## Chapter

## Extension of Number System

## Quick Recall!:

(a) 4480 (b) 6534 (c) 9999 (d) 700 (e) 9764 (f) 5997 (g) 2035 (h) Two thousand seven hundred three (i) 492, 6763, 9362 (j) 6542, 6462, 6292

## Practice Coach-1:

1. (a) three (b) ones (c) 1000, 99999 (d) six (e) five
2. (a) Sixty seven thousand three hundred two (b) Eighty-seven thousand Six-hundred eighty-three (c) Seven lakh thirty-five thousand four hundred (d) Nineteen thousand two hundred eightythree (e) Ninety-nine thousand nine hundred ninety-nine (f) Sixty two thousand two hundred (g) Ninety thousand six hundred sixtyfive (h) Three lakh thirty-five thousand one hundred fifty-two (i) Nine lakh sixty-five thousand four hundred (j) Five lakh two hundred ninety (k) Seven lakh eighty three thousand nine hundred fifty-two (l) Ninety-eight thousand one hundred five
3. (a) 44,010 (b) $1,68,000$ (c) 21,562 (d) 91,242 (e) 63,015 (f) $2,72,220$
4. (a) $60000+8000+300+90$ (b) $300000+40000+5000+600+80+3$
(c) $900000+70000+6000+100$ (d) $200000+40000+8000+100+90+3$
(e) $50000+1000+200+70+6$ (f) $30000+4000+200+0+8$
(g) $40000+5000+900+0+5$ (h) $100000+80000+3000+200+70+6$
5. (a)

(b)

(c)

(a) 55346 (b) 21714 (c) 42352 (d) 62355
6. (a) 23215 (b) 45320 (c) 32972 (d) 71500
7. (a)


(e)


(f)

8. 

| Thousands Period |  |  | Ones Period |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | TTh | Th | H | T | O |
| a) | 5 | 3 | 1 | 9 | 0 |
| b) | 7 | 3 | 5 | 0 | 8 |
| c) | 1 | 9 | 7 | 6 | 3 |
| d) | 2 | 3 | 4 | 1 | 0 |
| e) | 5 | 2 | 3 | 1 | 6 |
| f) | 4 | 2 | 3 | 6 | 2 |
| g) | 1 | 1 | 9 | 6 | 7 |
| h) | 2 | 0 | 1 | 1 | 5 |
| i) | 5 | 4 | 3 | 6 | 2 |

9. (a) 5 hundreds or 500 (b) 5 thousands or 5000 (c) 0 hundreds or 0 (d) 6 hundreds or 600 (e) 4 ones or 4 (f) 80 thousands or 80000 (g) 3 hundreds or 300 (h) 9 thousands or 9000
10. (a) 94,374 (b) $1,27,603$ (c) 70,458

## Practice Coach-2:

1. (a) $87052+1=87053$ (b) $196834+1=196835$ (c) $14799+1=14800$
(d) $18999+1=19000$ (e) $29999+1=30000$ (f) $768315+1=768316$
(g) $40658+1=40659$ (h) $573658+1=573659$
2. (a) $400-1=39999$ (b) $35685-1=35684$ (c) $57608-1=57607$
(d) 109923-1=109922 (e) $82319-1=82318$ (f) $729202-1=729201$
(g) $700765-1=700764$ (h) $23241-1=23240$
3. (a) 83014,83012 (b) 193481, 193480 (c) 140050, 140049
4. (a) $78533,78534,78535$ (b) $94034,94035,94036$
(c) $40022,40023,40024$
5. (a) $81780,81781,81782$ (b) $97659,97660,97661$ (c) $58701,58702,58703$ (d) $32577,32578,32579$

## Practice Coacb-3 :

1. (a) 83048 (b) 54678 2. (a) 26384 (b) 73423
2. (a) $20993,20999,23902,29003$ (b) $61107,71109,76799,91106$
(c) $82734,876542,892492,897238$ 4. (a) $54311,43155,43125,11543$
(b) $73428,24698,18395,17685$ (c) $96588,90595,86345,54985$
3. (a) $<$ (b) $>$ (c) $<$ (d) $=($ e) $>($ f $)>($ g $)=(\mathrm{h})=(\mathrm{i})<(\mathrm{j})<$

## Practice Coach-4:

| 1. | Digits | Greatest Number | Smallest Number |
| :---: | :---: | :---: | :---: |
| (a) | 6,0,1,9,5 | 96510 | 10569 |
| (b) | 4,3,1,9,2 | 94321 | 12349 |
| (c) | 7,6,8,3,1 | 87631 | 13678 |
| (d) | 4,9,7,8,2 | 98742 | 24789 |
| (e) | 2,0,5,1,7 | 75210 | 10257 |
|  | 7,0,8,6,4 | 87640 | 40678 |
|  | 3,7,8,5,9 | 98573 | 37589 |
| (h) | 1,5,3,4,8 | 85431 | 13458 |

2. (a) 1 more tham $99,999=1,00,000$
(b) Smallest number using $8,5,9,1,7=15789$
(c) Greatest number using $2,0,6,8,4=86420$
(d) 1 less than $1000=999$
(e) Greatest five digit $=99,999$

## Practice Coach - 5 :

1. (a) 37450 (b) 29340 (c) 750 (d) 55560 (e) 8760 (f) 6070
2. (a) 354600 (b) 19700 (c) 79100 (d) 86900 (e) 21400 (f) 41200
3. (a) 22000 (b) 75000 (c) 61000 (d) 49000 (e) 1000 (f) 61000
4. (a) 70000 (b) 30000 (c) 20000 (d) 50000 (e) 70000 (f) 90000

## Mental Matbs

1. 15206 2. 10258 3. 97642 4. 1400 5. 3999 6. 6 thousand or 60007. 99998 8. 74321 9. 24000 10. 1001

## Multiple Cboice Questions (MCQs):

1. (c) 9 2. (c) 70,000 3. (b) 99,999 4. (b) 38,065 5. (c) 0

## Chapter

## 2

## Roman Numerals

## Practice Coach-1:

1. (a) $5 \Rightarrow \mathrm{~V}$
2. (a) 2-II (b) 5-V (c) 29-XXIX (d) 38-XXXVIII
(b) $50 \Rightarrow \mathrm{~L}$
(e) 27-XXVII (f) $50-\mathrm{L}$ (g) $46-\mathrm{XLVI}$ (h) $40=\mathrm{XL}$
(i) 16-XVI (j) 19-XIX
(c) $1 \Rightarrow \mathrm{I}$
3. (a) III-3 (b) X-10 (c) XVIII-18 (d) VII-7
(d) $100 \Rightarrow \mathrm{C}$
(e) XXV-25 (f) XXVI-26 (g) XII-12
(e) $10 \Rightarrow \mathrm{X}$
(h) XXXVII-37 (i) XL-15 (j) XLII-42
4. (a) $1+3=4$ (b) $5+2=7$
5. (a) XIII, XIV, XV (b) XXVI, XXVII, XXVIII (c) XXXIX, XL, XLI
(d) V,VI,VII (e) XLIV, XLV, XLVI
6. (a) $<$ (b) $<$ (c) $<$ (d) $=$ (e) $>$

## Mental Matbs

1. 12.503 .5004 .10005 .10

## Multiple Cboice Questions (MCQs) :

1. (a) 40 2. (c) 35 3. (a) 44 4. (b) 50 5. (c) 39

## Chapter

## 3

## Addition and Subtraction

## Practice Coach-1:

1. (a) TTh Th H T O

| 2 | 4 | 2 | 7 |  |
| ---: | ---: | ---: | :--- | :--- |
| +4 | 5 | 1 | 2 | 1 |
| 6 | 9 | 3 | 6 | 8 |

(d) TTh Th H T O

|  | 0 | 0 | 5 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| + 1 | 2 | 5 | 0 | 1 |
| 5 | 2 | 5 | 5 |  |

(b) TTh Th H T O

| 1 | 3 | 4 | 1 |  |
| ---: | ---: | ---: | ---: | ---: |
| +2 | 4 | 3 | 5 | 7 |
| 3 | 7 | 7 | 7 | 8 |

(e) TTh Th H T O

| 15 | 3 | 2 | 5 |  |
| ---: | ---: | ---: | ---: | ---: |
| +5 | 2 | 1 | 5 | 2 |
| 6 | 7 | 4 | 7 | 7 |

(c) $\mathrm{TTh} \mathrm{Th} H \mathrm{~T} \mathrm{O}$

| 3 | 4 | 6 | 2 |  |
| ---: | ---: | ---: | ---: | ---: |
| +1 | 2 | 1 | 2 | 1 |
| 4 | 6 | 7 | 9 | 3 |

(f) TTh Th H T O
$\begin{array}{llll}3 & 3 & 2 & 6\end{array}$

| 363 |
| ---: |
| +543 |
| 8775819 |

(g) TTh Th H T O
$\begin{array}{lllll}2 & 3 & 8 & 9 & 1\end{array}$

| +1 | 5 | 1 | 2 |
| ---: | ---: | ---: | ---: |
| 3 | 8 | 9 | 9 |

(j) TTh Th H T O

$\begin{array}{lllll}3 & 2 & 4 & 0 & 3\end{array}$ | +4 | 5 | 4 | 0 | 2 |
| ---: | ---: | ---: | ---: | ---: |
| 7 | 7 | 8 | 0 | 5 |

2. (a) TTh Th H T O

| 2 | 1 | 0 | 2 | 5 |
| ---: | ---: | ---: | ---: | ---: |
| 5 | 2 | 0 | 1 | 1 |
| +1 | 3 | 4 | 1 | 0 |
| 8 | 6 | 4 | 4 | 6 |

(d) TTh Th H T O
$\begin{array}{lllll}3 & 6 & 5 & 3 & 1\end{array}$
$\begin{array}{lllll}3 & 1 & 2 & 3 & 4\end{array}$

| +2 | 1 | 0 | 0 | 1 |
| ---: | ---: | ---: | :--- | :--- |
| 8 | 8 | 7 | 6 | 6 |

(g) TTh Th H T O
$\begin{array}{lllll}2 & 0 & 1 & 3 & 2\end{array}$
$\begin{array}{lllll}3 & 0 & 3 & 4 & 1\end{array}$

| +3 | 7 | 3 | 1 | 2 |
| ---: | ---: | ---: | ---: | :--- |
| 8 | 7 | 7 | 8 | 5 |

3. (a) TTh Th H T O
$\begin{array}{lllll}3 & 0 & 8 & 4 & 2\end{array}$

| +2 | 7 | 1 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 5 | 7 | 9 | 4 | 2 |

## Practice Coach-2:

1. (a) TTh Th H T O

| 26 | 5 | 5 | 6 |  |
| ---: | ---: | ---: | ---: | ---: |
| +6 | 2 | 1 | 5 | 4 |
| 8 | 8 | 7 | 1 | 0 |

(d) TTh Th H T O
(g) TTh Th H T O
$\begin{array}{lllll}2 & 8 & 9 & 6\end{array}$

| +6 | 3 | 4 | 2 | 7 |
| ---: | ---: | ---: | ---: | ---: |
| 9 | 2 | 3 | 9 | 2 |

$\begin{array}{lllll}8 & 3 & 5 & 5 & 4\end{array}$
$+7647$

| 9 | 1 | 2 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- |

(d) 8 - 5

| 8 | 3 | 5 | 7 |  |
| :---: | :---: | :---: | :---: | :---: |
| + | 7 | 6 | 4 | 7 |
| 9 | 1 | 2 | 0 | 1 |

(h) TTh Th H T O

(k) TTh Th H T O
$\begin{array}{lllll}1 & 5 & 1 & 0 & 8\end{array}$

| +2 | 1 | 7 | 3 | 1 |
| ---: | ---: | ---: | ---: | ---: |
| 3 | 6 | 8 | 3 | 9 |

(b) TTh Th H T O
$\begin{array}{lllll}1 & 0 & 1 & 0 & 2\end{array}$
$\begin{array}{lllll}2 & 0 & 2 & 3 & 2\end{array}$

| 2 | 0 | 2 | 4 | 4 |
| ---: | ---: | ---: | ---: | ---: |
| 6 | 0 | 5 | 7 | 8 |

(e) TTh Th H T O
$\begin{array}{lllll}2 & 1 & 2 & 3 & 2\end{array}$
$\begin{array}{lllll}2 & 3 & 2 & 1 & 4\end{array}$
$\begin{array}{r}2 \\ +15 \\ 5 \\ 5\end{array} \mathbf{2} 4839$.
(h) TTh Th H T O
$\begin{array}{lllll}2 & 1 & 3 & 4 & 6\end{array}$
$\begin{array}{lllll}1 & 2 & 0 & 1 & 2\end{array}$

| 15 | 4 | 5 | 3 | 1 |
| ---: | ---: | ---: | ---: | ---: |
| 8 | 7 | 8 | 8 | 9 |

(b) TTh Th H T O
$\begin{array}{lllll}4 & 0 & 8 & 4 & 2\end{array}$

| +1 | 5 | 1 | 3 | 5 |
| ---: | ---: | ---: | ---: | ---: |
| 5 | 5 | 9 | 7 | 7 |

(b) TTh Th H T O
$\begin{array}{lllll}5 & 4 & 9 & 8 & 7\end{array}$

| +1 | 5 | 7 | 1 | 3 |
| ---: | ---: | ---: | ---: | ---: |
| 7 | 0 | 7 | 0 | 0 |

(e) TTh Th H T O

| 26786 |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- |
| +48 | 2 | 8 | 7 |  |
| 7 | 5 | 0 | 7 | 3 |

(h) TTh Th H T O $\begin{array}{lllll}4 & 7 & 8 & 3 & 0\end{array}$

| +1 | 8 | 9 | 6 | 5 |
| ---: | ---: | ---: | ---: | ---: |
| 6 | 6 | 7 | 9 | 5 |

(i) TTh Th H T O

(l) TTh Th H T O
$\begin{array}{lllll}4 & 7 & 5 & 0 & 6\end{array}$

| +3 | 2 | 2 | 9 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 7 | 9 | 7 | 9 | 6 |

(c) TTh Th H T O
$\begin{array}{lllll}2 & 4 & 1 & 1 & 2\end{array}$
$\begin{array}{lllll}5 & 3 & 2 & 3 & 3\end{array}$

| +1 | 2 | 5 | 4 | 4 |
| ---: | ---: | ---: | ---: | ---: |
| 8 | 9 | 8 | 8 | 9 |

(f) TTh Th H T O

400000
300003

| +1 | 5 | 6 | 7 | 1 |
| ---: | ---: | ---: | ---: | ---: |
| 8 | 5 | 6 | 7 | 4 |

(c) TTh Th H T O
$1 \quad 0 \quad 20$

$\begin{array}{lllll}1 & 1 & 2 & 2\end{array}$ | +3 | 0 | 3 | 0 | 6 |
| ---: | ---: | ---: | ---: | ---: |
| 4 | 2 | 5 | 4 | 8 |

(c) TTh Th H T O
$\begin{array}{lllll}7 & 5 & 4 & 8 & 3\end{array}$

| +3 | 5 | 5 | 7 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| 1 | 1 | 1 | 0 | 5 |

(f) TTh Th H T O $\begin{array}{llll}7 & 4 & 5 & 4\end{array}$ | +8 | 4 | 5 | 6 | 4 |
| ---: | ---: | ---: | ---: | ---: |
| 1 | 5 | 9 | 1 | 0 |

(i) TTh Th H T O $\begin{array}{lllll}4 & 7 & 0 & 7 & 2\end{array}$

| +4 | 6 | 5 | 4 | 8 |
| ---: | ---: | ---: | ---: | ---: |
| 9 | 3 | 6 | 2 | 0 |

(j) | TTh | Th | H | T | O |
| ---: | ---: | ---: | ---: | ---: |
| 3 | 6 | 4 | 2 | 9 |
| + | 5 | 6 | 3 | 2 |
| 4 | 2 | 0 | 6 | 1 |

(d) TTh Th H T O

| 3 | 3 | 7 | 0 |  |
| ---: | ---: | ---: | ---: | ---: |
| 9 | 9 | 3 | 1 |  |
| +4 | 6 | 3 | 5 |  |
| 17 | 9 | 2 | 8 | 6 |

(g) TTh Th H T O

| 4 | 7 | 2 | 1 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 0 | 5 | 4 | 6 |
| + | 1 | 2 | 4 | 1 |
| 5 | 8 | 9 | 9 | 7 |

2. (a) TTh Th H T O

| 3 | 2 | 5 | 7 | 6 |
| ---: | ---: | ---: | ---: | ---: |
| 1 | 3 | 8 | 9 | 7 |
| +4 | 2 | 3 | 0 | 0 |
| 8 | 8 | 7 | 7 | 3 |

(k) TTh Th H T O

(b) TTh Th H T O
$\begin{array}{lllll}5 & 1 & 3 & 3 & 1\end{array}$
$\begin{array}{lllll}2 & 3 & 4 & 9 & 1\end{array}$

| +1 | 0 | 9 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 8 | 5 | 7 | 2 | 2 |

(e) TTh Th H T O

| 5 | 3 | 1 | 8 | 0 |
| ---: | :--- | :--- | :--- | :--- |
| 3 | 5 | 2 | 9 | 4 |
| +4 | 5 | 3 | 9 | 2 |
| 13 | 3 | 8 | 6 | 6 |

53180
$\begin{array}{lllll}3 & 5 & 2 & 9 & 4\end{array}$

| +4 | 5 | 3 | 9 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| 13 | 3 | 8 | 6 | 6 |

(l) TTh Th H T O

$\begin{array}{lllll}3 & 4 & 5 & 6 & 5\end{array}$ | +3 | 8 | 0 | 2 | 3 |
| ---: | ---: | ---: | :--- | :--- |
| 7 | 2 | 5 | 8 | 8 |

