

Chapter - 4 Operation on large Number

• Find the sum of the following

11. $13256978 + 6975684 + 23679$
 $= 20256341$

12. $343851728 + 166452675 + 36725634935$
 $= 513977901$

13. $474361279 + 236554385 + 5316883720716314$
 $= 784800815$

Soln a) $\begin{array}{r} 13256978 \\ 6975684 \\ + 23679 \\ \hline 20256341 \end{array}$ Ans

Soln b) $\begin{array}{r} 343851728 \\ 166452675 \\ + 3672563 \\ \hline 513976966 \end{array}$

Soln c) $\begin{array}{r} 474361279 \\ 236554385 \\ 53168837 \\ + 20716314 \\ \hline 784800815 \end{array}$

Exercise - 7

Word problem

1. The number of person who visited the holy shrine of Mata Vaishno Devi during last two consecutive years was 6378907 and 7865089 respectively. How many persons visited shrine during these two years?

Soln: Total no. of persons visited the shrine during these two years -

$$\begin{array}{r} 63,78,907 \\ + 78,65,089 \\ \hline 14,24,3996 \text{ Ans} \end{array}$$

2. Last year, three sugar factories in a town produced 23807575 bags, 19728686 bags and 8962347 bags respectively. How many bags in all were produced by all the three factories during last year?

Soln: Total no. of bags in all were produced by all three factories during last three years -

$$\begin{array}{r} 23,80,75,75 \\ + 19,72,86,86 \\ + 8,96,23,47 \\ \hline 52,49,86,08 \end{array}$$

3 In a city there are 5726439 men, 4439675 women and 2016348 children. What is the total population of the city?

Soln → No. of men - 5726439
 No. of woman - 4439675
 No. of children - 2016348
 Total population of the city -

$$\begin{array}{r}
 5726439 \\
 4439675 \\
 + 2016348 \\
 \hline
 12182462
 \end{array}$$

4 In a particular year, the male population of a city was 2359324 more than the female population. The number of female was 6813675. What was the male population what was the total population of the city during that year?

Soln → No. of female - 6813675
 No. of male 2359324 more than female population.
 No. of male -

$$\begin{array}{r}
 6813675 \\
 + 2359324 \\
 \hline
 9172999
 \end{array}$$

Date: _____

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Total no. of population of the city
during that year - 9472999

+ 6813624

1,598,6674 Ans

5. The sales-receipt of a company during the year 2011 was ₹13047546. Next year it increased by ₹7973674. What was the sales-receipt of the company in the year 2012? What was the total sales-receipt of the company during these two years?

Soln → Earning of the company in the year
2011 - ₹13047546

Increase in the earning during next
year - ₹7973674

Earning of the company in the year
2012 - ₹13047546

+ ₹7973674

₹2,10,21,220 Ans

6. In a particular year an industry produced 6736265 bicycle. Next day the number of bicycles produced was

1374589 more than those produced in the preceding year, How many bicycles were produced during these two years.

Soln: No. of bicycles produced by an industry - 6736265

Increase in the no. of bicycles during next year - $6736265 + 1374589$
 $\Rightarrow 8110854$

Total no. bicycle produced during these two years - 6736265
 $+ 8110854$
148,47,119 Ans

7. There were three candidates in an election. They received 678509 votes, 462397 votes and 97685 votes respectively. The number of invalid votes and 16489 and 45716 persons did not votes. How many votes were registered.

Solⁿ 7. In an election,

No. of valid votes - 678509

For three candidates - 462397

= 678509

462397

+ 97685

1238591

No. of invalid votes - 16489

+ 45716

62205

Total no. of votes were registered -

1238591

+ 62205

1300,796 Ans

8. A survey conducted on an Indian state shows that 1623540 persons have only primary education; 9768678 people have secondary education; 6437945 people have higher education and 2682635 people are illiterate. If the no. of children below the age of school admission be 898781, find the population of that state

