

Ex: 4(B)

Q.2 Find the quotient and the remainder and check your answer.

(a) $48721 \div 13$

$$\begin{array}{r}
 3747 \rightarrow Q \\
 13 \overline{) 48721} \\
 \underline{-39} \\
 97 \\
 \underline{-91} \\
 62 \\
 \underline{-52} \\
 101 \\
 \underline{-91} \\
 10 \rightarrow R
 \end{array}$$

$$\begin{array}{r}
 \textcircled{2} \textcircled{1} \textcircled{2} \\
 3747 \\
 \times \textcircled{1} 13 \\
 \hline
 11241 \\
 + 3747 \times \\
 \hline
 48711 \\
 \\
 48711 \\
 + 10 \\
 \hline
 48721
 \end{array}$$

Check = $13 \times 3747 + 10$
 $= 48721$

(b) $87652 \div 14$

$$\begin{array}{r}
 6260 \rightarrow Q \\
 14 \overline{) 87652} \\
 \underline{-84} \\
 36 \\
 \underline{-28} \\
 85 \\
 \underline{-84} \\
 12 \\
 \underline{-00} \\
 12 \rightarrow R
 \end{array}$$

$$\begin{array}{r}
 \textcircled{1} \textcircled{2} \\
 6260 \\
 \times 14 \\
 \hline
 25040 \\
 + 6260 \times \\
 \hline
 87640 \\
 \\
 87640 \\
 + 12 \\
 \hline
 87652
 \end{array}$$

Check = $14 \times 6260 + 12$
 $= 87652$

(C) $42783 \div 24$

$$\begin{array}{r} 1782 - \text{Q} \\ 24 \overline{) 42783} \\ \underline{-24} \downarrow \\ 187 \\ \underline{-168} \downarrow \\ 198 \\ \underline{-192} \downarrow \\ 63 \\ \underline{-48} \\ 15 \rightarrow R \end{array}$$

$$\begin{array}{r} \textcircled{1} \textcircled{1} \\ \textcircled{3} \textcircled{3} \\ 1782 \\ \times 24 \\ \hline 7128 \\ + 3564 \times \\ \hline 42768 \end{array}$$

$$\begin{array}{r} \textcircled{1} \\ 42768 \\ + 15 \\ \hline 42783 \end{array}$$

Check - $24 \times 1782 + 15$
 $= 42783$

(d) $99999 \div 11$

$$\begin{array}{r} 9090 \\ 11 \overline{) 99999} \\ \underline{-99} \downarrow \downarrow \\ 0099 \\ \underline{-99} \downarrow \\ 009 \\ \underline{-0} \\ 9 \end{array}$$

$$\begin{array}{r} 9090 \\ \times 11 \\ \hline 9090 \\ + 9090 \times \\ \hline 99990 \end{array}$$

$$\begin{array}{r} 99990 \\ + 9 \\ \hline 99999 \end{array}$$

Check = $11 \times 9090 + 9$
 $= 99999$

(e) $97979 \div 21$

$$\begin{array}{r}
 4665 - 0 \\
 21 \overline{) 97979} \\
 \underline{-84} \downarrow \\
 139 \\
 \underline{-126} \downarrow \\
 137 \\
 \underline{-126} \downarrow \\
 119 \\
 \underline{-105} \\
 14 \rightarrow R
 \end{array}$$

$$\begin{array}{r}
 \textcircled{1} \textcircled{1} \textcircled{1} \\
 4665 \\
 \times \quad 21 \\
 \hline
 4665 \\
 + 9330 \times \\
 \hline
 97965
 \end{array}$$

$$\begin{array}{r}
 97965 \\
 + \quad 14 \\
 \hline
 97979
 \end{array}$$

Check = $21 \times 4665 + 14$
 $= 97979$

(f) $46721 \div 15$

$$\begin{array}{r}
 3114 - 0 \\
 15 \overline{) 46721} \\
 \underline{-45} \downarrow \\
 17 \\
 \underline{-15} \downarrow \\
 22 \\
 \underline{-15} \downarrow \\
 71 \\
 \underline{-60} \\
 11 \rightarrow R
 \end{array}$$

$$\begin{array}{r}
 \textcircled{2} \\
 3114 \\
 \times \quad \textcircled{1} 15 \\
 \hline
 15570 \\
 + 3114 \times \\
 \hline
 46710
 \end{array}$$

$$\begin{array}{r}
 46710 \\
 + \quad 11 \\
 \hline
 46721
 \end{array}$$

Check = $15 \times 3114 + 11$
 $= 46721$

digits) form the quotient.

In short,

(a)

Th	H	T	O
6	4	2	9

 $\div 1000 = 6 \text{ R } 429$
↑ ↑
 Quotient Remainder

(b)

TTh	Th	H	T	O
6	7	3	2	2

 $\div 1000 = 67 \text{ R } 322$
↑ ↑
 Quotient Remainder

(c)

L	TTh	Th	H	T	O
9	9	0	3	1	5

 $\div 1000 = 990 \text{ R } 315$
↑ ↑
 Quotient Remainder

Practice



- What number will give you a remainder 438 and quotient 5 when divided by 1000?
- What number will give you a remainder 7 and quotient 99 when divided by 10?