(c) TTh Th H T O $8 \quad 0607$ $\begin{array}{lllll}5 & 7 & 3 & 7 & 1\end{array}$ | +2 | 4 | 6 | 3 | 2 |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 1 | 6 | 2 | 6 | 1 | 0 |

(f) TTh Th H T O

|  | 6 | 9 | 0 | 1 |
| :---: | :---: | :---: | :---: | :---: | 2

(h) TTh Th H T O

| 4 | 6 | 4 | 5 |  |
| ---: | :--- | :--- | :--- | :--- |
| 54 | 3 | 8 | 0 |  |
| +2 | 5 | 8 | 5 | 9 |
| 8 | 4 | 8 | 8 | 4 |

## Practice Coacb-3:

1. Shyam bought a study table $=₹ 12,530$

He bought a bookshelf $=₹ 23,450$
Total money spent by him =₹ $12,530+₹ 23450$

$$
=₹ 35980
$$

Thus, Shyam ₹ 35,980 spent in buying the two items.
2. In a school there are students in $2001=11,230$

The students in $2002=21,200$
The students in $2003=31,012$

| TTh | Th | H | T | O |
| ---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 5 | 3 | 0 |
| +2 | 3 | 4 | 5 | 0 |
| 3 | 5 | 9 | 8 | 0 |

TTh Th H T O

Total number of students in the three years $=11,230+21,200$

$$
+31,012=63,442
$$

Thus, there are the total number of students is 63,442 who have enrolled for the school in the three years.
3. A LED TV set cost $=₹ 96,823$

A digital camera cost $=₹ 80,786$ TTh Th H T O
The total cost of both the items $=₹ 96,823+₹ 80,786 \quad 9 \quad 6 \quad 8 \quad 23$

$$
=₹ 1,77,609
$$

Thus, the total cost of both the items is ₹ $1,77,609$.
4. The sum of 64,869 and 75,899

TTh Th H T O

$$
\begin{aligned}
& =64869+75899 \\
& =140768
\end{aligned}
$$

5. The people watched a cricket match on first day

$$
=43599
$$

The people watched a cricket match on second day $=7499$
The people watched a cricket match on third day

$$
=10789
$$

The people watched the match in
all three days $=43599+7499+10789$

$$
=61887
$$

| TTh | Th | H | T | O |
| :---: | :--- | :--- | :--- | :--- |
| 4 | 3 | 5 | 9 | 9 |
|  | 7 | 4 | 9 | 9 |
| +1 | 0 | 7 | 8 | 9 |
| 6 | 1 | 8 | 8 | 7 |

Thus, 61887 people watched the match in all three days.
6. The largest four digit number $=9999$

The largest five digit number $=99999$
The sum of both digit numbers $=9999+99999$

$$
=109998
$$

7. The greatest five digit number $=99999$

A number is 26893 more than the 99999.
So, the number 126892 is 26893 more
than the greatest five digit number.
8. A factory produced blue pens $=45689$

The factory produced red pens $=36505$
The factory produced pens in all

$$
\begin{aligned}
& =45689+36505 \\
& =82194
\end{aligned}
$$

Thus, the factory produced 82194 pen in all.
9. The number of tourist in January $=35685$

The number of tourist in February $=19690$
The number of tourist in March $=48342$

TTh Th H T O


TTh Th H T O
$9 \quad 9999$
$\begin{array}{r}+26893 \\ \hline 12689 \\ \hline\end{array}$
TTh Th H T O

| 4 | 5 | 6 | 8 | 9 |
| ---: | ---: | ---: | ---: | ---: |
| +3 | 6 | 5 | 0 | 5 |
| 8 | 2 | 1 | 9 | 4 |

$\left.\begin{array}{rrrrr}\text { TTh } & \text { Th } & \text { H } & \text { T } \\ 3 & 5 & 6 & 8 & 5 \\ 1 & 9 & 6 & 9 & 0 \\ +4 & 8 & 3 & 4 & 2 \\ \hline 1 & 0 & 3 & 7 & 1\end{array}\right]$

The total number of tourists in three months

$$
=35685+19690+48342=103717
$$

Thus, the number of tourists who visited
Agra in three months is 103717.
10. The first contestant got votes $=45856$

The second contestant got votes $=11088$
The third contestant got votes $=25896$

| TTh | Th | H | T | O |
| ---: | :--- | :--- | :--- | :--- |
| 4 | 5 | 8 | 5 | 6 |
| 1 | 1 | 0 | 8 | 8 |
| +2 | 5 | 8 | 9 | 6 |
| 8 | 2 | 8 | 4 | 0 |

The total number of votes polled $=45856+11088+25896=82840$
The total number of votes polled is 82840 .

## Practice Coact -4:

1. (a) 89786 (b) 1080 (c) 0 (d) 23941 (e) 56354,37568 (f) 40404,20020
(g) 78346 (h) 1 (i) 45685
(j) 19005
(k) 1
(l) 32554 (m)

55611,19683,30481 (n) 45659 (o) 19679 (p) 36999

## Practice Coach-5 :

1. (a) Actual Sum Estimate Sum

TTh Th H T O TTh Th H T O So, Actual Sum

| 1 | 0 | 2 | 3 | 5 |
| ---: | ---: | ---: | ---: | ---: |
| +3 | 1 | 5 | 5 | 5 |
| 4 | 1 | 7 | 9 | 0 |

(b) Actual Sum

TTh Th H T O

| 20 | 5 | 8 | 3 |  |
| ---: | ---: | ---: | ---: | ---: |
| +1 | 3 | 7 | 8 | 1 |
| 3 | 4 | 3 | 6 | 4 |

(c) Actual Sum

TTh Th H T O

| 3 | 2 | 3 | 5 | 6 |
| ---: | ---: | ---: | ---: | ---: |
| 5 | 6 | 4 | 3 | 1 |
| +1 | 0 | 0 | 1 | 5 |
| 9 | 8 | 8 | 0 | 2 |


| 1 | 0 | 2 | 4 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| +3 | 1 | 5 | 6 | 0 |
| 4 | 1 | 8 | 0 | 0 |

$$
=41790
$$

and Estimate
Sum $=41800$
Estimate Sum
TTh Th H T O So, Actual Sum

$$
=34364
$$

and Estimate
Sum $=34360$
Estimate Sum
TTh Th H T O So, Actual Sum
$\begin{array}{llllll}3 & 2 & 3 & 6 & 0 & =98802\end{array}$
$\begin{array}{lllll}5 & 6 & 4 & 3 & 0\end{array} \quad$ and Estimate

| +1 | 0 | 0 | 2 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 9 | 8 | 8 | 1 | 0 |

Sum $=98810$
2. (a) Actual Sum

TTh Th H T O

(b) TTh Th H O

| 1 | 0 | 5 | 3 | 1 |
| ---: | ---: | ---: | ---: | ---: |
| +7 | 4 | 8 | 1 | 3 |
| 8 | 5 | 3 | 4 | 4 |

(c) TTh Th H T

$$
\begin{array}{rrrrl}
2 & 2 & 0 & 1 & 5 \\
2 & 2 & 2 & 6 & 3 \\
+1 & 0 & 0 & 1 & 0 \\
\hline 5 & 4 & 2 & 8 & 8 \\
\hline
\end{array}
$$

## Estimate Sum

TTh Th H T O So, Actual Sum

$$
=46243
$$

And Estimate
Sum $=46300$
TTh Th H T O So, Actual Sum

| 10 | 5 | 0 | 0 |  |
| ---: | ---: | ---: | ---: | ---: |
| +7 | 4 | 8 | 0 | 0 |
| 8 | 5 | 3 | 0 | 0 |

TTh Th H T O

| 2 | 2 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 2 | 2 | 3 | 0 | 0 |
| +1 | 0 | 0 | 0 | 0 |
| 5 | 4 | 3 | 0 | 0 |

$$
=85344
$$

And Estimate
Sum $=85300$
So, Actual Sum

$$
=54288
$$

and Estimate
Sum $=54300$
3. (a) TTh Th H T O TTh Th H T O

| 3 | 2 | 2 | 5 |  |
| ---: | ---: | ---: | :--- | :--- |
| +5 | 3 | 4 | 3 | 6 |
| 8 | 5 | 8 | 6 | 1 |


| 3 | 2 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: | :--- |
| +5 | 3 | 0 | 0 | 0 |
| 8 | 5 | 0 | 0 | 0 |

So, Actual Sum

$$
=85861
$$

And Estimate
Sum $=85000$
(b) TTh Th H T O TTh Th H T O

$$
\begin{aligned}
& \begin{array}{llllllllll}
8 & 3 & 4 & 5 & 2 & 8 & 3 & 0 & 0 & 0
\end{array} \\
& \begin{array}{|llllll}
+ & 7 & 6 & 3 & 4 & 7 \\
\hline 1 & 5 & 9 & 7 & 9 & 9 \\
\hline
\end{array} \quad \begin{array}{|ccccc|}
+ & 7 & 6 & 0 & 0 \\
\hline 1 & 5 & 9 & 0 & 0 \\
\hline
\end{array}
\end{aligned}
$$

So, Actual Sum

$$
=159799
$$

And Estimate
Sum $=159000$

(c) | TTh | Th | H | T | O |
| ---: | :--- | :--- | :--- | :--- |
| 2 | 1 | 0 | 0 | 8 |
| 3 | 4 | 1 | 2 | 1 |
| +2 | 1 | 0 | 5 | 0 |
| 7 | 6 | 1 | 7 | 9 |

TTh Th H T O
So, Actual Sum $=76179$
and Estimate
Sum $=76000$
4. A company produces footballs in a month $=51830$

The company produces basketballs in a month $=23469$
The total actual number of balls produced $=51830+23469=75299$
The total estimate number of balls produced by rounding off to nearest hundreds $=51800+23500=75300$

| Actual Sum |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| TTh Th H T O |  |  |  |  |
| 5 | 1 | 8 | 3 | 0 |
| +2 | 3 | 4 | 6 | 9 |
| 7 | 5 | 2 | 9 | 9 |

Estimate Sum
TTh Th H T O

| 5 | 1 | 8 | 0 | 0 |
| ---: | ---: | ---: | ---: | :--- |
| +2 | 3 | 5 | 0 | 0 |
| 7 | 5 | 3 | 0 | 0 |

The total number of balls produced by rounding off to nearest hundreds is 75300 .
5. A kitchen garden has vegetables $=24590$

The kitchen garden has fruits $=10438$
The total actual number of fruits and vegetables
$=24590+10438=35028$
The total actual number of fruits and vegetables by rounding off to nearest thousands is 36000 .

| Actual Sum |  |  |  |
| :--- | :---: | :---: | :---: |
| TTh |  |  |  |
| Th H T   <br> 2 4 5 9 0 <br> +1 0 4 3 8 <br> 3 5 0 2 8 |  |  |  |

## Estimate Sum

TTh Th H T O

$$
\begin{array}{rrrrr}
26 & 0 & 0 & 0 \\
+1 & 0 & 0 & 0 & 0 \\
\hline 3 & 6 & 0 & 0 & 0 \\
\hline
\end{array}
$$

## Practice Coach-6:

1. (a) TTh Th H T O

| 5 | 3 | 2 | 3 | 5 |
| ---: | ---: | ---: | ---: | ---: |
| -4 | 2 | 2 | 3 | 3 |
| 1 | 1 | 0 | 0 | 2 |

(c) TTh Th H T O
$\begin{array}{lllll}9 & 7 & 5 & 8 & 4\end{array}$

| -9 | 5 | 2 | 4 |
| ---: | ---: | ---: | ---: | \left\lvert\, | 2 | 3 |
| ---: | ---: | 4 | 1 |
| :--- |\right.

(f) TTh Th H T O

$$
\begin{aligned}
& \begin{array}{lllll}
4 & 8 & 9 & 6 & 7
\end{array} \\
& \begin{array}{rrrrr}
-2 & 3 & 6 & 3 & 5 \\
\hline 2 & 5 & 3 & 3 & 2 \\
\hline
\end{array}
\end{aligned}
$$

(i) TTh Th H T O

| 6 | 8 | 9 | 2 | 4 |
| ---: | ---: | ---: | ---: | ---: |
| -3 | 4 | 5 | 0 | 3 |
| 3 | 4 | 4 | 2 | 1 |

(l) TTh Th H T O
$\begin{array}{lllll}7 & 6 & 5 & 9 & 6\end{array}$

| -2 | 3 | 0 | 7 | 3 |
| ---: | ---: | ---: | ---: | ---: |
| 5 | 3 | 5 | 2 | 3 |

2. (a) TTh Th H T O

| 8 | 5 | 8 | 6 | 9 |
| ---: | ---: | ---: | ---: | ---: |
| -5 | 2 | 6 | 4 | 7 |
| 3 | 3 | 2 | 2 | 2 |

(d) TTh Th H T O
$\begin{array}{lllll}8 & 0 & 9 & 7 & 8\end{array}$

| -4 | 0 | 3 | 1 | 5 |
| ---: | ---: | ---: | ---: | ---: |
| 4 | 0 | 6 | 6 | 3 |

3. (a) TTh Th H T O
(d) 8 O 9

> 400 -2000 -20 1000
(b) TTh Th H T O

| 5 | 4 | 8 | 9 | 6 |
| ---: | ---: | ---: | ---: | ---: |
| -5 | 2 | 3 | 1 | 5 |
| 0 | 2 | 5 | 8 | 1 |

(d) TTh Th H T O $\begin{array}{lllll}8 & 3 & 6 & 7 & 9\end{array}$

| -4 | 0 | 3 | 6 | 5 |
| ---: | ---: | ---: | ---: | ---: |
| 4 | 3 | 3 | 1 | 4 |

(g) TTh Th H T O
$\begin{array}{lllll}2 & 8 & 5 & 9\end{array}$

| - | 6 | 5 | 4 |  | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 2 | 0 | 5 |  | 3 |

(j) TTh Th H T O
$\begin{array}{lllll}6 & 9 & 4 & 8 & 1\end{array}$

| 63 | 4 | 4 | 3 | 1 |
| ---: | ---: | ---: | ---: | ---: |
| 3 | 5 | 0 | 5 | 0 |

(k) TTh Th H T O
(e) TTh Th H T O
$\begin{array}{lllll}1 & 9 & 7 & 9\end{array}$
$\begin{array}{r}6 \\ -\quad 375 \\ \hline 13\end{array} \begin{array}{r}4 \\ \hline\end{array}$
(h) TTh Th H T O
$\begin{array}{lllll}9 & 0 & 6 & 9 & 5\end{array}$

| -6 | 0 | 4 | 7 | 3 |
| ---: | ---: | ---: | ---: | ---: |
| 3 | 0 | 2 | 2 | 2 |


| 6 | 7 | 8 | 9 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| -5 | 4 | 3 | 2 | 0 |
| 1 | 3 | 5 | 7 | 0 |

(b) TTh Th H T O

| 9 | 3 | 7 | 1 | 6 |
| ---: | ---: | ---: | ---: | ---: |
| -5 | 2 | 6 | 4 | 7 |
| 4 | 1 | 0 | 6 | 9 |

(e) TTh Th H T O

| 5 | 3 | 4 | 8 | 9 |
| ---: | ---: | ---: | ---: | ---: |
| -2 | 3 | 2 | 4 | 5 |
| 3 | 0 | 2 | 4 | 4 |

(c) TTh Th H T O

$\begin{array}{lllll}7 & 3 & 5 & 8 & 9\end{array}$ | -2 | 1 | 4 | 5 | 4 |
| ---: | ---: | ---: | ---: | ---: |
| 5 | 2 | 1 | 3 | 5 |

(f) TTh Th H T O
$\begin{array}{lllll}7 & 3 & 0 & 0 & 1\end{array}$

| -2 | 3 | 0 | 0 | 1 |
| ---: | ---: | ---: | ---: | ---: |
| 5 | 0 | 0 | 0 | 0 |

Subtract twenty thousand one hundred from forty thousand two hundred, then answer is twenty thousand one hundred.
(b) TTh Th H T O

$\begin{array}{lllll}9 & 6 & 4 & 6 & 8\end{array}$ | -5 | 4 | 2 | 3 | 6 |
| ---: | ---: | ---: | ---: | ---: |
| 4 | 2 | 2 | 3 | 2 |

Subtract fifty-four thousand two hundred thirty six from ninety-six thousand four hundred sixty-eight, then answer is forty-two thousand two hundred thirty-two.
(c) TTh Th H T O

| 7 | 9 | 9 | 2 |  |
| ---: | ---: | ---: | ---: | ---: |
| -6 | 5 | 3 | 0 | 0 |
| 1 | 4 | 6 | 4 | 2 |

Subtract sixty-five thousand three hundred from seventy-nine thousand nine hundred forty-two, then answer is fourteen thousand six hundred fortytwo.

