 600, respectively

1300

× 600

_____

780000

_____

(d) 9250 × 29

Rounding off by general rule

9250 and 29 rounded off to 9000 and 30, respectively

9000

× 30

_____

270000

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