

Chapter 4: Multiplication and Division

PROBLEM SET 14 [PAGES 14 - 16]

Problem Set 14 | Q 1.01 | Page 16

Multiply.

$$327 \times 92$$

SOLUTION

$$\begin{array}{r} 327 \\ \times 92 \\ \hline 654 \\ +29430 \\ \hline \underline{30084} \end{array}$$

Problem Set 14 | Q 1.02 | Page 16

Multiply.

$$807 \times 126$$

SOLUTION

$$\begin{array}{r} 807 \\ \times 126 \\ \hline 4842 \\ + 16140 \\ + 80700 \\ \hline \underline{101682} \end{array}$$

Problem Set 14 | Q 1.03 | Page 16

Multiply.

$$567 \times 890$$

SOLUTION

$$\begin{array}{r} 567 \\ \times 890 \\ \hline 000 \\ + 51030 \\ + 453600 \\ \hline \underline{504630} \end{array}$$

Problem Set 14 | Q 1.04 | Page 16

Multiply.

$$4317 \times 824$$

SOLUTION

$$\begin{array}{r} 4317 \\ \times \quad 824 \\ \hline 17268 \\ + 86340 \\ + 3453600 \\ \hline \underline{\underline{3557208}} \end{array}$$

Problem Set 14 | Q 1.05 | Page 16

Multiply.
 6092×203

SOLUTION

$$\begin{array}{r} 6092 \\ \times \quad 203 \\ \hline 18276 \\ + 00000 \\ + 1218400 \\ \hline \underline{\underline{1236676}} \end{array}$$

Problem Set 14 | Q 1.06 | Page 16

Multiply.
 1177×99

SOLUTION

$$\begin{array}{r} 1177 \\ \times \quad 99 \\ \hline 10593 \\ + 105930 \\ \hline \underline{\underline{116523}} \end{array}$$

Problem Set 14 | Q 1.07 | Page 16

Multiply
 456×187

SOLUTION

$$\begin{array}{r} 456 \\ \times \quad 187 \\ \hline 3192 \\ + 36480 \\ + 45600 \\ \hline \underline{\underline{85272}} \end{array}$$

Problem Set 14 | Q 1.08 | Page 16

Multiply

$$6543 \times 79$$

SOLUTION

$$\begin{array}{r} 6543 \\ \times \quad 79 \\ \hline 58887 \\ + 458010 \\ \hline \underline{516897} \end{array}$$

Problem Set 14 | Q 1.09 | Page 16

Multiply.

$$2306 \times 832$$

SOLUTION

$$\begin{array}{r} 2306 \\ \times \quad 832 \\ \hline 4612 \\ + 69180 \\ + 1844800 \\ \hline \underline{1918592} \end{array}$$

Problem Set 14 | Q 1.10 | Page 16

Multiply

$$6429 \times 509$$

SOLUTION

$$\begin{array}{r} 6429 \\ \times \quad 509 \\ \hline 57861 \\ + 00000 \\ + 3214500 \\ \hline \underline{3272361} \end{array}$$

Problem Set 14 | Q 1.11 | Page 14

Multiply

$$4,321 \times 678$$

SOLUTION

$$\begin{array}{r} 4321 \\ \times \quad 678 \\ \hline 34568 \\ + 302470 \\ \hline \end{array}$$

$$\begin{array}{r} +2592600 \\ \hline 2929638 \end{array}$$

Problem Set 14 | Q 1.12 | Page 16

Multiply.

$$20,304 \times 87$$

SOLUTION

$$\begin{array}{r} 20304 \\ \times \quad 87 \\ \hline 142128 \\ +1624320 \\ \hline 1766448 \end{array}$$

Problem Set 14 | Q 2 | Page 16

As part of the 'Avoid Plastic' campaign, each of the 745 students made 25 paper bags. What was the total number of paper bags made?