## Practice Coacb-7:

1. (a) TTh Th H T O

| 9 | 2 | 0 | 4 | 5 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| -3 | 6 | 1 | 9 | 6 |
| 5 | 5 | 8 | 4 | 9 |

(d) TTh Th H T O
$\begin{array}{lllll}5 & 4 & 3 & 2 & 0\end{array}$

| -5 | 3 | 9 | 4 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 0 | 0 | 3 | 8 | 0 |

(g) TTh Th H T O

| 6 | 0 | 9 | 0 | 2 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| -2 | 3 | 6 | 9 | 8 |
| 3 | 7 | 2 | 0 | 4 |

(j) TTh Th H T O

| 8 | 4 | 0 | 5 | 7 |
| ---: | ---: | ---: | :--- | :--- |
| -5 | 2 | 6 | 2 | 8 |
| 3 | 1 | 4 | 2 | 9 |

2. (a) TTh Th H T O
$\begin{array}{llll}7 & 6 & 4 & 25\end{array}$

| -3 | 4 | 3 | 6 | 7 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 4 | 2 | 0 | 5 | 8 |

(d) TTh Th H T O
$\begin{array}{llll}3 & 0 & 0 & 7\end{array}$

| -2 | 4 | 5 | 3 | 8 |
| ---: | ---: | ---: | ---: | ---: |
| 0 | 5 | 5 | 3 | 7 |

(b) TTh Th H T O

| 1 | 3 | 4 | 5 | 6 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| -1 | 2 | 7 | 8 | 6 |
| 0 | 0 | 6 | 7 | 0 |

(e) TTh Th H T O

70000

| -6 | 4 | 8 | 9 | 6 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 0 | 5 | 1 | 0 | 4 |

(h) TTh Th H T O

| 5 | 4 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| -3 | 6 | 0 | 6 | 8 |
| 1 | 7 | 9 | 3 | 2 |

(k) $\mathrm{TTh} \mathrm{Th} H \mathrm{~T} O$

|  | 3 | 5 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 6 | 9 | 4 |  |
|  | 6 | 5 | 5 |  |

(b) TTh Th H T O

| 83 | 971 |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| -46 | 89 | 7 |  |  |
| 3 | 7 | 0 | 7 | 4 |

(e) TTh Th H T O
$\begin{array}{llll}5 & 4 & 3 & 5\end{array}$

| -2 | 9 | 8 | 6 | 3 |
| ---: | ---: | ---: | ---: | ---: |
| 2 | 4 | 4 | 6 | 2 |

(c) TTh Th H T O 40360

(f) TTh Th H T O

61700
$\begin{array}{r}6674 \\ -86026 \\ \hline 530\end{array}$
(i) TTh Th H T O
$\begin{array}{llll}3 & 9 & 264\end{array}$

| -2 | 5 | 6 | 8 | 9 |
| ---: | :--- | :--- | :--- | :--- |
| 1 | 3 | 5 | 7 | 5 |

(l) TTh Th H T O

| 4 | 5 | 3 | 6 | 8 |
| ---: | ---: | ---: | ---: | ---: |
| -2 | 8 | 7 | 5 | 9 |
| 1 | 6 | 6 | 0 | 9 |

(c) TTh Th H T O

15048 | 1 | 4 | 6 | 9 | 3 |
| ---: | ---: | :--- | :--- | :--- |
| -1 | 0 | 3 | 5 | 5 |

## Practice Coach-8:

1. (a) TTh Th H T O TTh Th H T O
$\left.\begin{array}{rrrrr}7 & 3 & 2 & 6 & 2 \\ -4 & 1 & 0 & 5 & 5 \\ 3 & 2 & 2 & 1 & 3\end{array} \longrightarrow \xrightarrow{3} \begin{array}{l}3 \\ \hline 4 \\ 1\end{array}\right)$
(b) TTh Th H T O

TTh Th H T O

(c) TTh Th H T O

TTh Th H T O

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |

(d) TTh Th H T O

TTh Th H T O

$$
\left.\begin{array}{|cccc}
8 & 6 & 3 & 5 \\
\hline
\end{array}\right]+\begin{array}{cccccc}
8 & 3 & 8 & 3 & 7 \\
+ & 2 & 5 & 1 & 3 \\
8 & 3 & 8 & 3 & 7
\end{array} \xrightarrow{2} \begin{array}{lllll}
8 & 5 & 1 & 3 \\
8 & 6 & 3 & 5 & 0
\end{array}
$$

2. (a) TTh Th H T O

$$
\begin{array}{r|r|r|r|r|}
4 & 8 & 3 & 5 & 7 \\
-3 & 2 & 4 & 3 & 8 \\
\hline 1 & 5 & 9 & 1 & 9 \\
\hline
\end{array}
$$

(c) TTh Th H T O

$$
\begin{array}{r|r|r|r|r|}
7 & 4 & 4 & 6 & 9 \\
-5 & 7 & 5 & 3 & 4 \\
\hline 1 & 6 & 9 & 3 & 5 \\
\hline
\end{array}
$$

(e) TTh Th H T O
(b) TTh Th H T O

| 9 | 9 | 5 | 4 | 9 |
| :---: | :---: | :---: | :---: | :---: |
| -1 | 8 | 2 | 3 | 0 |
| 8 | 1 | 3 | 1 | 9 |

(d) TTh Th H T O | 6 | 2 | 9 | 8 | 7 |
| ---: | ---: | ---: | ---: | ---: |
| -4 | 5 | 2 | 5 | 2 |
| 1 | 7 | 7 | 3 | 5 |

(f) TTh Th H T O

| 4 | 8 | 8 | 6 | 9 |
| ---: | ---: | ---: | ---: | ---: |
| -2 | 4 | 3 | 1 | 2 |
| -2 | 4 | 5 | 5 | 7 |

## Practice Coach-8:

1. Total trees in a forest $=27,899$

TTh Th H T O
The trees fell down $=17,340$
The trees were left in the forest

$$
=27,899-17,340=10,559
$$

Thus, there were 10,559 trees left in the forest.
2. The population of a town $=95,368$

The number of females $=39,651$
The number of males $=95,368-39,651=55,717$
Thus, the number of males in a town is 55,717.
3. A booksseller had books $=19,455$

She sold books in one month= 13,656
The book were in her shop now $=19,455-13,656$

$$
=5,799
$$

Thus, 5,799 books were in her shop now.
4. A man had money $=₹ 70,000$

He gave money to his son $=₹ 43,650$
Money is left with him = ₹ $70,000-₹ 43,650$
= ₹ 26,350

Thus, ₹ 26,350 is left with him.
5. The sum of two numbers $=56,856$

If one number $=2892$

| 2 | 7 | 8 | 9 | 9 |
| ---: | ---: | ---: | ---: | ---: |
| -1 | 7 | 3 | 4 | 0 |
| 1 | 0 | 5 | 5 | 9 |

TTh Th H T O

| 9 | 5 | 3 | 6 | 8 |
| ---: | ---: | ---: | ---: | ---: |
| -3 | 9 | 6 | 5 | 1 |
| 5 | 5 | 7 | 1 | 7 |

TTh Th H T O

| 1 | 9 | 4 | 5 | 5 |
| ---: | ---: | ---: | ---: | ---: |
| -1 | 3 | 6 | 5 | 6 |
| 0 | 5 | 7 | 9 | 9 |

TTh Th H T O

| 7 | 0 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| -4 | 3 | 6 | 5 | 0 |
| 2 | 6 | 3 | 5 | 0 |

TTh Th H T O

| 5 | 6 | 8 | 5 | 6 |
| ---: | ---: | ---: | ---: | ---: |
| -2 | 8 | 6 | 9 | 2 |
| 2 | 8 | 1 | 6 | 4 |

Then the other number $=56,856-28,692=28,1664$.
6. The smallest 5 -digit number $=10,000$ TTh Th H T O
The largest 4-digit number $=9,999$
Then the answer $=10,000-9,999=1$
7. The apartments in a township $=65,200$

The apartments are already occupied $=21,890$
The apartments are still vacant $=65,200-21,890$

$$
=43,310
$$

Thus, 43,310 apartments are still vacant.

| 1 | 0 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| - | 9 | 9 | 9 | 9 |
| 0 | 0 | 0 | 0 | 1 |

TTh Th H T O

| 6 | 5 | 2 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| -2 | 1 | 8 | 9 | 0 |
| 4 | 3 | 3 | 1 | 0 |

8. TTh Th H T O

| 5 | 3 | 6 | 5 | 8 |
| ---: | ---: | ---: | ---: | :--- |
| -2 | 6 | 7 | 8 | 9 |
| 2 | 6 | 8 | 6 | 9 |

Thus, we must be added 26,869 to 26,789 to get 53,658 .
9. $\quad$ The first number $=20,768$

The second number $=29,300$
The greater number $=29,300-20,768=8,532$
Thus, 29,300 is greater by 8,532 .

TTh Th H T O

| 2 | 9 | 3 | 0 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| -2 | 0 | 7 | 6 | 8 |
| 8 | 2 | 3 | 2 |  |

10. The total length of a wire $=8,795 \mathrm{~m}$

The length of one piece $=5,986 \mathrm{~m}$
The length of other piece $=8,795 \mathrm{~m}-5,986 \mathrm{~m}=2809 \mathrm{~m}$
Thus, the length of other piece of wire is $2,809 \mathrm{~m}$.

## Practice Coach-10:

1. (a) 46389 (b) 0 (c) 73999 (d) 0 (e) 1 (f) 34053 (g) 19684 (h) 36895 (i) 49980 (j) 30450

## Practice Coach-11:

1. (a) Actual Difference

Th H T O
$\begin{array}{llll}3 & 3 & 1 & 9\end{array}$

| -1 | 2 | 8 | 7 |
| ---: | ---: | ---: | ---: |
| 2 | 0 | 3 | 2 |

(b) Actual Difference

Th H T O
$\begin{array}{llll}6 & 0 & 9 & 1\end{array}$

| -5 | 1 | 6 | 7 |
| ---: | ---: | ---: | ---: |
| 0 | 9 | 2 | 4 |

(c) Actual Difference

Estimated Difference
Th H T O
$\begin{array}{llll}3 & 3 & 2 & 0\end{array}$

| -1 | 2 | 9 | 0 |
| ---: | ---: | ---: | ---: |
| 2 | 0 | 3 | 0 |

Actual difference

$$
=2032
$$

Estimated difference $=2030$

Estimated Difference
Th H T O
$\begin{array}{llll}6 & 0 & 9 & 0\end{array}$

| -5 | 1 | 7 | 0 |
| ---: | ---: | ---: | ---: |
| 0 | 9 | 2 | 0 |

Actual difference

$$
=924
$$

Estimated difference $=920$

Estimated Difference TTh Th H T O TTh Th H T O

| 5 | 0 | 4 | 9 | 1 |
| ---: | :--- | :--- | :--- | :--- |
| -4 | 1 | 0 | 0 | 7 |
| 0 | 9 | 4 | 8 | 4 |$\quad$| 5 | 0 | 4 | 9 | 0 |
| ---: | :--- | :--- | :--- | :--- |
| -4 | 1 | 0 | 1 | 0 |
| 0 | 9 | 4 | 8 | 0 |

Actual difference

$$
=9484
$$

Estimated difference $=9480$
2. (a) Actual Difference Estimated Difference

| Th H | T | O | Th H |
| ---: | ---: | ---: | :--- |
| 6 | 9 | 8 | 7 |
| -2 | 4 | 2 | 8 |$\quad$| 7 | 0 | 0 | 0 |
| ---: | :--- | :--- | :--- |
| -2 | 4 | 0 | 0 |
| 4 | 5 | 5 | 9 |
| 4 | 6 | 0 | 0 |

Actual difference

$$
=4559
$$

Estimated difference $=4600$
(b) Actual Difference

TTh Th H T O

| 8 | 2 | 3 | 6 |  |
| ---: | ---: | ---: | ---: | :--- |
| -5 | 3 | 4 | 0 | 2 |
| 2 | 8 | 9 | 9 | 4 |

(c) Actual Difference

Th H T O
$\begin{array}{llll}9 & 6 & 1 & 5\end{array}$

| -4 | 2 | 0 | 8 |
| ---: | ---: | ---: | ---: |
| 5 | 4 | 0 | 7 |

3. (a) Actual Difference

| Th | H | T | O |
| ---: | :---: | :---: | :---: |
| 5 | 3 | 5 | 6 |
| -2 | 9 | 1 | 4 |
| 2 | 4 | 4 | 2 |

(b) Actual Difference

Th H T O
$\begin{array}{llll}5 & 4 & 8 & 0\end{array}$

| -3 | 8 | 6 | 1 |
| ---: | ---: | ---: | ---: |
| 1 | 6 | 1 | 9 |

(c) Actual Difference

Th H T O
$1 \begin{array}{llll}1 & 2 & 9\end{array}$

| 1 | 0 | 8 | 0 |
| ---: | ---: | ---: | ---: |
|  | 2 | 9 |  |

Estimated Difference
TTh Th H T O Actual difference

$$
=28994
$$

Estimated difference
$=29000$
Estimated Difference
Th H T O
9600

| -4 | 2 | 0 | 0 |
| ---: | ---: | ---: | ---: |
| 5 | 4 | 0 | 0 |

Actual difference
$=5407$
Estimated difference

$$
=5400
$$

Estimated Difference

| Th | H | T | O | Actual difference |
| ---: | ---: | ---: | ---: | ---: |
| 5 | 0 | 0 | 0 | $=2442$ |
| -3 | 0 | 0 | 0 | Estimated difference |
| 2 | 0 | 0 | 0 | $=2000$ |

Estimated Difference
Th H T O
$\begin{array}{llll}5 & 0 & 0 & 0\end{array}$

| -4 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: |
| 1 | 0 | 0 | 0 |

Actual difference

$$
=1619
$$

Estimated difference

$$
=1000
$$

Estimated Difference
Th H T O
$1 \begin{array}{llll}1 & 0 & 0 & 0\end{array}$

| -1 | 0 | 0 | 0 |
| ---: | ---: | ---: | ---: |
| 0 | 0 | 0 | 0 |

Actual difference

$$
=129
$$

Estimated difference

$$
=0
$$

4. A man bought food items $=₹ 89,860$

He bought drinks = ₹ 56,440
The difference in both the expenses = ₹ $89,860-₹ 56,440=$ ₹ 33,420

Actual Difference
TTh Th H T O

| 8 | 9 | 8 | 6 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| -5 | 6 | 4 | 4 | 0 |
| 3 | 3 | 4 | 2 | 0 |

Estimated Difference TTh Th H T O

$$
\begin{array}{rrrrr}
8 & 9 & 9 & 0 & 0 \\
-5 & 6 & 4 & 0 & 0 \\
\hline 3 & 3 & 5 & 0 & 0 \\
\hline
\end{array}
$$

Thus, the difference in both the expenses by rounding off to nearest hundreds is 33,500 .
5. The total ribbons $=34,254$

The blue ribbons $=13,245$
Then the red ribbons $=34,254-13,245=21,009$

| Actual Difference | Estimated Difference |
| :---: | :---: |
| TTh Th H T O | TTh Th H T O |
| $\begin{array}{llllll}3 & 4 & 2 & 5 & 4\end{array}$ | $3 \begin{array}{lllll}3 & 4 & 0 & 0\end{array}$ |
| $\begin{array}{rrrrr}-1 & 3 & 2 & 4 & 5\end{array}$ | $\begin{array}{rrrrrr}-1 & 3 & 0 & 0 & 0\end{array}$ |
| $\begin{array}{llllll}2 & 1 & 0 & 0 & 9\end{array}$ | $\begin{array}{lllll}2 & 1 & 0 & 0 & 0\end{array}$ |

Thus, the estimated number of red ribbons to the nearest thousands is 21,000 .

## Practice Coact-12:

1. (a) Add $13243+13423$

TTh Th H T O

$$
\begin{array}{r}
13 \\
+1
\end{array} 34 \begin{array}{lll}
4 & 4 & 3 \\
+2 & 6 & 6 \\
\hline
\end{array}
$$

(b) Add 63534+32624

TTh Th H T O

| 63 | 5 | 3 | 4 |  |
| ---: | ---: | ---: | ---: | ---: |
| +3 | 2 | 6 | 2 | 4 |
| 9 | 6 | 1 | 5 | 8 |

(c) Add 42167+54150

TTh Th H T O

| 4 | 2 | 1 | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: |
| + 5 | 4 | 1 | 5 | 0 |
| 9 | 6 | 3 | 1 |  |

(d) Add $32136+15220$

TTh Th H T O

| 3 | 2 | 1 | 3 | 6 |
| ---: | ---: | ---: | :--- | :--- |
| +1 | 5 | 2 | 2 | 0 |
| 4 | 7 | 3 | 5 | 6 |

Add 26666+14235
TTh Th H T O

| 26 |
| ---: |
| 1 | $\mathbf{6} 66$

Subtract 96158-43434
TTh Th H T O

| 9 | 6 | 1 | 5 | 8 |
| ---: | ---: | ---: | ---: | ---: |
| -4 | 3 | 4 | 3 | 4 |
| 5 | 2 | 7 | 2 | 4 |

Subtract 96317-35901
TTh Th H T O

| 9 | 6 | 3 | 1 | 7 |
| ---: | ---: | ---: | ---: | :--- |
| -3 | 5 | 9 | 0 | 1 |
| 6 | 0 | 4 | 1 | 6 |

Subtract 47356-21742
TTh Th H T O

| 4 | 7 | 3 | 5 | 6 |
| ---: | ---: | ---: | ---: | :--- |
| -2 | 1 | 7 | 4 | 2 |
| 2 | 5 | 6 | 1 | 4 |

(e) Add 12874+61742

TTh Th H T O

| 1 | 2 | 8 | 7 | 4 |
| ---: | ---: | ---: | ---: | :--- |
| +6 | 1 | 7 | 4 | 2 |
| 7 | 4 | 6 | 1 | 6 |

(f) Add 53578+31051

TTh Th H T O

| 5 | 3 | 5 | 7 | 8 |
| ---: | ---: | ---: | ---: | ---: |
| +3 | 1 | 0 | 5 | 1 |
| 8 | 4 | 6 | 2 | 9 |

Subtract 74616-40741
TTh Th H T O

| 7 | 4 | 6 | 1 | 6 |
| ---: | ---: | ---: | ---: | :--- |
| -4 | 0 | 7 | 4 | 1 |
| 3 | 3 | 8 | 7 | 5 |

Subtract 84629-42536
TTh Th H T O

| 7 | 4 | 6 | 2 | 9 |
| ---: | ---: | ---: | ---: | ---: |
| -4 | 2 | 5 | 3 | 6 |
| 4 | 2 | 0 | 9 | 3 |