Ans 8 Total no. of people conducted in survey - 16,23,540

No. of people have only primary education - 9768678

No. of people have secondary education - 6437945

No. of people have higher education - 2682635

No. of children below the age of school admission - 698781

Total population of the state

= 1623540

9768678

6437945

2682635

+ 698781

21211579 Ans

9. A number exceeds 35637844 by 764256. what is that number?

Soln

Given,

Solⁿ A number exceed 35637844 by

7674156 then $\textcircled{7} \textcircled{6} \textcircled{7} \textcircled{4} \textcircled{1} \textcircled{5} \textcircled{6}$

Number - 35637844

± 7674156

43312000 Ans

Exercise - 8

• Find the difference

11 $5826704 - 3927815 = 18,98,885$

$\textcircled{4} \textcircled{7} \textcircled{11} \textcircled{15} \textcircled{6} \textcircled{9} \textcircled{10}$

Solⁿ ~~5826704~~

~~- 3927815~~

18,98,885 Ans

12 $8134205 - 5146307 = 29,87,898$

$\textcircled{7} \textcircled{10} \textcircled{2} \textcircled{3} \textcircled{11} \textcircled{9} \textcircled{15}$

Solⁿ ~~8134205~~

~~- 5146307~~

29,87,898 Ans

$$13 \quad 6010036 - 5419947 = 0590089 \text{ Ans}$$

Soln $\begin{array}{r} 6010036 \\ - 5419947 \\ \hline 0590089 \end{array}$ Ans

$$14 \quad 12034504 - 8075698 = 03958806$$

Soln $\begin{array}{r} 12034504 \\ - 8075698 \\ \hline 03958806 \end{array}$ Ans

Exercise - 9

Word Problem

1. By how much is 6437859 less than 7016418?

Soln $\begin{array}{r} 7016418 \\ - 6437859 \\ \hline 0578559 \end{array}$ Ans

2. The sum of two numbers is 13604050.
If one of the number is 7824361.
Find the other number.

Sol: Sum of two number is - 13604050
One number is - 7824361
Other number is - 57,79,689

6. In an examination conducted by a board of secondary education. 1008314 candidates appeared. Out of these 789425 candidates passed. How many failed?

Sol: Total candidates appeared in Examination - 1008314
Passed candidates - 789425
∴ Failed candidates - 1008314
- 789425
0218889 Ans

7. In an Indian state, a survey shows that there are in all 7651234 students in all the secondary schools. Out of these, there are 2963459 girl-students. How many children boys are there in these schools.

Solⁿ Total no. of student in the school =

7651234

No. of Girl in the school = 2963459

∴ No. of Boys in the school = 7651234

- 2963459

4687775

11. In an examination, 506212 candidates could get through. Out of these, 197538 passed in first division, 238604 passed in second division. How many passed in third division?

Solⁿ Total Candidates in examination = 506212

Passed candidates in first division = 197538

Passed candidates in 2nd division = 238604

Total no. of candidates in 1st & 2nd division = 436142

∴ No. of candidates in 3rd division = 506212

- 436142

070070

• Fin

3. 65

Ans B

⇒ C

⇒ 3

⇒ C

4. 9

Ans 9

⇒ C

⇒ 5

⇒ 5

5. 15

Ans 1

⇒ C

⇒

⇒

Exercise-10

• Find the following products

3. 8540×50

Ans $8540 \times 5 \times 10$
 $\Rightarrow (8540 \times 5) \times 10$
 $\Rightarrow 32700 \times 10$
 $\Rightarrow 327000$ Ans

7. 8986×700

Ans $8986 \times 7 \times 100$
 $\Rightarrow (8986 \times 7) \times 100$
 $\Rightarrow 62902 \times 100$
 $\Rightarrow 6290200$ Ans

4. 9784×60

Ans $9784 \times 6 \times 10$
 $\Rightarrow (9784 \times 6) \times 10$
 $\Rightarrow 58704 \times 10$
 $\Rightarrow 587040$ Ans

8. 26305×800

Ans $26305 \times 8 \times 100$
 $\Rightarrow (26305 \times 8) \times 100$
 $\Rightarrow 210440 \times 100$
 $\Rightarrow 21044000$ Ans