SOLUTION

$$\begin{array}{r} 745 \text{ Number of students} \\ \times \quad 25 \text{ bags made by each} \\ \hline 3725 \\ +14900 \\ \hline 18625 \end{array}$$

Problem Set 14 | Q 3 | Page 16

In a plantation, saplings of 215 medicinal trees have been planted in each of the 132 rows of trees. How many saplings are there in the plantation altogether?

SOLUTION

$$\begin{array}{r} 215 \text{ Saplings in each row} \\ \times \quad 132 \text{ Number of rows} \\ \hline 430 \\ + 6450 \\ +21500 \\ \hline 28380 \end{array}$$

Problem Set 14 | Q 4 | Page 16

One computer costs 27,540 rupees. How much will 18 such computers cost?

SOLUTION

$$\begin{array}{r} 27540 \text{ Cost of 1 computer} \\ \times \quad 18 \text{ No. of computers} \\ \hline 220320 \end{array}$$

$$\begin{array}{r} +275400 \\ \hline 495720 \end{array}$$

Problem Set 14 | Q 5 | Page 16

Under the 'Inspire Awards' scheme, 5000 rupees per student were granted for the purchase of science project materials. If 154 students in a certain taluka were covered under the scheme, find the total amount granted to that taluka.

SOLUTION

$$\begin{array}{r} \text{₹}5000 \text{ Granted per student} \\ \times \quad 154 \text{ No of students} \\ \hline 20000 \\ + 250000 \\ + 500000 \\ \hline \text{₹ } 770000 \end{array}$$

Problem Set 14 | Q 6 | Page 16

If a certain two-wheeler costs 53,670 rupees, how much will 35 such two-wheelers cost?

SOLUTION

$$\begin{array}{r} 53760 \text{ Cost of 1 two-wheeler} \\ \times \quad 35 \text{ No. of two-wheelers} \\ \hline 268800 \\ +1612800 \\ \hline 1881600 \end{array}$$

Problem Set 14 | Q 7 | Page 16

One hour has 3,600 seconds. How many seconds do 365 hours have?

SOLUTION

$$\begin{array}{r} 3600 \text{ Seconds of 1 hour} \\ \times \quad 365 \text{ No. of hours} \\ \hline 18000 \\ + 216000 \\ + 1080000 \\ \hline 1314000 \end{array}$$

Problem Set 14 | Q 8 | Page 16

Frame a multiplication word problem with the numbers 5473 and 627 and solve it.

SOLUTION

Cost of one mobile is ₹5,473. What is the cost of such 627 mobiles?
5473 Cost of 1 mobile

x 627 Number of mobiles

$$\begin{array}{r} 38311 \\ + 109460 \\ + 3283800 \\ \hline \mathbf{3431571} \end{array}$$

₹ 34,31,571 cost for 627 mobiles.

Problem Set 14 | Q 9 | Page 16

Find the product of the biggest three-digit number and the biggest four-digit number.

SOLUTION

$$\begin{array}{r} 9999 \text{ Biggest four digit no.} \\ x \quad 999 \text{ Biggest three-digit no.} \\ \hline 89991 \\ + 899910 \\ + 8999100 \\ \hline \mathbf{9989001} \end{array}$$

Problem Set 14 | Q 10 | Page 16

One traveller incurs a cost of 7,650 rupees for a certain journey. What will be the cost for 26 such travelers?

SOLUTION

$$\begin{array}{r} 7650 \text{ Cost of one traveller} \\ x \quad 26 \text{ No. of travellers} \\ \hline 45900 \\ + 153000 \\ \hline \mathbf{198900} \end{array}$$

98,900 cost of 26 travellers.