2. A shopkeeper had rice in stock $=52370 \mathrm{~kg}$ He sold rice in first day $=12155 \mathrm{~kg}$
He sold rice in second day $=9328 \mathrm{~kg}$
He sold rice in third day $=15271 \mathrm{~kg}$
He sold rice in three days

$$
\begin{array}{r}
=12155 \mathrm{~kg}+9328 \mathrm{~kg}+15271 \mathrm{~kg} \\
=36754 \mathrm{~kg}
\end{array}
$$

Rice left in the stock

$$
\begin{aligned}
& =52370 \mathrm{~kg} \\
& =36754 \mathrm{~kg} \\
& =15616 \mathrm{~kg}
\end{aligned}
$$

TTh Th H T O

| 1 | 2 | 1 | 5 | 5 |
| ---: | ---: | ---: | ---: | ---: |
|  | 9 | 3 | 2 | 8 |
| +1 | 5 | 2 | 7 | 1 |
| 3 | 6 | 7 | 5 | 4 |

TTh Th H T O

| 5 | 2 | 3 | 7 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| -3 | 6 | 7 | 5 | 4 |
| 1 | 5 | 6 | 1 | 6 |

Thus, 15616 kg rice still left in the stock.
3. Add 64512 and 23175

TTh Th H T O

| 6 | 4 | 5 | 1 | 2 |
| ---: | ---: | ---: | ---: | ---: |
| -2 | 3 | 1 | 7 | 5 |
| 8 | 7 | 6 | 8 | 7 |

Subtract 87687 from 90000

| TTh | Th | H | T | O |
| ---: | :--- | :--- | :--- | :--- |
| 9 | 0 | 0 | 0 | 0 |
| -8 | 7 | 6 | 8 | 7 |
| 0 | 2 | 3 | 1 | 3 |

## Mental Matbs

1. 34265 and 1986 2. 25613,14208 3. $95608-4000=916084$. $50000+50=50050$ 5. bigger 6. $99999-1000=98999$ 7. 896368. 99998 9. 8000-8 = 7992 10. 10000+35609 $=45609$

## Multiple Cboice Questions (MCQs) :

1. (a) 97789 2. (b) 99998 3. (a) sum 4. (b) 13125 5. (b) difference

## Chapter

## Multiplication

## Quick Recall!:

1. (a) 5 (b) 10 (c) $14+14+14+14+14+14+14+14=8 \times 14$
2. (a)

| 34 |
| ---: |
| $\times 7$ |
| 238 |

(b)

| 19 |
| ---: |
| 9 |
| $\times 6$ |
| 114 |

(c) 134

| $\times 7$ |
| ---: | ---: |
| 938 |

(d) 246

|  |
| :--- |
| $\times 5$ |
| 1230 |

4. A jar has marbles $=195$

The number of jars $=20$
The marbles are in 20 jars $=195 \times 20$

|  | 1 | 9 | 5 |
| :---: | :---: | :---: | :---: |
| $\times$ | 2 | 0 |  |
|  | 0 | 0 | 0 |
| 3 | 9 | 0 | 0 |
| 3 | 9 | 0 | 0 |

(c) $243 \times 100=24300$ (d) $9456 \times 1=9456$

## Practice Coach-1:

1. (a) 35 (b) 1 (c) 0 (d) 5 (e) 0 (f) 1971 (g) 7842 (h) 1250 (i) 4175 (j) 25755 (k) $(96 \times 45) \times 3=45 \times(96 \times 3)$
2. (a) $142 \times 2$
$\Rightarrow \quad$ (v) $2 \times 142$
(b) $357 \times 1 \quad \Rightarrow \quad$ (iv) 357
(c) $899 \times 0 \quad \Rightarrow \quad$ (ii) 0
(d) Product of $112 \times 4 \Rightarrow$ (iii) is an even number
(e) Product of $511 \times 5 \Rightarrow$ (i) is an odd number

## Practice Coacb-2:

1. (a) 1200 (b) 17,000 (c) $1,50,000$ (d) 42,600 (e) 91,800 (f) $9,73,000$ (g) 11,000 (h) 4,187,00 (i) 86,000 (j) 32,40,000 (k) 5100 (l) 63,000
2. 

(a) $11 \times 99=11 \times(100-1)$
(b) $65 \times 99$
$=65 \times(100-1)$
$=1100-11$
$=6500-65$
$=1089$
$=6435$
(c) $94 \times 9=94 \times(10-1)$
(d) $28 \times 99=28 \times(100-1)$
$=940-94$
$=846$
$=2800-28$
$=2772$
(e) $25 \times 29=25 \times(30-1)$
(f) $86 \times 49=86 \times(50-1)$
$=750-25$
$=4300-86$
$=725$
$=4214$

$$
\text { (g) } \begin{aligned}
& 28 \times 79=28 \times(80-1) \\
&=2240-28 \\
&=2212 \\
& \text { (i) } \begin{aligned}
70 \times 59 & =70 \times(60-1) \\
& =4200-70 \\
& =4130
\end{aligned},=\text { m }
\end{aligned}
$$

## Practice Coach-3:

$$
\text { 1. (a) } \begin{aligned}
1 \times 123 & =123 \\
2 \times 123 & =246 \\
3 \times 123 & =369 \\
4 \times 123 & =492 \\
5 \times 123 & =615 \\
5 \times 123 & =738 \\
7 \times 123 & =861 \\
8 \times 123 & =984 \\
9 \times 123 & =1107 \\
10 \times 123 & =1230 \\
11 \times 123 & =1353
\end{aligned}
$$

So, $123 \times 11=1353$
(c) $1 \times 326=326$
$2 \times 326=652$
$3 \times 326=978$
$4 \times 326=1304$
$5 \times 326=1630$
$6 \times 326=1956$
$7 \times 326=2282$
$8 \times 326=2608$
$9 \times 326=2934$
$10 \times 326=3260$
So, $326 \times 20=6520$
(d) $1 \times 404=404$
$2 \times 404=808$
$3 \times 404=1212$
$4 \times 404=5656$
$5 \times 404=2020$
$6 \times 404=2424$
$7 \times 404=2828$
$8 \times 404=3232$
$9 \times 404=3636$
(e) $1 \times$
$237=237$
(f) $1 \times 725=725$
$2 \times 237=474$
$2 \times 725=1450$
$11 \times 326=3586$
$12 \times 326=3912$
$13 \times 326=4238$
$14 \times 326=4564$
$15 \times 326=4890$
$16 \times 326=5216$
$17 \times 326=5542$
$18 \times 326=5868$
$19 \times 326=6194$
$20 \times 326=6520$
(b) $1 \times 441=441$
$2 \times 441=882$
$3 \times 441=1323$
$4 \times 441=1764$
$5 \times 441=2205$
$6 \times 441=2646$
$7 \times 441=3087$
$8 \times 441=3528$
$9 \times 441=3969$
$10 \times 441=4410$
$11 \times 441=4851$
$12 \times 441=5292$
So, $441 \times 12=5292$
$11 \times 326=3586$
$12 \times 326=3912$
$13 \times 326=4238$
$14 \times 326=4564$
$15 \times 326=4890$
$16 \times 326=5216$
$17 \times 326=5542$
$18 \times 326=5868$
$19 \times 326=6194$
$20 \times 326=6520$

| $10 \times 404=4040$ | $10 \times 237=2370$ | $10 \times 725=7250$ |
| :---: | :---: | :---: |
| $11 \times 404=4444$ | $11 \times 237=2607$ | $11 \times 725=7975$ |
| $12 \times 404=4848$ | $12 \times 237=2844$ | $12 \times 725=8700$ |
| $13 \times 404=5252$ | $13 \times 237=3081$ | $13 \times 725=9425$ |
| $14 \times 404=5656$ | $14 \times 237=3318$ | $14 \times 725=10150$ |
| $15 \times 404=6060$ | $15 \times 237=3555$ | $15 \times 725=10875$ |
| So, $404 \times 15=6060$ | $16 \times 237=3792$ | $16 \times 725=11600$ |
|  | So, $237 \times 16=3792$ | So, $25 \times 18=13050$ |
|  |  | $17 \times 725=12325$ |
|  |  | $18 \times 725=13050$ |

(g) | $1 \times 762$ | $=62$ | $11 \times 762=8382$ |
| ---: | :--- | :--- |
| $2 \times 762$ | $=1524$ | $12 \times 762=9144$ |
| $3 \times 762$ | $=2286$ | $13 \times 762=9906$ |
| $4 \times 762$ | $=3048$ | $14 \times 762=10668$ |
| $5 \times 762$ | $=3810$ | $15 \times 762=11430$ |
| $6 \times 762$ | $=4572$ | $16 \times 762=12192$ |
| $7 \times 762$ | $=5334$ | $17 \times 762=12954$ |
| $8 \times 762$ | $=6096$ | $18 \times 762=13716$ |
| $9 \times 762$ | $=6858$ | $19 \times 762=14478$ |
| $10 \times 762$ | $=7620$ | So, $762 \times 19=14478$ |

(h) $1 \times 346=346$
$2 \times 346=692$
$3 \times 346=1038$
$4 \times 346=1384$
$5 \times 346=1730$
$6 \times 346=2076$
$7 \times 346=2422$
$8 \times 346=2768$
$9 \times 346=3114$
$10 \times 346=3460$
$11 \times 346=3806$
$12 \times 346=4152$
$13 \times 346=4498$
$14 \times 346=4844$
$15 \times 346=5190$
$16 \times 346=5536$
$17 \times 346=5882$ So, $564 \times 16=9024$
So, $346 \times 17=5882$

2. (a) | 20 | 4 |  |
| :---: | :---: | :---: |
|  | 100 | 20 |

$100+20=120$
Answer $=24 \times 5=120$
(d)

| 70 | 8 |
| :---: | :---: |
| 560 | 64 |

$560+64=524$
Answer $=78 \times 8=624$

(c) | 40 | 2 |
| :---: | :---: |
| 7 | 280 |

$280+14=294$
$180+36=216$
Answer $=36 \times 6=216 \quad$ Answer $=42 \times 7=294$
(e)

| 60 | 5 |
| :---: | :---: |
| 180 | 15 |

$180+15=195$
(f)

| 20 | 4 |
| :---: | :---: |
| 200 | 40 |
| 40 | 8 |

Answer $=65 \times 3=195$
$200+40+40+8=288$
Answer $=24 \times 12=288$
(g)

|  | 30 | 2 |
| :---: | :---: | :---: |
| 10 | 300 | 20 |
| 8 | 240 | 16 |
|  |  |  |

$300+20+240+16=576$
Answer $=32 \times 18=576$
(h)

|  | 50 | 50 |
| :---: | :---: | :---: |
| 20 | 1000 | 80 |
| 8 | 400 | 32 |
|  |  |  |
|  |  |  |

$1000+80+400+32=1512$
Answer $=54 \times 28=1512$

$2800+560+80+16=3456$
Answer $=48 \times 72=3456$

| (j) | 60 | 6 |
| :--- | :---: | :---: |
| 80 | 4800 | 480 |
|  | 360 | 36 |
|  |  |  |

$4800+480+360+36=5676$
Answer $=66 \times 86=5676$

## Practice Coach-4:

1. (a)

| (a) | 234 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\times$ | 6 | 1 | 2 |
|  |  | 4 | 6 | 8 |
|  | 2 | 3 | 4 | 0 |
| + 14 | 0 | 4 | 0 |  |
| 14 | 3 | 2 | 0 | 8 |

(b)

(c) $\begin{array}{r}894 \\ \times 632 \\ \hline 1788\end{array}$

26820
13720
$\begin{array}{r}98100 \\ +92112 \\ \hline\end{array}$

| +5 | 3 | 6 | 4 | 0 | 0 |
| ---: | ---: | ---: | ---: | :--- | :--- |
| 5 | 6 | 5 | 0 | 0 | 8 |


| (d) |  |  | 2 | 5 |  | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\times$ | 1 | 2 | 2 | 5 |
|  |  | 1 | 2 | 6 | 6 | 5 |
|  |  | 5 | 0 | 6 | 6 | 0 |
|  | 2 | 5 | 3 | 0 |  | 0 |
|  | 3 | 1 | 6 | 2 | 2 | 5 |

(e)

(f)

|  | $\times$ | 1 1 |  |  | 2 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 4 | 4 |  | 8 |
|  | 1 | 1 | 2 | 2 | 0 |
| + 1 | 1 | 2 | 0 |  | 0 |
| 1 | 2 | 7 | 6 | 6 | 8 |

(g)

| ) | 266 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2 | 3 |  | 9 |
|  | 2 | 3 | 9 |  | 4 |
|  | 7 | 9 | 8 |  | 0 |
| + 5 | 3 | 2 | 0 |  | 0 |
| 6 | 3 | 5 | 7 |  | 4 |

(h) $\quad 356$ $\begin{array}{r}\times 455 \\ \hline 1780\end{array}$ 17800

| 142400 |
| ---: |
| +161980 |

2. (a) $3 \quad 7 \quad 2 \quad 8$

|  |
| :--- |
| $\times 42$ |
| 7456 |

(d) $\begin{array}{llll}7 & 6 & 1 & 3\end{array}$

|  | $\times \quad 5$ |
| :--- | :--- |
| $38 \quad 0 \quad 6 \quad 5$ |  |

(g) | 1 | 0 | 0 |
| ---: | ---: | ---: |
|  | $\times$ | 8 |
| 8 | 0 | 6 |

3. (a) 3254

| (a) |  | $\begin{array}{r} 25 \\ \times \quad 1 \end{array}$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | 6 | 5 | 0 | 8 |
| + 3 | 2 | 5 | 4 | 0 |
| 3 | 9 | 0 | 4 | 8 |

(d)

9864
$\begin{array}{r}\times 37 \\ \hline 69048\end{array}$
$\begin{array}{r}295920 \\ \hline 3649688 \\ \hline\end{array}$
(b) $\begin{array}{llll}1 & 9 & 8\end{array}$

|  |
| :--- |
| $\times \quad 3$ |
| 5958 |

(e) 5645 |  |  |  | $\times$ |
| :--- | :--- | :--- | :--- |
| 3 | 3 | 8 | 7 |

(h) $\quad \begin{array}{llll}2 & 0 & 1 & 5\end{array}$

|  | $\times$ | 9 |
| :--- | :--- | :--- | :--- |
| 1813 | 1 |  |

(b) $\quad \begin{array}{llll}1 & 0 & 8 & 4\end{array}$ 0
$\times 13$
3252
(c) $\quad 7 \quad 536$ $\begin{array}{r}\times 21 \\ \hline 7536\end{array}$

| 1500720 |
| ---: |
| +1588256 |

(e) $\begin{array}{rlll}8 & 6 & 2\end{array}$ $\begin{array}{r}\times 23 \\ \hline 25872\end{array}$

| 1782480 |
| ---: |
| +198835 |

(f) $\quad 3482$ $\begin{array}{r}\times 43 \\ \hline 10446\end{array}$
+1
+1 992880

|  |  |  | 4 | 0 |  |  | (h) |  | 2 |  |  | 356 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\times$ | 6 |  |  |  |  |  |  |  | $\times$ | 5 |  | 5 |
| (g) | 3 | 7 | 8 | 0 |  |  |  |  |  | 1 | 1 | 7 | 8 | 8 | 0 |
|  | 32 | 24 | 0 | 0 |  |  |  |  | 1 | 1 | 7 | 8 |  |  | 0 |
| 3 | 36 | 61 | 8 | 0 |  |  |  |  | 2 | 2 | 9 | 5 | 8 | 8 | 0 |

## Practice Coach-5:

1. Cost of a book $=₹ 125$

| 1225 |
| ---: |
| $\times 765$ |
| 6225 |
| +875 |
| 9375 |

Thus, the cost of 75 books are ₹ 9375 .
2. Cost of a ticket $=₹ 15$

Total number of tickets $=347$
The cost of total tickets $=₹ 15 \times 347$

$$
=₹ 5205
$$

Thus, ₹ 5205 was collected.
3. The ice cream parlour in a city $=278$

Each ice cream parlour sold ice creams $=980$
The ice creams sold in all $=278 \times 980$

$$
=272440
$$



278
$\begin{array}{r}980 \\ \hline 000\end{array}$
$\begin{array}{lllll}2 & 2 & 2 & 4 & 0\end{array}$

| 2 | 5 | 0 | 2 | 0 |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 2 | 7 | 2 | 4 | 4 | 0 |

Thus, 272440 ice creams were sold in all ice cream parlours in a city.
4. A car travels in one week $=1350 \mathrm{~km}$

The number of weeks $=4$
The car travels in 4 weeks $=1350 \mathrm{~km} \times 4$

| 1350 |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | $\times$ | 4 |
| 5 | 4 | 0 | 0 |

Thus, a car travels 5400 km in four weeks.