5. 15235×70

Ans $15235 \times 7 \times 10$
 $\Rightarrow (15235 \times 7) \times 10$
 $\Rightarrow 106645 \times 10$
 $\Rightarrow 1066450$ Ans

6. 2981×4000

Ans $2981 \times 4 \times 1000$
 $\Rightarrow (2981 \times 4) \times 1000$
 $\Rightarrow 11924 \times 1000$
 $\Rightarrow 11924000$ Ans

$$9 \quad 7892 \times 300$$

$$\begin{aligned} \text{Ans } 7892 \times 3 \times 100 \\ \Rightarrow (7892 \times 3) \times 100 \\ \Rightarrow 23676 \times 100 \\ \Rightarrow 2367600 \text{ Ans} \end{aligned}$$

$$10 \quad 7897 \times 6000$$

$$\begin{aligned} \text{Ans } 7897 \times 6 \times 1000 \\ \Rightarrow (7897 \times 6) \times 1000 \\ \Rightarrow 47382 \times 1000 \\ \Rightarrow 47382000 \text{ Ans} \end{aligned}$$

• By using suitable grouping, find the following products.

$$1 \quad 2 \times 467 \times 5$$

$$\begin{aligned} \text{Ans } 2 \times 467 \times 5 \\ \Rightarrow (2 \times 5) \times 467 \\ \Rightarrow 10 \times 467 \\ \Rightarrow 4670 \text{ Ans} \end{aligned}$$

$$2 \quad 8 \times 3472 \times 125$$

$$\begin{aligned} \text{Ans } 8 \times 3472 \times 125 \\ \Rightarrow (8 \times 125) \times 3472 \\ \Rightarrow 1000 \times 3472 \\ \Rightarrow 3472000 \text{ Ans} \end{aligned}$$

$$3 \quad 5 \times 1986 \times 20$$

$$\begin{aligned} \text{Ans } 5 \times 1986 \times 20 \\ \Rightarrow (5 \times 20) \times 1986 \\ \Rightarrow 100 \times 1986 \\ \Rightarrow 198600 \text{ Ans} \end{aligned}$$

$$4 \quad 2 \times 5726 \times 500$$

$$\begin{aligned} \text{Ans } 2 \times 5726 \times 500 \\ \Rightarrow (2 \times 500) \times 5726 \\ \Rightarrow 1000 \times 5726 \\ \Rightarrow 5726000 \text{ Ans} \end{aligned}$$

$$5 \quad 4 \times 9$$

$$\begin{aligned} \text{Ans } 4 \times 9 \\ \Rightarrow 36 \\ \Rightarrow 100 \\ \Rightarrow 82 \end{aligned}$$

• Mul

$$13 \quad 106$$

$$\text{Ans } 10$$

$$\times$$

$$5$$

$$74$$

$$+ 852$$

$$93$$

$$15 \quad 89$$

$$80$$

$$\times 1$$

$$680$$

$$71$$

$$628$$

$$+ 898$$

$$1607$$

5. $4 \times 829 \times 25$
 Ans $4 \times 829 \times 25$
 $\Rightarrow (4 \times 25) \times 829$
 $\Rightarrow 100 \times 829$
 $\Rightarrow 82900$ Ans

6. $4 \times 248 \times 125$
 Ans $4 \times 248 \times 125$
 $\Rightarrow (4 \times 125) \times 248$
 $\Rightarrow 500 \times 248$
 $\Rightarrow 124000$ Ans

Exercise 11

• Multiply:

13. 10654 by 875

14. 14567 by 1065

Ans 10654

$$\begin{array}{r} 10654 \\ \times 875 \\ \hline 53270 \\ 74578X \\ + 85232XX \\ \hline 9322250 \end{array}$$

14567

$$\begin{array}{r} 14567 \\ \times 1065 \\ \hline 272835 \\ 87402X \\ 00000XX \\ + 14567XXX \\ \hline 15513855 \end{array}$$

15. 8985 by 1789

8985

$$\begin{array}{r} 8985 \\ \times 1789 \\ \hline 680865 \\ 71880X \\ 62895XX \\ + 8985XXX \\ \hline 16074465 \end{array}$$
 Ans