PROBLEM SET 15 [PAGES 19 - 20]

Problem Set 15 | Q 1.1 | Page 19

Solve the following and write the quotient and remainder.

$$1284 \div 32$$

$$\begin{array}{r}
 \mathbf{40} \\
 32 \overline{)1284} \\
 \underline{- 128} \\
 0004 \\
 \underline{- 0} \\
 \mathbf{4}
 \end{array}$$

Quotient = 40

Remainder = 4

Problem Set 15 | Q 1.2 | Page 19

Solve the following and write the quotient and remainder.

$$5586 \div 87$$

SOLUTION

$$\begin{array}{r}
 \mathbf{64} \\
 87 \overline{)5586} \\
 \underline{- 522} \\
 0366 \\
 \underline{- 348} \\
 \mathbf{018}
 \end{array}$$

Quotient = 64

Remainder = 18

Problem Set 15 | Q 1.3 | Page 19

Solve the following and write the quotient and remainder.

$$1207 \div 27$$

SOLUTION

$$\begin{array}{r} 44 \\ 27 \overline{)1207} \\ \underline{-108} \\ 127 \\ \underline{-108} \\ 19 \end{array}$$

Quotient = 44

Remainder = 19

Problem Set 15 | Q 1.4 | Page 19

Solve the following and write the quotient and remainder.

$$8543 \div 41$$

SOLUTION

$$\begin{array}{r} 208 \\ 41 \overline{)8543} \\ \underline{-82} \\ 034 \\ \underline{-00} \\ 343 \\ \underline{-328} \\ 15 \end{array}$$

Quotient = 208

Remainder = 15

Problem Set 15 | Q 1.5 | Page 19

Solve the following and write the quotient and remainder.

$$2304 \div 43$$

SOLUTION**53**

$$23 \overline{)2304}$$

$$\underline{- 215}$$

$$0154$$

$$\underline{- 129}$$

025**Quotient = 53****Remainder = 25****Problem Set 15 | Q 1.6 | Page 19****Solve the following and write the quotient and remainder.**

$$56,741 \div 26$$

SOLUTION**2182**

$$26 \overline{)56741}$$

$$\underline{- 52}$$

$$047$$

$$\underline{- 26}$$

$$214$$

$$\underline{- 208}$$

$$0061$$

$$\underline{- 52}$$

0009**Quotient = 2182****Remainder = 9****Problem Set 15 | Q 2 | Page 19**

How many hours will it take to travel 336 km at a speed of 48 km per hour?

SOLUTION

Time = Distance ÷ Speed

$$\begin{array}{r} 7 \\ 48 \overline{)336} \\ \underline{-336} \\ 000 \end{array}$$

It will take 7 hours.

Problem Set 15 | Q 3 | Page 19

Girija needed 35 cartons to pack 1400 books. There are an equal number of books in every carton. How many books did she pack into each carton?

SOLUTION

No. of cartons x No. of books in each carton = Total no. of books
35 x No. of books in each carton = 1400
No. of books in each carton = 1400 ÷ 35

$$\begin{array}{r} 40 \\ 35 \overline{)1400} \\ \underline{-1400} \\ 0000 \end{array}$$

She packs 40 books in each carton.

Problem Set 15 | Q 4 | Page 19

The contribution for a picnic was 65 rupees each. Altogether, 2925 rupees were collected. How many had paid for the picnic?

SOLUTION

$$\begin{array}{r} 45 \\ 65 \overline{)2925} \\ \underline{-260} \\ 0325 \\ \underline{-325} \\ 000 \end{array}$$

45 persons paid for the picnic.

Problem Set 15 | Q 5 | Page 19

Which number, on being multiplied by 56, gives a product of 9688?

SOLUTION

$$\begin{array}{r} 173 \\ 56 \overline{)9688} \\ \underline{-56} \\ 408 \\ \underline{-392} \\ 168 \\ \underline{-168} \\ 000 \end{array}$$

Problem Set 15 | Q 6 | Page 20

If 48 sheets are required for making one notebook, how many notebooks at the most will 5880 sheets make, and how many sheets will be leftover?