Thus, the cost of 245 oil tins is ₹ 115640 .
6. A man earns money in a day $=₹ 3245$

The number of days $=9$
The man earns money in 9 days $=₹ 3245 \times 9$

$$
\text { = ₹ } 29205
$$

Thus, the man earns ₹ 29205 in 9 days.
7. Each coach has seats $=118$

Total number of coaches $=36$
Total seats has in all coaches $=118 \times 36$

| 3245 |
| ---: |
|  |
|  |
| 2905 |


| 1188 |
| ---: |
| $\times 36$ |
| 7008 |
| +3540 |
| 42448 |

Thus, 4248 seats are there in 36 such coaches.
8. The metre in a kilometre $=1000 \mathrm{~m}$

The number of total kilometres $=234 \mathrm{~km}$

| 1000 |
| ---: |
| $\times 2304$ |
| 4000 |

The metres are in 234 kilometres $=234 \mathrm{~km} \times 1000 \quad 3 \quad 0 \quad 0 \quad 0 \quad 0$

$$
=234000 \mathrm{~m}
$$

Thus, there are 234000 m in 234 km .
9. The weight of a box containing notebooks $=314 \mathrm{~kg}$

The total number of boxes $=163$
The total weight of 163 boxes $=314 \mathrm{~kg} \times 163$

$$
=51182 \mathrm{~kg}
$$

Thus, the weight of 163 boxes is 51182 kg .

| 314 |
| ---: |
| $\times \quad 163$ |
| 9942 |
| 18840 |
| +314000 |
| 511882 |

10. A factory makes toys in a day $=692$

Number of days in a leap year $=366 \quad 692$
The factory produced toys in a leap year $=692 \times 366$

| 6366 |
| ---: |
| 4152 | $=253272$

Thus, this factory 253272 toys
produced in a leap year.

| +2 | 0 | 7 | 6 | 0 | 0 |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 2 | 5 | 3 | 2 | 7 | 2 |

## Practice Coach-6:

1. Rounding off to nearest 100
(a) $342 \times 645$

342 rounded off $=300$
645 rounded off $=600$

$$
=300 \times 600=1,80,000
$$

Thus, the product $1,80,000$ is an estimated product.
(b) $196 \times 430$

196 rounded off $=200$
430 rounded off $=400$

$$
=400 \times 200=80,000
$$

Thus, the product 80,000 is an estimated product.
(c) $168 \times 230$

168 rounded off $=200$
230 rounded off $=200$

$$
=200 \times 200=40,000
$$

Thus, the product 40,000 is an estimated product.
(d) $430 \times 199$

430 rounded off $=400$
199 rounded off $=200$

$$
=400 \times 200=80,000
$$

Thus, the product 80,000 is an estimated product.
(e) $576 \times 318$

576 rounded off $=600$
318 rounded off $=300$

$$
=600 \times 300=1,80,000
$$

Thus, the product $1,80,000$ is an estimated product.
(f) $244 \times 465$

244 rounded off $=200$
465 rounded off $=500$

$$
=200 \times 500
$$

$$
=10,000
$$

Thus, the product 10,000 is an estimated product.
(g) $208 \times 425$

208 rounded off $=200$
245 rounded off $=400$

$$
=200 \times 400=80,000
$$

Thus, the product 80,000 is an estimated product.
(h) $277 \times 166$

277 rounded off $=300$
166 rounded off $=200$

$$
=300 \times 200=60,000
$$

Thus, the product 60,000 is an estimated product.
2. Rounding off to nearest thousands
(a) $1932 \times 4936$

1932 rounded off $=2000$
4936 rounded off $=5000$

$$
=2000 \times 5000=1,00,00,000
$$

Thus, $1,00,00,000$ is an estimated product.
(b) $2435 \times 3010$

2435 rounded off $=2000$
3010 rounded off $=3000$

$$
=2000 \times 3000=60,00,000
$$

Thus, the product $60,00,000$ is an estimated product.
(c) $4218 \times 2819$

4218 rounded off $=4000$
2819 rounded off $=3000$

$$
=4000 \times 3000=1,20,00,000
$$

Thus, the product $1,20,00,000$ is an estimated product.
(d) $3763 \times 2555$

3763 rounded off $=4000$
2555 rounded off $=3000$

$$
=4000 \times 3000=1,20,00,000
$$

Thus, the product 1200000 is an estimated product.
(e) $7500 \times 8108$

7508 rounded off $=8000$
8108 rounded off $=8000$

$$
=8000 \times 8000=6,40,00,000
$$

Thus, the product $6,40,00,000$ is an estimated product.
(f) $6539 \times 3333$

6539 rounded off $=7000$
3333 rounded off $=3000$

$$
=7000 \times 3000=2,10,00,000
$$

Thus, the product $2,10,00,000$ is an estimated product.
(g) $4444 \times 2089$

4444 rounded off $=4000$
2089 rounded off $=2000$

$$
=4000 \times 2000=80,00,000
$$

Thus, the product $80,00,000$ is an estimated product.
(h) $5368 \times 4896$

5368 rounded off $=5000$
4896 rounded off $=5000$

$$
=5000 \times 5000=2,50,00,000
$$

Thus, the product $2,50,00,000$ is an estimated product.
3. The number of rows $=143$

The number of books in each row $=109$
The estimated number of rows nearest $10=140$
The estimated number of books in each row nearest $10=10$
The total number of books by rounding off nearest $10=140 \times 110$

$$
=15400
$$

Thus, the estimated total number of books by rounding off to nearest 10 is 15400 .
4. The cost of one can of juice $=₹ 158$

The total number of juice cans $=45$
Ritu spend money $=₹ 158 \times 45$

$$
\text { = ₹ } 7110
$$

Ritu would spend by rounding off to the nearest tens is ₹ 7110 .

## Mental Matbs

1. 0 2. 1936 3. product 4. 343000 5. multiplied 6. multiplier 7. 89238.1 9. 0 10. 463,729

## Multiple Cboice Questions (MCQs) :

1. (c) product 2. (b) 250 3. (a) 0 4. (c) 475800 5. (a) 11

## Chapter

## Quick Recall!:

1. 

| Division fact | Dividend | Divisor | Quotient |
| :--- | :---: | :---: | :---: |
| a) $40 \div 10$ | 40 | 10 | 4 |
| b) $21 \div 3$ | 21 | 3 | 7 |
| c) $14 \div 2$ | 14 | 2 | 7 |

2. (a) $20 \div 2=10$
(b) $27 \div 3=9$
(c) $25 \div 5=5$
(d) $16 \div 4=4$

| 10 |
| ---: |
| $2) 20$ |
| -20 |
| 0 |

3) | 9 |
| :--- |
| 27 |
4) $\frac{5}{25}$
$\begin{array}{r}4 \\ 4) 16 \\ -16 \\ \hline-0 \\ \hline\end{array}$

## Practice Coach-1:

1. (a) 450 (b) 1 (c) 24 (d) 1 (e) 0 (f) 195 (g) 261 (h) 1

## Practice Coach-2:

1. (a) $\mathrm{Q}=8, \mathrm{R}=6$ (b) $\mathrm{Q}=4, \mathrm{R}=58$ (c) $\mathrm{Q}=1, \mathrm{R}=983$ (d) $\mathrm{Q}=938, \mathrm{R}=$ 5 (e) $\mathrm{Q}=24, \mathrm{R}=58$ (f) $\mathrm{Q}=19, \mathrm{R}=0$ (g) $\mathrm{Q}=79, \mathrm{R}=757$ (h) $\mathrm{Q}=192$, $\mathrm{R}=13$ (i) $\mathrm{Q}=23, \mathrm{R}=5(\mathrm{j}) \mathrm{Q}=45, \mathrm{R}=86$ (k) $\mathrm{Q}=58, \mathrm{R}=459$ (l) $\mathrm{Q}=$ $96, R 283(\mathrm{~m}) R=368, R=5(\mathrm{n}) \mathrm{Q}=29, R=8$ (o) $\mathrm{Q}=45, \mathrm{R}=83(\mathrm{p})$ $\mathrm{Q}=68, \mathrm{R}=546$

## Practice Coach-3:

1. (a) $121 \div 11$
(b) $107 \div 15$
(c) $182 \div 12$
11) $121(11$

15 $107(7$

| $1 2 \longdiv { 1 8 2 ( 1 5 }$ |
| :---: |
| $\frac{-12 \downarrow}{62}$ |
| -60 |
| 2 |

$\mathrm{Q}=11, \mathrm{R}=0$
$\mathrm{Q}=15, \mathrm{R}=2$
(d) $307 \div 22$
(e) $504 \div 28$
(f) $775 \div 35$
22) $307(13$
28) $504(18$

35 $775(22$
$-\frac{22 \downarrow}{87}$
$-\frac{28 \downarrow}{224}$

$$
\frac{-70 \downarrow}{75}
$$

$\frac{-224}{0}$
$\begin{array}{r}-70 \\ -\quad 5 \\ \hline\end{array}$
$\mathrm{Q}=13, \mathrm{R}=21$
$\mathrm{Q}=18, \mathrm{R}=0$

$$
\mathrm{Q}=22, \mathrm{R}=5
$$

2. (a) $1935 \div 25$
(b) $2248 \div 7$
(c) $2876 \div 2$

25 $\longdiv { 1 9 3 5 ~ ( 7 7 }$
$7 \longdiv { 2 2 4 8 }$

| $\begin{array}{r}-21 \downarrow \\ 14 \\ 14 \downarrow\end{array}$ |
| :--- |
| 08 <br> $-\frac{1}{2}$ <br> $=321$,,$R=1$ |

2) 2876 (1438
$-\frac{175 \downarrow}{185}$
$\begin{array}{r}175 \\ \hline 10 \\ \hline\end{array}$
$\mathrm{Q}=77, \mathrm{R}=10$

$$
\mathrm{Q}=1438, \mathrm{R}=0
$$

(d) $9985 \div 8$
(e) $5438 \div 6$
(f) $1968 \div 9$
$8 \longdiv { 9 9 8 5 ( 1 2 4 8 }$
$6 \longdiv { 5 4 3 8 ( 9 0 6 }$
$\frac{-54 \downarrow \downarrow}{038}$
$\begin{array}{r}-36 \\ \hline 2\end{array}$
$\mathrm{Q}=906, \mathrm{R}=2$
65
$\begin{array}{r}-64 \\ \hline\end{array}$
$\mathrm{Q}=1248, \mathrm{R}=1$
3. (a) $6293 \div 31$
(b) $8001 \div 63$
(c) $8740 \div 42$
31) $6293(203$
63) 8001 (127
$4 2 \longdiv { 8 7 4 0 ( 2 0 8 }$
$\frac{-62 \downarrow \downarrow}{093}$
$\begin{array}{r}-93 \\ \hline 0 \\ \hline\end{array}$
$\overline{Q=203}$
$\frac{-63 \downarrow}{170}$
$\frac{-126}{441}$
$\frac{-441}{0}$
$Q=127$

$$
\begin{array}{r}
\frac{-84 \downarrow \downarrow}{340} \\
-336 \\
\hline \mathbf{Q}=208
\end{array}
$$

(d) $848 \div 53$
(e) $6204 \div 94$
(f) $4312 \div 14$

$$
\begin{gathered}
5 3 \longdiv { 8 4 8 } \\
\begin{array}{c}
\frac{-53 \downarrow \downarrow}{318} \\
-318 \\
\hline
\end{array} \\
Q=16
\end{gathered}
$$

94) 6204 (66
$\begin{array}{r}\frac{-564}{564} \\ -564 \\ \hline 0 \\ \hline=66\end{array}$
95) 4312 (308

$$
\begin{array}{r}
\frac{-42 \downarrow \downarrow}{112} \\
\frac{-112}{0} \\
\hline \bar{Q}=308
\end{array}
$$

## Practice Coach-4:

1. The number of buttons $=1400$

The number of boxes $=100$
Buttons were kept in each box $=1400 \div 100$

$$
=14
$$

$1 4 \longdiv { 1 4 0 0 ( 1 0 0 }$ $-\frac{14}{0}$

Thus, 14 buttons were kept in each box.
2. A factory produces bulbs $=4800 \div 8$

The number of hours $=8$
The bulbs are produced in an hour $=4800$
8) $4800 \quad 600$
$-\frac{48}{0}$

Thus, the factory produces 600 bulbs in one hour.
3. The number of books in a library $=4500$

The number of cartons $=12$
Books are packed in each carton $=4500 \div 12$

$$
=375
$$

Thus, there are 375 books packed in each carton.
4. The number of students in a school $=255$

The number of rows $=15$
The students will stand in each row $=255 \div 15$

$$
=17
$$

Thus, 17 students will stand in each row.
5. The paper strips together make a design $=5$

The number of total paper strips $=2645$
The designs can be made with total paper strips

$$
=2645 \div 5=529
$$

Thus, 529 similar designs can be made with 2645 paper strips.
6. A basket can hold apples $=34$

The number of total apples $=7650$
The baskets are needed for keeping all apples

$$
\begin{aligned}
& =7650 \div 34 \\
& =225
\end{aligned}
$$

Thus, 225 baskets are needed for keeping

$$
7650 \text { apples. }
$$

7. Amit can read pages in a day $=25$

The number of total pages in a book $=675$
The number of days he will be able to read a book

$$
=675 \div 25=27
$$

Thus, in 27 days he will be able to read a book having 675 pages.
8. Mukul has crayons $=1428$

The number of packets $=19$
He put in each packet $=1428 \div 19=75$
left crayons = remainder $=3$
Thus, he put 75 crayons in each packet and 3 are left.
$1 2 \longdiv { 4 5 0 0 ( 3 7 5 }$

$$
\begin{array}{r}
-36 \downarrow \\
\hline 90 \\
-84 \downarrow \\
\hline 60 \\
-60 \\
\hline 0 \\
\hline
\end{array}
$$

$1 5 \longdiv { 2 5 5 ( 1 7 }$
$-15 \downarrow$
$\begin{array}{r}-105 \\ \hline\end{array}$
$5 \longdiv { 2 6 4 5 ( 5 2 9 }$

$$
\begin{array}{r}
-25 \downarrow \\
\hline 14 \\
-10 \downarrow \\
\hline 45 \\
-45 \\
\hline 0 \\
\hline
\end{array}
$$

$3 4 \longdiv { 7 6 5 0 ( 2 2 5 }$

| $-68 \downarrow$ <br> 85 <br> $-68 \downarrow$ |
| ---: |
| 170 |
| -170 |
| 0 |

$2 5 \longdiv { 6 7 5 ( 2 7 }$

| $\frac{-50 \downarrow}{175}$ |
| ---: |
| -175 |
| 0 |

19) $1428(75$
$\frac{-133 \downarrow}{98}$
$\begin{array}{r}-95 \\ \hline 3 \\ \hline\end{array}$
9. The number of floors $=17$

The number of stairs $=425$
The stairs are there between each floor $=425 \div 17$

$$
=25
$$

Thus, there are 25 stairs between each floor.
10. The number of cycles $=9$

The cost of 9 cycles $=₹ 6750$
The cost of 1 cycle $=₹ 6750 \div 9$

$$
\text { = ₹ } 750
$$

Thus, the cost of 1 cycle is ₹ 750 .

$$
\begin{aligned}
& 9 \longdiv { 6 7 5 0 } ( 7 5 0 \\
& \frac{-63 \downarrow}{45} \\
& -45 \\
& \hline 0 \\
& \hline
\end{aligned}
$$

$3 0 \longdiv { 3 0 0 \quad 1 0 }$ $-\frac{300}{0}$
$2 0 \longdiv { 6 0 0 \quad 3 0 }$ $\frac{-600}{0}$
$5 0 \longdiv { 2 0 0 \quad ( 4 }$

$$
\frac{-200}{0}
$$

60 $600 \quad$ (10 $\frac{-600}{0}$
10) $500 \quad(50$ $\begin{array}{r}-500 \\ \hline \\ \hline\end{array}$

40) $800 \quad(20$ | -800 |
| :---: |
| 0 |

(g) $719 \div 13$

719 rounded off $=700$ (nearest 100)
13 rounded off $=10$ (nearest 10)

$$
\therefore 700 \div 10=70
$$

$$
\begin{aligned}
& 1 0 \longdiv { 7 0 0 } ( 7 0 \\
& \frac{-700}{0}
\end{aligned}
$$

(h) $2799 \div 12$

2799 rounded off $=2800$ (nearest 100)
12 rounded off $=10$ (nearest 10)

$$
\therefore 2800 \div 10=280
$$

2. 560 rounded off to the nearest ten is 560 and
$1 0 \longdiv { 2 8 0 0 ( 2 8 0 }$
$\frac{-20 \downarrow}{80}$
$\begin{array}{r}80 \\ \hline \\ \hline\end{array}$ 12 rounded off to the nearest ten is 10 .

$$
\therefore 560 \div 10=56
$$

So, 56 cubes of sugar in each serving rounded off to the nearest 10 .
3. $\quad$ The number of fish tanks $=25$

The number of goldfish $=648$
Estimate the number of goldfish rounded off to the nearest $10=650$
The gold fish in each tank $=650 \div 25$

$$
=26
$$

Thus, The estimated number of goldfish is 26 in each tank rounded off to the nearest 10 .