Checkpoint 4C



1. Tick (✓) the correct choice.

- (a) $59 \div 10$ is equal to
 (i) 5 R 9 (ii) 59 R 0 (iii) 5 R 0
- (b) $673 \div 10$ is equal to
 (i) 6 R 73 (ii) 67 R 3 (iii) 673 R 0
- (c) $57900 \div 100$ is equal to
 (i) 579 (ii) 5790 (iii) 57 R 900
- (d) $19623 \div 1000$ is equal to
 (i) 196 R 23 (ii) 1962 R 3 (iii) 19 R 623

2. Write the quotient (Q) and the remainder (R) without actual division.

(a) $93 \div 10$
 Q = 9 R = 3

(b) $103 \div 10$
 Q = 10 R = 3

(c) $1003 \div 100$
 Q = 10 R = 03 03 3

(d) $95267 \div 100$
 Q = 952 R = 67

(e) $45987 \div 1000$
 Q = 45 R = 987

(f) $80008 \div 1000$
 Q = 80 R = 008 008 8

Ex: 4(D)

Q.1

Number of Yoga tents = 26.

Number of Students = 130.

$$\begin{aligned}\text{Students in each tent} &= 130 \div 26 \\ &= 5\end{aligned}$$

$$\begin{array}{r} 5 \\ 26 \overline{) 130} \\ \underline{-130} \\ 000 \end{array}$$

∴ There are 5 students in each tent.

Q.2

Numbers of columns = 15

Number of tiles = 1845

$$\begin{aligned}\text{Number of rows} &= 1845 \div 15 \\ &= 123\end{aligned}$$

$$\begin{array}{r} 123 \\ 15 \overline{) 1845} \\ \underline{-15} \downarrow \\ 34 \\ \underline{-30} \downarrow \\ 45 \\ \underline{-45} \\ 00 \end{array}$$

∴ 123 rows of tiles are there in the path

Q.3

25 bedsheets = ₹12,375

$$1 \text{ bedsheet} = 12375 \div 25$$

$$\begin{array}{r} 495 \\ 25 \overline{) 12375} \\ \underline{-100} \downarrow \\ 237 \\ \underline{-225} \downarrow \\ 125 \\ \underline{-125} \\ 000 \end{array}$$

∴ Cost of 1 bedsheet is ₹495

Q.4

Number of gift items = 70428

Number of months in a year = 12

Gift items made in 1 year (12 months) = 70428

Gift items made in a month

$$= 70428 \div 12$$

$$= 5869$$

∴ The factory made 5869 gift items every month.

$$\begin{array}{r} 5869 \\ 12 \overline{) 70428} \\ \underline{-60} \downarrow \\ 104 \\ \underline{-96} \downarrow \\ 82 \\ \underline{-72} \downarrow \\ 108 \\ \underline{-108} \\ 000 \end{array}$$

Q.5

(a) $50000 \div 50$

(b) $50000 \div 100$

$$\begin{array}{r} 1000 \text{ notes} \\ 50 \overline{) 50000} \\ \underline{-50} \downarrow \downarrow \downarrow \\ 00000 \end{array}$$

$$\begin{array}{r} 500 \text{ notes} \\ 100 \overline{) 50000} \\ \underline{-500} \downarrow \downarrow \\ 00000 \end{array}$$

(c) $50000 \div 200$

(d) $50000 \div 500$

$$\begin{array}{r} 250 \text{ notes} \\ 200 \overline{) 50000} \\ \underline{-400} \downarrow \\ 1000 \\ \underline{-1000} \downarrow \\ 00000 \end{array}$$

$$\begin{array}{r} 100 \text{ notes} \\ 500 \overline{) 50000} \\ \underline{-500} \downarrow \downarrow \\ 00000 \end{array}$$

Q. 6

Product = 99066.

One number is 79

$$\text{Other number} = 99066 \div 79$$

$$= 1254$$

$$\begin{array}{r}
 1254 \\
 79 \overline{) 99066} \\
 \underline{-79} \\
 200 \\
 \underline{-158} \\
 426 \\
 \underline{-395} \\
 316 \\
 \underline{-316} \\
 000
 \end{array}$$

$\therefore$ The other number
is 1254

Q. 7

$$64295 \div 14$$

$$\begin{array}{r}
 4592 \\
 14 \overline{) 64295} \\
 \underline{-56} \\
 82 \\
 \underline{-70} \\
 129 \\
 \underline{-126} \\
 35 \\
 \underline{-28} \\
 7
 \end{array}$$

$\therefore$ The least number
that must be
subtracted is 7

Q8 Total number of bottles = 43776

Bottles in each box = 96.

No. of boxes required to pack all bottles

$$= 43776 \div 96$$

$$= 456$$

∴ 456 boxes are required to pack all the bottles

$$\begin{array}{r} 456 \\ 96 \overline{) 43776} \\ \underline{- 384} \downarrow \\ 537 \\ \underline{- 480} \downarrow \\ 576 \\ \underline{- 576} \\ 000 \end{array}$$