SOLUTION

$$\begin{array}{r} 122 \\ 56 \overline{)5880} \\ \underline{-48} \\ 108 \\ \underline{-96} \\ 0120 \\ \underline{-96} \\ 024 \end{array}$$

122 notebooks can be made and 24 sheets left over.

Problem Set 15 | Q 7 | Page 20

What will the quotient be when the smallest five-digit number is divided by the smallest four-digit number?

SOLUTION

Smallest five-digit number is 10,000 and smallest four-digit number is 1,000.
So, $10000 \div 1000 = 10$

$$\begin{array}{r}
 10 \\
 1000 \overline{)10000} \\
 \underline{- 1000} \\
 00000
 \end{array}$$

Quotient = 10

PROBLEM SET 16 [PAGE 20]

Problem Set 16 | Q 1 | Page 20

From a total of 10,000 rupees, Anna donated 7,000 rupees to a school. The remaining amount was to be divided equally among six students as the 'all-round student' prize. What was the amount of each prize?

SOLUTION

$$\begin{array}{r}
 10000 \text{ Total rupees} \\
 \underline{- 7000 \text{ rupees donated}} \\
 \underline{\underline{3000 \text{ remained}}}
 \end{array}$$

This amount was divided among 6 students

$$\begin{array}{r}
 500 \\
 6 \overline{)3000} \\
 \underline{- 30} \\
 0000
 \end{array}$$

Amount of the prize is ₹ 500.

Problem Set 16 | Q 2 | Page 20

An amount of 260 rupees each was collected from 50 students for a picnic. If 11,450 rupees were spent for the picnic, what is the amount left over?

SOLUTION

$$\begin{array}{r}
 260 \text{ Collected from 1 student} \\
 \times 50 \text{ No. of students} \\
 \underline{\quad 000} \\
 + 13000 \\
 \underline{\quad 13000 \text{ Rupees, collected amount}}
 \end{array}$$

- 11450 Rupees spent
1550 Rupees left over

1,550 Rupees left over

Problem Set 16 | Q 3 | Page 20

A shopkeeper bought a sack of 50kg of sugar for 1750 rupees. As the price of sugar fell, he had to sell it at the rate of 32 rupees per kilo. How much less money did he get than he had spent?

SOLUTION

32 Sale price of 1 kg
x 50 kg sold
00
+ 1600
1600 Amount received

1750 Purchased price
- 1600 Obtained price
150 Less he got

₹ 150 less he got than he had spent

Problem Set 16 | Q 4 | Page 20

A shopkeeper bought 7 pressure cookers at the rate of 1870 rupees per cooker. He sold them all for a total of 14,230 rupees. Did he get less or more money than he had spent?

SOLUTION

1870 Purchase price of 1 cooker
x 7 No. of cookers
13090 Purchase price

14230 Sell price
- 13090 Purchase price
01140 he got more

₹ 1,140 he got more

Problem Set 16 | Q 5 | Page 20

Fourteen families in a Society together bought 8 sacks of wheat, each weighing 98 kilos. If they shared all the wheat equally, what was the share of each family?

SOLUTION

98 Kilo weight of 1 sack
x 8 No. of sacks

784 Kilo

$$\begin{array}{r} 56 \\ 14 \overline{)784} \\ \underline{-70} \\ 084 \\ \underline{-84} \\ 00 \end{array}$$

Share of each family = 56 kilo

Problem Set 16 | Q 6 | Page 20

The capacity of an overhead water tank is 3000 litres. There are 16 families living in this building. If each family uses 225 litres every day, will the tank filled to capacity be enough for all the families? If not, what will the daily shortfall be?

SOLUTION

$$\begin{array}{r} 225 \text{ Litres uses 1 family} \\ \underline{x 16} \text{ No. of families} \\ 1350 \\ + 2250 \\ \hline 3600 \text{ Litres required} \\ - \underline{3000} \text{ Litres capacity} \\ \hline \underline{600} \text{ Litres daily shortfall} \\ 600 \text{ litres is daily shortfall} \end{array}$$