## Mental Matbs

1. $\mathrm{Q}=48, \mathrm{R}=3$ 2. $\mathrm{Q}=8, \mathrm{R}=46$ 3. Quotient 4. dividend 5. divisor
2. 45 7. 1 8. 0 9. $\mathrm{Q}=49, \mathrm{R}=5 \mathbf{1 0} . \mathrm{Q}=89, \mathrm{R}=68$

## Multiple Cboice Questions (MCQs) :

1. (a) dividend 2. (b) 25 3. (a) remainder 4. (c) 2164 5. (c) 4

## Chapter

## 6

## Factors and Multiples

## Practice Coach - 1 :

1. (a) $16=1,2,4,8,16$
(b) $18=1,2,3,6,9,18$
(c) $42=1,2,3,6,7,14,21,42$
(d) $35=1,5,7,35$
(e) $15=1,3,5,15$
(f) $36=1,2,3,4,6,9,12,18,36$
2. 3. $30=1 \times 30$

$$
30=2 \times 15
$$

$30=3 \times 10$
$30=6 \times 5$
2. $81=1 \times 81$
$81=9 \times 9$
Factors of 81 are 1,9,81
Factors of 30 are 1,2,3,5,6,10,15,30

## Practice Coach-2:

1. (a) $40=1,2,4,5,8,10,20,40$; (b) $28=1,2,4,7,14,28$;
(c) $18=1,2,3,6,9,18$ (d) $25=1,5,25$; (e) $49=1,7,49$;
(f) $12=1,2,3,4,6,12$; (g) $8=1,2,4,8$; (h) $30=1,2,3,5,6,10,15,30$;
2. (a) $\checkmark(\mathrm{b}) \checkmark(\mathrm{c}) \times(\mathrm{d}) \times(\mathrm{e}) \checkmark(\mathrm{f}) \times(\mathrm{g}) \checkmark(\mathrm{h}) \times$
3. (a) $1 \times 32=32$ (so, 1 and 32 are factors of 32 )
$2 \times 16=32$ (so, 2 and 16 are factors of 32 )
$4 \times 8=32$ (so, 4 and 8 are factors of 32 )
Hence, $1,2,4,8,16$ and 32 are factors of 32 .
(b) $1 \times 75=75$ (so, 1 and 75 are factors of 75)
$3 \times 25=75$ (so, 3 and 25 are factors of 75)
$5 \times 15=75$ (so, 5 and 15 are factors of 75)
Hence $1,3,5,15,25$ and 75 are factors of 75 .
(c) $1 \times 93=93$ (so, 1 and 93 are the factors of 93) $3 \times 31=93$ (so, 3 and 31 are the factors of 93 )
Hence $1,3,31$ and 31 are the factors of 93 .
(d) $1 \times 28=28$ (so, 1 and 28 are the factors of 28)
$2 \times 14=28$ (so, 2 and 14 are the factors of 28)
$4 \times 7=28$ (so, 4 and 7 are the factors of 28)
Hence, $1,2,4,7,14$ and 28 are the factors of 28.
(e) $1 \times 54=54$ (so, 1 and 54 are the factors of 54)
$2 \times 27=54$ (so, 2 and 27 are the factors of 54)
$3 \times 18=54$ (so, 3 and 18 are the factors of 54)
$6 \times 9=54$ (so, 6 and 9 are the factors of 54)
Hence, $1,2,3,6,9,18,27$ and 54 are the factors of 54 .
(f) $1 \times 81=81$ (so, 1 and 81 are the factors of 81)
$3 \times 27=81$ (so, 3 and 27 are the factors of 81)
$9 \times 9=81$ (so, 9 is the factor of 81 )
Hence, $1,3,9,27$ and 81 are the factors of 81 .
(g) $1 \times 64=64$ (so, 1 and 64 are the factors of 64)
$2 \times 32=64$ (so, 2 and 32 are the factors of 64)
$4 \times 16=64$ (so, 4 and 16 are the factors of 64 )
$8 \times 8$ (so, 8 is the factor of 64)
Hence $1,2,4,8,16,32$ and 64 are the factors of 64 .
(h) $1 \times 18=18$ (so, 1 and 18 are the factors of 18)
$2 \times 9=18$ (so, 2 and 9 are the factors of 18)
$3 \times 6=18$ (so, 3 and 6 are the factors of 18)
Hence, $1,2,3,6,9$ and 18 are the factors of 18.

## Practice Coact-3:

1. 

| Number |  | Greatest | Smallest |
| :---: | :---: | :---: | :---: |
| a) | 25 | 25 | 5 |
| b) | 42 | 42 | 2 |
| c) | 64 | 64 | 2 |
| d) | 76 | 76 | 2 |

2. (a)

(c)

(d)

(g)
(h)

3. (a) $1 \times 48=48$
$2 \times 24=48$
$3 \times 16=48$
$4 \times 12=48$
$6 \times 8=48$
Factors of 48 are
1,2,3,4,6,8,12,16,24,48
Thus, the common factor of 48 and 14 are 1 and 2 .
(b) $1 \times 18=18$
$2 \times 9=18$
$3 \times 6=18$
Factors of 18 are
1,2,3,6,9,18
Thus, the common factors of 18 and 30 are 1,2,3 and 6.
(c) $1 \times 14=14$
$1 \times 56=56$
$2 \times 7=14$
$2 \times 28=56$
Factors of 14 are
1,2,7,14
$1 \times 14=14$
$2 \times 7=14$
Factors of 14 are
1,2,7,14
$1 \times 30=30$
$2 \times 15=30$
$3 \times 10=30$
$5 \times 6=30$
Factors of 30 are
1,2,3,5,6,10,15,30

Thus, the common factors of 14 and 56 are 1,2,7 and 14.
(d) $1 \times 18=18$
$2 \times 9=18$
$3 \times 6=18$
Factors of 18 are
1,2,3,6,9,18
$1 \times 42=42$
$2 \times 21=42$
$3 \times 14=42$
$6 \times 7=42$
Factors of 42 are
1,2,3,6,7,14,21,42

Thus, the common factors of 18 and 42 are $1,2,3$, and 6 .
(e) $1 \times 56=56$
$1 \times 84=84$
$2 \times 28=56$
$2 \times 42=84$
$4 \times 14=56$
$3 \times 28=84$
$7 \times 8=56$
$4 \times 21=84$
Factors of 56 are
1,2,4,7,8,14,28,56
$6 \times 14=84$
$7 \times 12=84$
Factors of 84 are
1,2,3,4,6,7,12,14,21,28,42,84
Thus, the common factors of 56 and 84 are 1,2,4,7,14 and 28.
(f) $1 \times 12=12$
$1 \times 32=32$
$2 \times 6=12$
$2 \times 16=32$
$3 \times 4=12$
Factors of 12 are
$4 \times 8=32$
1,2,3,4,6,12
Factors of 32 are
1,2,4,8,16,32
Thus, the common factors of 12 and 32 are 1,2 and 4 .
(g) $1 \times 15=15$
$1 \times 30=30$
$3 \times 5=15$
Factors of 15 are 1,3,5,15
$2 \times 15=30$
$3 \times 10=30$
$5 \times 6=30$
Factors of 30 are
1,2,5,6,15,30

Thus, the common factors of 15 and 30 are $1,3,5$ and 15 .
(h) $1 \times 13=13$

Factors of 13 are 1,13
$1 \times 39=39$
$3 \times 13=39$
Factors of 39 are 1,3,13,39

Thus, the common factors of 13 and 39 are 1 and 13 .
(i) $1 \times 55=55$
$5 \times 11=55$
Factors of 55 are 1,5,11,55
Thus, the common factors of 55 and 11 are 1 and 11.
(j) $1 \times 16=11$
$2 \times 8=16$
$4 \times 4=16$
Factors of 16 are 1,2,4,8,16
$1 \times 11=11$
Factors of 11 are
1,11
$1 \times 28=28$
$2 \times 14=28$
$4 \times 7=28$
Factors of 28 are 1,2,4,7,14,28

Thus, the common factors of 16 and 28 are 1,2 and 4 .
(k) $1 \times 12=12$
$2 \times 6=12$
$3 \times 4=12$
Factors of 12 are
1,2,3,4,6,12
$1 \times 80=80$
$2 \times 40=80$
$4 \times 20=80$
$5 \times 16=80$
$8 \times 10=80$
Factors of 80 are 1,2,4,5,8,10,16,20,40,80

Thus, the common factors of 12 and 80 are 1,2 and 4 .
(l) $1 \times 49=49$
$7 \times 7=49$
Factors of 49 are
1,7,49
$1 \times 84=84$
$2 \times 42=84$
$3 \times 28=84$
$4 \times 21=84$
$6 \times 14=84$
$7 \times 12=84$
Factors of 84 are
1,2,3,4,6,7,12,14,21,28,42,84
Thus, the common factors of 49 and 84 are 1 and 7 .

## Practice Coacb-4:

1. (a) $27=1 \times 27$

$$
=3 \times 9
$$

$$
\begin{aligned}
24 & =1 \times 24 \\
& =2 \times 12 \\
& =3 \times 8 \\
& =4 \times 6
\end{aligned}
$$

Factors of 27 are
$1,3,9,27$
Factors of 24 are 1,2,3,4
3 is the only common factor of 27 and 24 .
Thus, 3 is the HCF of 27 and 24 .
(b) $28=1 \times 28$

$$
=2 \times 14
$$

$$
=4 \times 7
$$

$$
\begin{aligned}
40 & =1 \times 40 \\
& =2 \times 20 \\
& =4 \times 10 \\
& =5 \times 8
\end{aligned}
$$

Factors of 40 are
Factors of 28 are $1,2,4,5,8,10,20,40$ $1,2,3,4,7,8,14,28$
2,4 and 8 are common factors of 28 and 40 .
Thus, 2,4 and 8 are the HCF of 28 and 40.
(c) $88=1 \times 88$

$$
\begin{aligned}
12 & =1 \times 12 \\
& =2 \times 6
\end{aligned}
$$

$=2 \times 44$
$=4 \times 22$
$=8 \times 11$
Factors of 12 are
Factors of 88 are
$1,2,3,4,6,12$
$1,2,4,8,11,22,44,88$
2 and 4 are common factors of 88 and 12.
Thus, 2 and 4 are the HCF of 88 and 12 .
(d) $36=1 \times 36$
$=2 \times 18$
$=3 \times 12$
$=4 \times 9$
$=6 \times 6$
$66=1 \times 66$
$=2 \times 33$

$$
=3 \times 11
$$

Factors of 66 are
$1,2,3,11,33,66$

Factors of 36 are
$1,2,3,4,6,9,12,18,36$
2 and 3 are the common factors of 36 and 66.
Thus, 2 and 3 are the HCF of 36 and 66.
(e) $49=1 \times 49$
$=7 \times 7$

$$
\begin{aligned}
84 & =1 \times 84 \\
& =2 \times 42 \\
& =3 \times 28 \\
& =4 \times 21 \\
& =6 \times 14 \\
& =7 \times 12
\end{aligned}
$$

Factors of 84 are
7 is the only factor of 49 and 84 . $1,2,3,4,6,7,12,14,21,28,42,84$
Thus, 7 is the HCF of 49 and 84 .
(f) $25=1 \times 25$
$=5 \times 5$

$$
\begin{aligned}
35 & =1 \times 35 \\
& =5 \times 7
\end{aligned}
$$

Factors of 35 are 1,5,7,35
Factors of 25 are $1,5,25$

5 is the only common factor of
25 and 35.
Thus, 5 is the HCF of 25 and 35 .
(g) $50=1 \times 50$
$=2 \times 25$
$=5 \times 10$
$=5 \times 10$

$$
\begin{aligned}
100 & =1 \times 100 \\
& =2 \times 50 \\
& =4 \times 25 \\
& =5 \times 20 \\
& =10 \times 10
\end{aligned}
$$

Factors of 50 are
Factors of 100 are
1,2,5,10,25,50
1,2,4,5,10,20,25,50,100
$25,10,25$ and 50 are common factors of 50 and 100.
Thus, $2,5,10,25$ and 50 are the HCF of 50 and 100.
(h) $93=1 \times 93$

$$
=3 \times 31
$$

Factors of 93 are $1,3,31,93$

$$
\begin{aligned}
36 & =1 \times 36 \\
& =2 \times 18 \\
& =3 \times 12 \\
& =4 \times 9
\end{aligned}
$$

Factors of 36 are
$1,2,3,4,6,9,12,18,36$
3 is the only common factor of 93 and 36 .
Thus, 3 is the HCF of 93 and 36 .
(i) $55=1 \times 55$
$11=1 \times 11$
$=5 \times 11$
Factors of 55 are
Factors of 11 are 1,11
1,5,11,55
11 is the only common factor of 55 and 11.
Thus, 11 is the HCF of 55 and 11.
2. Prime numbers $=5,7,13,17,19,23,29,31,37,47$

Composite numbers $=4,6,15,20,35,58,63,64,72,78,81,86,95,99$
3. $2,3,5,7,11,13,17,19$
4. $\quad$ Smallest prime number $=2$
5. $4,6,8,10,12,14,15,16,18,20,21,22,24,25,26,27,28$
6. $48,78,92,84,66,100,56$
7. $51,53,55,57,59,61,63,65,67,69,71,73,75,77,79,81,83,85,87,89,91,93$, 95,97,99

## Practice Coacb-5 :

1. (a) $10,15,20,25,30$ (b) $16,24,32,40,48$ (c) $18,27,36,45,54$
(d) $24,36,48,60,72$ (e) $30,45,60,75,90$
2. (a) $80,100,120,140$ (b) $20,250,300,350$ (c) $800,1000,1200,1400$ (d) 2000,2500,3000,3500
3. (a) 15,25,35,45,55,65,75 (b) 18,36,54,72 (c) 45,75,105 (d) 42,84
4. (a) $60,120,180$ (b) $36,72,108$ (c) $60,120,180$ (d) $60,120,180$

Multiple of $=4=4,8,12,16,20,24,28,32,36$
Multiple of $5=5,10,20,25,30,35,40,45,50$

## Practice Coacb-6:

1. (a) Multiple of $9=9,18,27,36,45,54,63,72,81,90$

Multiple of $24=24,48,72,96,120$
The least common multiple of 9 and 24 is 72 .
(b) Multiple of $9=9,18,27,36,45,54$

Multiple of $15=15,30,45,60$
The least common multiple of 9 and 15 is 45 .
(c) Multiple of $19=19,38,57,76,95,114,133,152,171,190,209,228$, $247,266,285,304,323,342,380,399,418,437,456$, $475,494,513,532,550,571,589,608,627,646,665$, 684,703,722,741,760,779,798,817,836,855,874, 893,912,931,950,969,988,1007,1026,1045,1064, 1083,1102,1121,1140,1159,1178,1197,1216, 1235,1254,1273,292,1311,1330,1349,1368,1387,1406, 1425,1444,1520,1539,1558,1577,1596,1615
Multiple of $82=82,164,246,328,410,492,574,656,738,820,902$, 984,1066,1148,1230,1312,1394,1476,1558,1640
The least common multiple of 19 and 82 is 1558 .
(d) 45 and 72

Multiple of $45=45,90,135,180,225,270,315,360,405$
Multiple of $72=72,144,216,288, \mathbf{3 6 0}, 432$
The least common multiple of 45 and 72 is 360 .
(e) 78 and 22

Multiple of $78=78,156,234,312,390,468,546,624,702,780,858,936$

Multiple of $22=22,44,66,88,110,132,154,176,198,220,242,264$, $286,308,330,352,374,396,418,440,462,484,506$, 528,550,572,594,616,638,660,682,704,726,748, 770,792,814,836,858,880
The least common multiple of 78 and 22 is 858 .
(f) 66 and 18

Multiple of $66=66,132,198,264,330,396,462,528,594,660,726$, 792
Multiple of $18=18,36,54,72,90,108,126,144,162,180,198,216$
The least common multiple of 66 and 18 is 198 .
(g) 8 and 20

Multiple of $8=8,16,24,32,40,48$
Multiple of $20=20,40,60,80$
The least common multiple of 8 and 20 is 40 .
(h) 50 and 70

Multiple of $50=50,100,150,200,250,300, \mathbf{3 5 0}, 400,450,500$
Multiple of $70=70,140,210,280,350,420,490$
The least common multiple of 50 and 70 is 350 .
(i) 30 and 60

Multiple of $30=30,60,90, \mathbf{1 2 0}, 150,180,210$
Multiple of $60=60, \mathbf{1 2 0}, 180,240$
The least common multiple of 30 and 60 is 120 .

## Practice Coach-7:

1. $305,310,315,320,325,330,335,340,345$
2. A number is divisible by 2 if it has $0,2,4,6$ and 8 at its ones place. So, (a) 42 (b) 578 (h) 86 is divisible by 2.
3. A teacher wants to sit students in columns $=100$ The students in each column $=10$
The total columns for 100 students $=100 \div 10=10$

$$
\begin{gathered}
1 0 \longdiv { 1 0 0 } 1 0 \\
\frac{-100}{0}
\end{gathered}
$$

It is possible because ' 0 ' is at its units place.
4. The number of balls $=50$

The number of bags $=10$
Akshay can pack ball in each bag $=50 \div 10$
It is possible because ' 0 ' is at its units place.

| $1 0 \longdiv { 5 0 } 5$ |
| :---: |
| $-\frac{50}{0}$ |

## Mental Matbs

1. False 2. False 3. True 4. True 5. True 6. True 7. True 8. True
2. False 10. True

## Multiple Cboice Questions (MCQs) :

1. (a) factor 2. (c) 27 3. (b) itself 4. (b) 105 5. (a) 450

## Chapter

## Fractions

## Quick Recall!:

1. (a) Numerator $=4$, Denominator $=7$, (b) Numerator $=3$,

Denominator $=8$, (c) Numerator $=15$, Denominator $=21$,
(d) Numerator $=2$, Denominator $=5$ (e) Numerator $=11$, Denominator $=23$
2. (a) $\frac{2}{5}$
(b) $\frac{4}{8}$
(c) $\frac{2}{6}$
(d) $\frac{4}{9}$
(e) $\frac{6}{12}$
(f) $\frac{3}{8}$
3. (a) $\frac{3}{5}$
(b) $\frac{1}{3}$
(c) $\frac{2}{7}$
(d) $\frac{5}{8}$
4. (a) $\frac{1}{2} \times 22=\frac{22}{2} \times 11$ balls
(b) $\frac{1}{8} \times 24=\frac{24}{8}=3$ apples
(c) $\frac{1}{5} \times 25=\frac{25}{5} \times 5$ bananas
(d) $\frac{1}{4} \times 16=\frac{16}{4}=4$ roses.