16. 10023 by 1034

Ans 10023

$$\begin{array}{r}
 \times 1034 \\
 40092 \\
 30069 \times \\
 00000 \times \times \\
 + 10023 \times \times \times \\
 \hline
 10363782
 \end{array}$$

Exercise 12

1. The cost of a scooter is ₹36453. Find the cost of 270 scooter.

Soln Cost of a scooter is = ₹36453
Cost of 270 scooter are = ₹36453

$$\begin{array}{r}
 \times 270 \\
 00000 \\
 235171 \times \\
 + 72906 \times \times \\
 \hline
 9842310
 \end{array}$$

2. There are 1483 bags of wheat in a godown. If each bags weight 108 kg. Find the total weight of these bags.

Soln
to
1

3 A
a
b

Soln
Tot
to

Solⁿ No. of wheat bags - 1483

Weight of each bag - 108 Kg

∴ Total weight of these bags = 1483

$$\begin{array}{r}
 \times 108 \\
 11864 \\
 0000x \\
 + 1483xx \\
 \hline
 160164
 \end{array}$$

3 A box contains 2748 pencils. How many are there pencils are there in 1674 such boxes.

Solⁿ No. of pencil contain in a box = 2748

Total no. of pencil contain 1674 such boxes = 2748

$$\begin{array}{r}
 \times 1674 \\
 10992 \\
 19236x \\
 16488xx \\
 + 2748xxx \\
 \hline
 4599152
 \end{array}$$

8 There are 1869 students on the rolls of a school. If each student pays £267650 as fees annually how much money is collected in a year.

Soln No. of enroll students in a school = 1869

Paid annual fees by each student = £267650

∴ Total money is collected in a year

$$= £ 267650$$

$$\times 1869$$

$$248850$$

$$155900 \times$$

$$+ 221200 \times \times$$

$$23927850$$

9 A newspaper contains 124 columns each column contains 136 lines each line has 36 letters. How many letters are there in the newspaper.

Ans Contain in a newspaper = 124

No. of lines contains in each column
= 136

∴ Total no. of lines contains in 124
column = 124

× 136

744

372x

+ 164xx

16864

No. of letter contain in each line - 36

∴ Total no. of letter contain in 16,864 such
lines = 16864

× 36

104184

+ 50592x

607104 Any

- Find the continued product.

10 $628 \times 537 \times 96$

Ans $628 \times 537 \times 96$
 $\Rightarrow (628 \times 537) \times 96$
 $\Rightarrow 337236 \times 96$
 $\Rightarrow 32374656$ Ans

Exercise 13

- Divide and find the quotient and remainder

1 $83254 \div 58$

Ans $58 \overline{) 83254} \quad 1435$

$$\begin{array}{r} -58 \downarrow \\ 252 \\ -232 \\ \hline \end{array}$$

Hence, $\times 205$
 Quotient-1435-174
 Remainder-24 $\times 314$
 -290
 $\times 24$

2 $547802 \div 97$

Ans $97 \overline{) 547802} \quad 5648$

$$\begin{array}{r} -485 \downarrow \\ \times 628 \\ -582 \downarrow \end{array}$$

Hence, $\times 460$
 Quotient-5647-388
 Remainder-43 $\times 722$
 -679
 $\times 43$
 Ans

3. 67

Ans 8

Hence,
 Quotient-
 Remainder

e) 59

243

Hence,
 Quotient-
 Remainder

3. $673900 \div 86$

Ans $86 \overline{) 673900} (7836$

$$\begin{array}{r} - 602 \downarrow \\ \times 719 \\ - 688 \downarrow \\ \times 310 \end{array}$$

Hence, Quotient = 7836

Remainder = 4

$$\begin{array}{r} - 258 \downarrow \\ \times 520 \\ - 516 \\ \times 4 \end{array}$$

4. $333624 \div 137$

Ans $137 \overline{) 333624} (2435$

$$\begin{array}{r} - 274 \downarrow \\ \times 596 \\ - 548 \downarrow \\ \times 482 \end{array}$$