## Practice Coach-1:

1. a, c 2. Do yourself 3. (a) $\frac{4}{6}, \frac{6}{9}, \frac{8}{12}, \frac{10}{15} \frac{12}{18}$
(b) $\frac{10}{16}, \frac{15}{24}, \frac{20}{32}, \frac{25}{40}, \frac{30}{48}$
(c) $\frac{12}{14}, \frac{18}{21}, \frac{24}{28}, \frac{30}{35}, \frac{36}{42}$
(d) $\frac{18}{20}, \frac{27}{30}, \frac{36}{40}, \frac{45}{50}, \frac{54}{60}$
(e) $\frac{18}{24}, \frac{27}{36}, \frac{3}{48}, \frac{45}{60}, \frac{54}{72}$
(f) $\frac{8}{32}, \frac{12}{48}, \frac{16}{64}, \frac{20}{80}, \frac{24}{96}$
(g) $\frac{6}{8}, \frac{9}{12}, \frac{12}{16}, \frac{15}{20}, \frac{18}{24}$
(h) $\frac{6}{10}, \frac{9}{15}, \frac{12}{20}, \frac{15}{25}, \frac{18}{30}$
(i) $\frac{8}{26}, \frac{12}{39}, \frac{16}{52}, \frac{20}{65}, \frac{24}{78}$
(j) $\frac{10}{18}, \frac{15}{27}, \frac{20}{36}, \frac{25}{45}, \frac{30}{54}$
(k) $\frac{8}{14}, \frac{12}{21}, \frac{16}{28}, \frac{20}{35}, \frac{24}{42}$
(l) $\frac{10}{18}, \frac{15}{27}, \frac{20}{36}, \frac{25}{45}, \frac{30}{54}$
(m) $\frac{10}{14}, \frac{15}{21}, \frac{20}{28}, \frac{25}{35}, \frac{30}{42}$
(n) $\frac{6}{14}, \frac{9}{21}, \frac{12}{28}, \frac{15}{35}, \frac{18}{42}$
(o) $\frac{4}{10}, \frac{6}{15}, \frac{8}{20}, \frac{10}{25}, \frac{12}{30}$
(p) $\frac{6}{16}, \frac{9}{24}, \frac{12}{32}, \frac{15}{40}, \frac{18}{48}$
2. (a) $\frac{1}{8}$
(b) $\frac{4}{8}$
(c) $\frac{3}{8}$
(d) $\frac{4}{8}$
3. (a) $\frac{16}{13}$
(b) $\frac{16}{18}$
(c) $\frac{15}{56}$
(d) $\frac{16}{52}$
4. (a) $\frac{2}{6}$
(b) $\frac{6}{9}$
(c) $\frac{1}{4}$
(d) $\frac{6}{27}$
(e) $\frac{4}{10}=\frac{8}{20}=\frac{6}{15}$
(f) $\frac{6}{16}=\frac{12}{32}=\frac{15}{40}$
(g) $\frac{3}{9}=\frac{4}{12}=\frac{5}{15}$
(h) $\frac{5}{10}=\frac{8}{16}=\frac{16}{32}$
5. (a) $\frac{6}{7}$
(b) $\frac{5}{6}$
(c) $\frac{1}{3}$
(d) $\frac{5}{6}$
(e) $\frac{3}{5}$
(f) $\frac{3}{5}$
(g) $\frac{1}{6}$
(h) $\frac{13}{30}$
(i) $\frac{14}{15}$
(j) $\frac{11}{16}$
(k) $\frac{7}{8}$
(l) $\frac{1}{3}$

## Practice Coact-2:

1. (a) $\frac{1}{9}, \frac{5}{9}, \frac{7}{9}$
(d) $\frac{4}{13}, \frac{3}{13}, \frac{9}{13}$
2. (a) $\frac{5}{7}$
(b) $\frac{2}{5}$
(c) $\frac{8}{11}$
(d) $\frac{7}{13}$
3. (a)

$\frac{2}{5}$

$\frac{3}{5}$
(b)

$\frac{4}{9}$

$\frac{7}{9}$
4. (a) $>$ (b) $>$ (c) $<$ (d) $>$ (e) $<$
5. (a) $\frac{1}{11}<\frac{3}{11}<\frac{5}{11}<\frac{7}{11}$ (b) $\frac{1}{25}<$ $\frac{3}{25}<\frac{8}{25}<\frac{11}{25}$ (c) $\frac{7}{45}<\frac{8}{45}<\frac{11}{45}<\frac{22}{45}$
(d) $\frac{1}{17}<\frac{3}{17}<\frac{5}{17}<\frac{9}{17}$
6. (a) $\frac{9}{19}>\frac{8}{19}>\frac{5}{19}>\frac{3}{19}$
(b) $\frac{13}{21}>\frac{11}{21}>\frac{9}{21}>\frac{5}{21}$
(c) $\frac{9}{10}>\frac{7}{10}>\frac{3}{10}$ $>\frac{1}{10}$ (d) $\frac{17}{20}>\frac{11}{20}>\frac{7}{20}>\frac{1}{20}$

## Practice Coacb-3:

1. (a) $\frac{7}{14}+\frac{7}{14}$
(b) $\frac{3}{8}+\frac{5}{8}$
(c) $\frac{8}{12}+\frac{4}{12}$
(d) $\frac{9}{14}+\frac{5}{14}$
2. (a) $\frac{8}{21}-\frac{4}{21}=\frac{4}{21}$
(b) $\frac{5}{9}-\frac{2}{9}=\frac{3}{9}$
(c) $\frac{5}{11}-\frac{3}{11}=\frac{2}{11}$
(d) $\frac{7}{18}-\frac{3}{18}=\frac{4}{18}$
3. (a) $\frac{2}{15}+\frac{3}{15}=\frac{2+3}{15}=\frac{5}{15}$
(b) $\frac{1}{8}+\frac{3}{8}=\frac{1+3}{8}=\frac{4}{8}$
(c) $\frac{5}{9}+\frac{1}{9}+\frac{1}{9}=\frac{5+1+1}{9}=\frac{7}{9}$
(d) $\frac{9}{21}+\frac{11}{21}=\frac{9+11}{21}=\frac{20}{21}$
(e) $\frac{3}{20}+\frac{7}{20}=\frac{3+7}{20}=\frac{10}{20}$
(f) $\frac{1}{19}+\frac{5}{19}+\frac{7}{19}=\frac{1+5+7}{19}=\frac{13}{19}$
4. Ajay bought sugar from shop $1=\frac{5}{8} \mathrm{~kg}$

He bought sugar from shop $2=\frac{3}{8} \mathrm{~kg}$
He bought sugar together from both shop $=\frac{5}{8}+\frac{3}{8}=\frac{5+3}{8}=\frac{8}{8}$
5. (a) $\frac{7}{11}-\frac{3}{11}=\frac{7-3}{11}=\frac{4}{11}$
(b) $\frac{4}{5}-\frac{1}{5}=\frac{4-1}{5}=\frac{3}{5} \quad=1 \mathrm{~kg}$
(c) $\frac{19}{23}-\frac{11}{23}=\frac{19-11}{23}=\frac{8}{23}$
(d) $\frac{5}{9}-\frac{2}{9}=\frac{5-2}{9}=\frac{3}{9}$
(e) $\frac{8}{15}-\frac{2}{15}=\frac{8-2}{15}=\frac{6}{15}$
(f) $\frac{15}{27}-\frac{8}{27}=\frac{15-8}{27}=\frac{7}{27}$
6. Ananya ate chocolate on Monday $=\frac{3}{10}$

She ate chocolate on Tuesday $=\frac{7}{10}$

$$
\frac{7}{10}>\frac{3}{10}
$$

Thus, she ate more chocolate on Tuesday.
To find the fraction of chocolate how much she ate more, subtract the fraction.

$$
\frac{7}{10}-\frac{3}{10}=\frac{7-3}{10}=\frac{4}{10}
$$

Thus, she ate $\frac{4}{10}$ more chocolate on Tuesday than Monday.

## Practice Coach-4:

1. Improper fractions $=\frac{9}{7}, \frac{35}{31}, \frac{24}{7}, \frac{5}{3}, \frac{15}{8}, \frac{9}{2}, \frac{11}{10}$ and $\frac{22}{5}$

Proper fractions $=\frac{2}{3}, \frac{5}{8}, \frac{6}{11}, \frac{48}{49}, \frac{97}{100}, \frac{3}{10}$ and $\frac{9}{11}$
2. (a) $\frac{27}{5}=5 \frac{2}{5}$
(b) $\frac{44}{9}=4 \frac{8}{9}$
(c) $\frac{71}{8}=8 \frac{7}{8}$
(d) $\frac{16}{7}=2 \frac{2}{7}$
(e) $\frac{15}{4}=3 \frac{3}{4}$
(f) $\frac{17}{9}=1 \frac{8}{9}$
(g) $\frac{18}{5}=3 \frac{3}{5}$
(h) $\frac{22}{3}=7 \frac{1}{3}$
(i) $\frac{21}{5}=4 \frac{1}{5}$
(j) $\frac{25}{4}=6 \frac{1}{4}$
3. (a) $3 \frac{1}{3}=\frac{(3 \times 3)+1}{3}=\frac{9+1}{3}=\frac{10}{3} \quad$ (b) $7 \frac{1}{2}=\frac{(7 \times 2)+1}{2}=\frac{14+1}{2}=\frac{15}{2}$
(c) $11 \frac{1}{3}=\frac{(3 \times 11)+1}{3}=\frac{33+1}{3}=\frac{34}{3}$
(d) $4 \frac{5}{8}=\frac{(8 \times 4)+5}{8}=\frac{40+5}{8}=\frac{45}{8}$
(e) $7 \frac{2}{9}=\frac{(9 \times 7)+2}{9}=\frac{63+2}{9}=\frac{65}{9}$
(f) $7 \frac{3}{5}=\frac{(5 \times 7)+3}{5}=\frac{35+3}{5}=\frac{38}{5}$
(g) $5 \frac{2}{3}=\frac{(3 \times 5)+2}{3}=\frac{15+2}{3}=\frac{17}{3}$
(h) $\frac{(9 \times 9)+1}{9}=\frac{81+1}{9}=\frac{82}{9}$
(i) $10 \frac{5}{8}=\frac{(8 \times 10)+5}{8}=\frac{80+5}{8}=\frac{85}{8}$
(j) $5 \frac{3}{4}=\frac{(5 \times 4)+3}{4}=\frac{20+3}{4}=\frac{23}{4}$
4. Mixed fractions $=$
(a) $3 \frac{1}{2}$
(b) $5 \frac{1}{4}$
(c) $6 \frac{2}{6}$

Improper fractions $=$ (a) $\frac{7}{2}$
(b) $\frac{21}{4}$
(c) $\frac{38}{6}$

## Practice Coach-5:

1. (a)

(b)

(c)

(d)

(e)

2. (a) $\frac{6}{11}$
(b) $\frac{4}{9}$
(c) $\frac{11}{13}$

## Mental Matbs

1. 5
2.     - 
3. False
4. No
5. $\frac{1}{2}$
6. $7 \frac{2}{5}$
7. $\frac{52}{11}$
8. No
9. $\frac{15}{15}=1$
10. $\frac{7}{11}$

## Maltiple Cboice Questions (MCQs) :

1. (c) $\frac{9}{69}$
2. (c) $\frac{4}{18}$
3. (a) whole
4. (b) $3 \frac{3}{12}$
5. (a) $\frac{31}{4}$

## Chapter

## 8

Metric Measures

## Practice Coach-1:

1. Convert into centimeters :
(a) 4 m
$1 \mathrm{~m}=100 \mathrm{~cm}$
$4 \mathrm{~m}=4 \times 100=400 \mathrm{~cm}$
(b) 19 m
$1 \mathrm{~m}=100 \mathrm{~cm}$
$19 \mathrm{~m}=19 \times 100 \mathrm{~cm}=1900 \mathrm{~cm}$
(c) 463 m
$1 \mathrm{~m}=100 \mathrm{~cm}$
$463 \mathrm{~m}=463 \times 100 \mathrm{~cm}$
$=46300 \mathrm{~cm}$
(e) 5 m 68 cm

$$
1 \mathrm{~m}=100 \mathrm{~cm}
$$

$5 \mathrm{~m} 68 \mathrm{~cm}=5 \mathrm{~m}+68 \mathrm{~cm}$

$$
\begin{aligned}
& =5 \times 100 \mathrm{~cm}+68 \mathrm{~cm} \\
& =500 \mathrm{~cm}+68 \mathrm{~cm} \\
& =568 \mathrm{~cm}
\end{aligned}
$$

(d) 193 m
$1 \mathrm{~m}=100 \mathrm{~cm}$

$$
\begin{aligned}
193 \mathrm{~m} & =193 \times 100 \mathrm{~cm} \\
& =19300 \mathrm{~cm}
\end{aligned}
$$

(f) $6 \mathrm{~m} 48 \mathrm{~cm} 1 \mathrm{~m}=100 \mathrm{~cm}$ $6 \mathrm{~m} 48 \mathrm{~cm}=6 \times 100 \mathrm{~cm}+48 \mathrm{~cm}$ $=6 \times 100 \mathrm{~cm}+48 \mathrm{~cm}$ $=600 \mathrm{~cm}+48 \mathrm{~cm}$ $=648 \mathrm{~cm}$
(g) $73 \mathrm{~m} 52 \mathrm{~cm}=73 \mathrm{~m}+52 \mathrm{~cm}$

$$
=73 \times 100 \mathrm{~cm}+52 \mathrm{~cm}=7300 \mathrm{~cm}+52 \mathrm{~cm}=7352 \mathrm{~cm}
$$

(h) $35 \mathrm{~m} 19 \mathrm{~cm}=35 \mathrm{~m}+19 \mathrm{~cm}$

$$
=35 \times 100 \mathrm{~cm}+19 \mathrm{~cm}=3500 \mathrm{~cm}+19 \mathrm{~cm}=3519 \mathrm{~cm}
$$

(i) $41 \mathrm{~m} \mathrm{70} \mathrm{cm}=41 \mathrm{~m}+70 \mathrm{~cm}$

$$
=41 \times 100 \mathrm{~cm}+70 \mathrm{~cm}=4100 \mathrm{~cm}+70 \mathrm{~cm}=4170 \mathrm{~cm}
$$

(j) $338 \mathrm{~m} 15 \mathrm{~cm}=338 \mathrm{~m}+15 \mathrm{~cm}$

$$
\begin{aligned}
& =338 \times 100 \mathrm{~cm}+15 \mathrm{~cm}=33800 \mathrm{~cm}+15 \mathrm{~cm} \\
& =33815 \mathrm{~cm}
\end{aligned}
$$

(k) $463 \mathrm{~m} 12 \mathrm{~cm}=463 \mathrm{~m}+12 \mathrm{~cm}$

$$
\begin{aligned}
& =463 \times 100 \mathrm{~cm}+12 \mathrm{~cm}=46300 \mathrm{~cm}+12 \mathrm{~cm} \\
& =46312 \mathrm{~cm}
\end{aligned}
$$

(l) $628 \mathrm{~m} 19 \mathrm{~cm}=628 \mathrm{~m}+19$

$$
\begin{aligned}
& =628 \times 100 \mathrm{~cm}+19 \mathrm{~cm}=62800 \mathrm{~cm}+19 \mathrm{~cm} \\
& =62819 \mathrm{~cm}
\end{aligned}
$$

2. (a) 300 cm
$100 \mathrm{~cm}=1 \mathrm{~m}$
$300 \mathrm{~cm}=300 \div 100 \mathrm{~m}=3 \mathrm{~m}$
(c) 1500 cm
$100 \mathrm{~cm}=1 \mathrm{~m}$
$1500 \mathrm{~cm}=1500 \div 100 \mathrm{~m}$
$=15 \mathrm{~m}$
(e) $5638 \mathrm{~cm}=5600 \mathrm{~cm}+38 \mathrm{~cm}$
$5600 \mathrm{~cm}=5600 \div 100 \mathrm{~m}=56 \mathrm{~m}$
$5638 \mathrm{~cm}=56 \mathrm{~m}+38 \mathrm{~cm}$ $=56 \mathrm{~m} 38 \mathrm{~cm}$
(b) 900 cm
$100 \mathrm{~cm}=1 \mathrm{~m}$
$900 \mathrm{~cm}=900 \div 100 \mathrm{~m}=9 \mathrm{~m}$
(d) 1800 cm
$100 \mathrm{~cm}=1 \mathrm{~m}$
$1800 \mathrm{~cm}=18 \div 100 \mathrm{~m}$
$=18 \mathrm{~m}$
(f) $9861 \mathrm{~cm}=9800 \mathrm{~cm}+61 \mathrm{~cm}$
$9800 \mathrm{~cm}=9800 \div 100 \mathrm{~m}=98 \mathrm{~m}$
$9861 \mathrm{~cm}=98 \mathrm{~m}+61 \mathrm{~cm}$ $=98 \mathrm{~m} 61 \mathrm{~cm}$
(g) $95421 \mathrm{~cm}=95400 \mathrm{~cm}+21 \mathrm{~cm}$ (h) $78910 \mathrm{~cm}=78900 \mathrm{~cm}+10 \mathrm{~cm}$
$95400 \mathrm{~cm}=95400 \div 100 \mathrm{~m}$
$=954 \mathrm{~m}$
$95421 \mathrm{~cm}=954 \mathrm{~m}+21 \mathrm{~cm}$
$=954 \mathrm{~m} 21 \mathrm{~cm}$
(i) $2214 \mathrm{~cm}=2200 \mathrm{~cm}+14 \mathrm{~cm}$
$2200 \mathrm{~cm}=2200 \div 100 \mathrm{~m}=22 \mathrm{~m}$
$2214 \mathrm{~cm}=22 \mathrm{~m}+14 \mathrm{~cm}$
$=22 \mathrm{~m} 14 \mathrm{~cm}$
(k) $28960 \mathrm{~cm}=28900 \mathrm{~cm}+60 \mathrm{~cm}$
$28900 \mathrm{~cm}=28900 \div 100 \mathrm{~m}$
$=289 \mathrm{~m}$
$28960 \mathrm{~cm}=289 \mathrm{~m}+60 \mathrm{~cm}$
$=289 \mathrm{~m} 60 \mathrm{~cm}$
$78900 \mathrm{~cm}=78900 \div 100 \mathrm{~m}$
$=789 \mathrm{~m}$
$78910 \mathrm{~cm}=789 \mathrm{~m}+10 \mathrm{~cm}$
$=789 \mathrm{~m} 10 \mathrm{~cm}$
(j) $41966 \mathrm{~cm}=41900 \mathrm{~cm}+66 \mathrm{~cm}$
$41900 \mathrm{~cm}=41900 \div 100 \mathrm{~m}$
$=419 \mathrm{~m}$
$41966 \mathrm{~cm}=419 \mathrm{~m}+66 \mathrm{~cm}$
$=419 \mathrm{~m} 66 \mathrm{~cm}$
$10081 \mathrm{~cm}=10000 \mathrm{~cm}+81 \mathrm{~cm}$
$10000 \mathrm{~cm}=10000 \div 100 \mathrm{~m}$
$=100 \mathrm{~m}$
$10081 \mathrm{~cm}=100 \mathrm{~m}+81 \mathrm{~cm}$
$=100 \mathrm{~m} 81 \mathrm{~cm}$