Hence, Quotient = 2435

Remainder = 29

e) $598613 \div 243$

$243 \overline{) 598613} (2463$

$$\begin{array}{r} - 486 \downarrow \\ 1126 \\ - 897 \downarrow \\ 1541 \end{array}$$

Hence, Quotient = 2463

Remainder = 104

104

• Find the dividend when:

16 Divisor = 187, Quotient = 3078,
Remainder = 96

Soln: Given,

Divisor = 187, Quotient = 3078,
Remainder = 96

$\therefore \text{Dividend} = (187 \times 3078) + 96$

Dividend = 575586 + 96

Dividend = 575682 Ans

17 Divisor = 429, Quotient = 5237,
Remainder = 248

Soln: Given,

Divisor = 429, Quotient = 5237

Remainder = 248

$\therefore \text{Dividend} = (429 \times 5237) + 248$

Dividend = 2246673 + 248

Dividend = 2246921 Ans

48 Find the quotient and the remainder when the largest 7-digit number is divided by the largest 2-digit number.

Soln: Given,

largest 7-digit number - 99,99,999

largest 3-digit number - 999

$$\begin{array}{r}
 10010 \\
 999 \overline{) 9999999} \\
 \underline{- 999} \\
 xxx999 \\
 \underline{- 999} \\
 xxx9 \\
 \underline{- 0} \\
 9
 \end{array}$$

Hence,

Quotient = 10010

Remainder = 9 Ans

19 Find the quotient and the remainder when the smallest 8-digit number is divided by the largest 2-digit number.

Soln-19 Given,

Smallest 8-digit no. - 1,00,00,000

Largest 2-digit no. - 99

$$\begin{array}{r} 1,00,00,000 \\ - 99 \\ \hline 100 \\ - 99 \\ \hline 100 \\ - 99 \\ \hline 100 \\ - 99 \\ \hline 10 \\ - 10 \\ \hline 0 \end{array}$$

Hence,

Quotient 101010

Remainder = 10 Ans

Exercise-14

1. A carton can hold 275 screws. How many cartons are required to pack 4426725 screws?

Given Required screws for a carton - 275
 $\therefore$ No. of carton required to pack
 44,26,125 screws - $4426125 \div 275$

[illegible]

Hence,

16095 carton required to pack
44,26,125 screws.

2. The cost of 347 radios is 1664212.
What is the cost of one radio?

Solⁿ Cost of 347 radios is - ₹ 1664212
Cost of one radio is - ₹ 1664212 ÷ 347

$$\begin{array}{r}
 347 \overline{) 1664212} \quad (4796 \\
 \underline{- 1388} \downarrow \\
 \times 2762 \downarrow \\
 \underline{- 2429} \downarrow \\
 \times 3331 \downarrow \\
 \underline{- 3123} \downarrow \\
 \times 2082 \\
 \underline{- 2082} \\
 \times \times \times \times
 \end{array}$$

Hence,
Cost of 1 radio is ₹ 4,796 Ans

6. 187 water tanks of the same capacity can hold 1323025 litres of water. What is the capacity of each tank?

Soln total no. of persons visited Appu
ghar in 327 days - 950589.
No. of persons visited Appu ghar
in one day - $950589 \div 327$

$$\begin{array}{r} 327 \overline{) 950589} \quad 2907 \\ - 654 \downarrow \\ \hline 2965 \downarrow \\ - 2943 \downarrow \\ \hline \text{xx} 2289 \\ - 2289 \\ \hline \text{xxxx} \end{array}$$

Hence,
2907 persons visited Appu ghar 1 day Ans

11. The product of two numbers is
1785483. If one of the number
is 987. What is the other number?

Soln Product of two
 number is - 1785483
 One number - 987

∴ other number is - $1785483 \div 987$

$$\begin{array}{r}
 987 \overline{) 1785483} \quad 1809 \\
 \underline{- 987} \\
 7984 \\
 \underline{- 7896} \\
 8883 \\
 \underline{- 8883} \\
 0000 \text{ Ans}
 \end{array}$$

~~Sun~~
 24/4/25

~~Vijay~~