## Practice Coach-2:

1. (a) 8 km
$1 \mathrm{~km}=1000 \mathrm{~m}$
$8 \mathrm{~km}=8 \times 1000 \mathrm{~m}=8000 \mathrm{~m}$
(c) 31 km
$1 \mathrm{~km}=1000 \mathrm{~m}$
$31 \mathrm{~km}=31 \times 1000 \mathrm{~m}$ $=31000 \mathrm{~m}$
(e) 38 km 42 m

$$
\begin{aligned}
& =38 \times 1000 \mathrm{~m}+42 \mathrm{~m} \\
& =38000 \mathrm{~m}+42 \mathrm{~m} \\
& =38042 \mathrm{~m}
\end{aligned}
$$

(g) 3 km 91 m

$$
\begin{aligned}
& =3 \times 1000 \mathrm{~m}+91 \mathrm{~m} \\
& =3000 \mathrm{~m}+91 \mathrm{~m} \\
& =3091 \mathrm{~m}
\end{aligned}
$$

(i) 92 km 29 m
$=92 \times 1000 \mathrm{~m}+29 \mathrm{~m}$
$=92000 \mathrm{~m}+29 \mathrm{~m}$
$=92029 \mathrm{~m}$
(b) 21 km
$1 \mathrm{~km}=1000 \mathrm{~m}$
$21 \mathrm{~km}=21 \times 1000 \mathrm{~m}=21000 \mathrm{~m}$
(d) 169 km
$1 \mathrm{~km}=1000 \mathrm{~m}$
$169 \mathrm{~km}=169 \times 1000 \mathrm{~m}$
$=169000 \mathrm{~m}$
(f) 72 km 62 m
$=72 \times 1000 \mathrm{~m}+62 \mathrm{~m}$
$=72000 \mathrm{~m}+62 \mathrm{~m}$
$=72062 \mathrm{~m}$
(h) 7 km 19 m

$$
\begin{aligned}
& =7 \times 1000 \mathrm{~m}+19 \mathrm{~m} \\
& =7000 \mathrm{~m}+19 \mathrm{~m} \\
& =7019 \mathrm{~m}
\end{aligned}
$$

(j) 421 km 12 m

$$
\begin{aligned}
& =421 \times 1000 \mathrm{~m}+12 \mathrm{~m} \\
& =421000 \mathrm{~m}+12 \mathrm{~m} \\
& =421012 \mathrm{~m}
\end{aligned}
$$

(k) 524 km 38 m

$$
\begin{aligned}
& =524 \times 1000 \mathrm{~m}+38 \mathrm{~m} \\
& =524000 \mathrm{~m}+38 \mathrm{~m} \\
& =524038 \mathrm{~m}
\end{aligned}
$$

2. (a) 6000 m
$1000 \mathrm{~m}=1 \mathrm{~km}$
$6000 \mathrm{~m}=6000 \div 1000 \mathrm{~km}$
$=6 \mathrm{~km}$
(c) 4000 m
$4000 \mathrm{~m}=4000 \div 1000 \mathrm{~km}$
$=4 \mathrm{~km}$
(l) 622 km 41 m

$$
\begin{aligned}
& =622 \times 1000 \mathrm{~m}+41 \mathrm{~m} \\
& =622000 \mathrm{~m}+41 \mathrm{~m} \\
& =622041 \mathrm{~m}
\end{aligned}
$$

(b) 8000 m
$1000 \mathrm{~m}=1 \mathrm{~km}$
$1000 \mathrm{~m}=8000 \div 1000 \mathrm{~km}$ $=8 \mathrm{~km}$
(d) 7145 km
$1000 \mathrm{~m}=1 \mathrm{~km}$
$7145 \mathrm{~m}=7000 \mathrm{~m}+145 \mathrm{~m}$
$7000 \mathrm{~m}=7000 \div 1000 \mathrm{~km}=7 \mathrm{~km}$
$7145 \mathrm{~m}=7 \mathrm{~km}+145 \mathrm{~m}$
$=7 \mathrm{~km} 145 \mathrm{~m}$
(f) 1563 m
$1000 \mathrm{~m}=1 \mathrm{~kg}$
$1563 \mathrm{~m}=1000 \mathrm{~m}+563 \mathrm{~m}$
$1000 \mathrm{~m}=1000 \div 1000 \mathrm{~km}=1 \mathrm{~km}$
$1563 \mathrm{~m}=1 \mathrm{~km}+563 \mathrm{~m}$
$=1 \mathrm{~km} 563 \mathrm{~m}$
(g) 1837 m
(h) 2198 m
$1000 \mathrm{~m}=1 \mathrm{~km}$
$2198 \mathrm{~m}=2000 \mathrm{~m}+198 \mathrm{~m}$
$2000 \mathrm{~m}=2000 \div 1000 \mathrm{~km}=2 \mathrm{~km}$
$2198 \mathrm{~m}=2 \mathrm{~km}+198 \mathrm{~m}$
$=2 \mathrm{~km} 198 \mathrm{~m}$
(j) 2748 m
$1000 \mathrm{~m}=1 \mathrm{~km}$
$2748 \mathrm{~m}=2000 \mathrm{~m}+748 \mathrm{~m}$
$2000 \mathrm{~m}=2000 \div 1000 \mathrm{~km}=2 \mathrm{~km}$
$2748 \mathrm{~m}=2 \mathrm{~km}+748 \mathrm{~m}$
$=2 \mathrm{~km} 748 \mathrm{~m}$
(l) 5561 m
$1000 \mathrm{~m}=1 \mathrm{~km}$
$5561 \mathrm{~m}=5000 \mathrm{~m}+561 \mathrm{~m}$
$5000 \mathrm{~m}=5000 \div 1000 \mathrm{~km}=5 \mathrm{~km}$
$5561 \mathrm{~m}=5 \mathrm{~km}+561 \mathrm{~m}$
$=5 \mathrm{~km} 561 \mathrm{~m}$

## Practice Coach-3:

1. (a) $\mathrm{m} \quad \mathrm{cm}$
(b) $\begin{array}{ll}\mathrm{m} & \mathrm{cm} \\ 148 & 60\end{array}$
(c) $\begin{array}{ll}\mathrm{m} & \mathrm{cm} \\ 32 & 920\end{array}$
(d) $\begin{array}{ll}\mathrm{m} & \mathrm{cm} \\ 16 & 950\end{array}$

| $+43 \quad 58$ |
| ---: |
| $71 \quad 28$ |

$\begin{array}{r}+75625 \\ \hline 90486 \\ \hline\end{array}$

| $+21 \quad 532$ |
| ---: |
| $54 \quad 452$ |


| +17 | 210 |
| ---: | ---: |
| 34 | 160 |

(e) $\begin{array}{ll}\mathrm{m} & \mathrm{cm} \\ 50 & 7\end{array}$
(f) $\begin{array}{ll}\mathrm{m} & \mathrm{cm} \\ 381 & 74\end{array}$
$\begin{array}{r}+23740 \\ \hline 61914 \\ \hline\end{array}$

(g) | m | cm |
| ---: | :--- |
| 13 | 308 |
| +10 | 207 |
| 23 | 515 |

(h) $\begin{array}{ll}\mathrm{m} & \mathrm{cm} \\ 21 & 355\end{array}$

| 2161 |
| ---: |
| $+65 \quad 816$ |

2. (a) $\begin{array}{ll}\mathrm{m} & \mathrm{cm} \\ 12 & 950\end{array}$
(b) $\begin{array}{ll}\mathrm{m} & \mathrm{cm} \\ 94 & 08\end{array}$

| $-\quad 6 \quad 750$ |
| ---: |
| $6 \quad 200$ |

(e) | m | cm |
| :---: | :---: |
| 68 | 189 |
| -42 | 423 |
| 25 | 766 |

(f) $\begin{array}{cc}\mathrm{m} & \mathrm{cm} \\ 9 & 306\end{array}$

| -4 | 283 |
| ---: | ---: |
| 5 | 023 |

(c) $\begin{array}{ll}\mathrm{m} & \mathrm{cm} \\ 232 & 85\end{array}$
(d) $\begin{array}{ll}\mathrm{m} & \mathrm{cm} \\ 781 & 60\end{array}$

| -14565 |
| ---: |
| 87 |


| 98198 |
| ---: |
| $-\quad 94662$ |
| 686 |

(g) $\begin{array}{cc}\mathrm{m} & \mathrm{cm} \\ 79 & 563\end{array}$

(h) | m | cm |
| ---: | :--- |
| 86 | 981 |
| -24 | 324 |
| 62 | 657 |

(i) $\begin{array}{ll}\mathrm{m} & \mathrm{cm} \\ 89 & 739\end{array}$
$-53989$
(j) $\begin{array}{cl}\mathrm{m} & \mathrm{cm} \\ 4 & 959\end{array}$

| -2 | 553 |
| ---: | ---: |
| 2 | 406 |

3. The height of one coconut tree $=8 \mathrm{~m} 92 \mathrm{~m}$

| m |
| ---: |
| cm |
| 15 |
| 85 |
| $+\quad 89$ |
| 6 |
| 6 |

The height of another coconut tree $=15 \mathrm{~m} 85 \mathrm{~cm}$
5. Sanya uses cloth to make a dress $=9 \mathrm{~m} 80 \mathrm{~cm}$

Vaishali uses cloth to make her dress $=7 \mathrm{~m} 20 \mathrm{~cm} \quad \mathrm{~m} \quad \mathrm{~cm}$
The total length of cloth needed $=9 \mathrm{~m} 80 \mathrm{~cm}+7 \mathrm{~m} 20 \mathrm{~cm} \quad 9 \quad 80$

$$
=80 \mathrm{~m}
$$

Thus, the total length of cloth needed is 80 m .
6. A shopkeeper purchased blue ribbon $=116 \mathrm{~m} 80 \mathrm{~cm}$

He purchased red ribbon $=223 \mathrm{~m} 75 \mathrm{~cm}$
He purchased the ribbon altogether

| $m$ | cm |
| ---: | ---: |
| 116 | 80 |
| +223 | 75 |
| 340 | 55 |

$$
\begin{aligned}
& =116 \mathrm{~m} 80 \mathrm{~cm}+223 \mathrm{~m} 75 \mathrm{~cm} \\
& =340 \mathrm{~m} 55 \mathrm{~cm}
\end{aligned}
$$

Thus, 340 m 55 cm ribbon he purchased altogether.

## Practice Coach-4:

1. (a) 5 kg
$1 \mathrm{~kg}=1000 \mathrm{~g}$
$5 \mathrm{~kg}=5 \times 1000 \mathrm{~g}=5000 \mathrm{~g}$
(c) 3 kg
$1 \mathrm{~kg}=1000 \mathrm{~g}$
$3 \mathrm{~kg}=3 \times 1000 \mathrm{~g}=3000 \mathrm{~g}$
(e) $7 \mathrm{~kg} 149 \mathrm{~g}=7 \mathrm{~kg}+149 \mathrm{~g}$
$7 \mathrm{~kg}=7 \times 1000 \mathrm{~g}=7000 \mathrm{~g}$
$7 \mathrm{~kg} 149 \mathrm{~g}=7000 \mathrm{~g}+149 \mathrm{~g}$ $=7149 \mathrm{~g}$
(g) $4 \mathrm{~kg} 525 \mathrm{~g}=4 \mathrm{~kg}+525 \mathrm{~g}$
$4 \mathrm{~kg}=4 \times 1000 \mathrm{~g}=4000 \mathrm{~g}$
$4 \mathrm{~kg} 525 \mathrm{~g}=4000 \mathrm{~g}+525 \mathrm{~g}$

$$
=4525 \mathrm{~g}
$$

(i) $6 \mathrm{~kg} 665 \mathrm{~g}=6 \mathrm{~kg}+665 \mathrm{~g}$ $6 \mathrm{~kg}=6 \times 1000 \mathrm{~g}=6000 \mathrm{~g}$
$6 \mathrm{~kg} 665 \mathrm{~g}=6000 \mathrm{~g}+665 \mathrm{~g}$ $=6665 \mathrm{~g}$
2. (a) 2293 g
$1000 \mathrm{~g}=1 \mathrm{~kg}$
$2293 \mathrm{~g}=2000 \mathrm{~g}+293 \mathrm{~g}$
$2000 \mathrm{~g}=2000 \div 1000=2 \mathrm{~kg}$
$2293 \mathrm{~g}=2 \mathrm{~kg}+293 \mathrm{~g}$
$=2 \mathrm{~kg} 293 \mathrm{~g}$
(c) 7585 g
$1000=1 \mathrm{~kg}$
$7585 \mathrm{~g}=7000 \mathrm{~g}+585 \mathrm{~g}$
$7000 \mathrm{~g}=7000 \div 1000 \mathrm{~kg}=7 \mathrm{~kg}$
$7585 \mathrm{~g}=7 \mathrm{~kg}+585 \mathrm{~g}$
$=7 \mathrm{~kg} 585 \mathrm{~g}$
(e) 12000 g
$1000 \mathrm{~g}=1 \mathrm{~kg}$
$12000 \mathrm{~g}=12000 \div 1000 \mathrm{~kg}$ $=12 \mathrm{~kg}$
(b) 10 kg
$1 \mathrm{~kg}=1000 \mathrm{~g}$
$10 \mathrm{~kg}=10 \times 1000 \mathrm{~g}=10000 \mathrm{~g}$
(d) 12 kg
$1 \mathrm{~kg}=1000 \mathrm{~g}$
$12 \mathrm{~kg}=12 \times 1000 \mathrm{~g}=12000 \mathrm{~g}$
(f) $12 \mathrm{~kg} 741 \mathrm{~g}=12 \mathrm{~kg}+141 \mathrm{~g}$
$12 \mathrm{~kg}=12 \times 1000 \mathrm{~g}=12000 \mathrm{~g}$
$12 \mathrm{~kg} 741 \mathrm{~g}=12000 \mathrm{~g}+741 \mathrm{~g}$ $=12741 \mathrm{~g}$
(h) $68 \mathrm{~kg} 902 \mathrm{~g}=68 \mathrm{~kg}+902 \mathrm{~g}$ $68 \mathrm{~kg}=68 \times 1000 \mathrm{~g}=68000 \mathrm{~g}$ $68 \mathrm{~kg} 902 \mathrm{~g}=68000 \mathrm{~g}+902 \mathrm{~g}$ $=68902 \mathrm{~g}$
(j) $93 \mathrm{~kg} 356 \mathrm{~g}=93 \mathrm{~kg}+356 \mathrm{~g}$
$93 \mathrm{~kg}=93 \times 1000 \mathrm{~g}=93000 \mathrm{~g}$
$93 \mathrm{~kg} 356 \mathrm{~g}=93000 \mathrm{~g}+356 \mathrm{~g}$ $=93356 \mathrm{~g}$
(b) 6509 g
$1000 \mathrm{~g}=1 \mathrm{~kg}$
$6509 \mathrm{~g}=6000 \mathrm{~g}+509 \mathrm{~kg}$
$6000 \mathrm{~g}=6000 \div 1000 \mathrm{~kg}=6 \mathrm{~kg}$
$6509 \mathrm{~g}=6 \mathrm{~kg}+509 \mathrm{~g}$ $=6 \mathrm{~kg} 509 \mathrm{~g}$
(d) 89874 g
$1000 \mathrm{~g}=1 \mathrm{~kg}$
$89874 \mathrm{~g}=89000 \mathrm{~g}+874 \mathrm{~g}$
$89000 \mathrm{~g}=89000 \div 1000 \mathrm{~kg}=89 \mathrm{~kg}$
$89874 \mathrm{~g}=89 \mathrm{~kg}+874 \mathrm{~g}$
$=89 \mathrm{~kg} 874 \mathrm{~g}$
(f) 71820 g
$1000 \mathrm{~g}=1 \mathrm{~kg}$
$71820 \mathrm{~g}=71000 \mathrm{~g}+820 \mathrm{~g}$
$71000 \mathrm{~g}=71000 \div 1000 \mathrm{~kg}=71 \mathrm{~kg}$
$71820 \mathrm{~g}=71 \mathrm{~kg}+820 \mathrm{~g}$
$=71 \mathrm{~kg} 820 \mathrm{~g}$

$$
\begin{array}{cc}
\text { (g) } 20925 \mathrm{~g} & \text { (h) } 6889 \mathrm{~g} \\
1000 \mathrm{~g}=1 \mathrm{~kg} & 1000 \mathrm{~g}=1 \mathrm{~kg} \\
20925 \mathrm{~g}=20000 \mathrm{~g}+925 \mathrm{~g} & 6889 \mathrm{~g}=6000 \mathrm{~g}+889 \mathrm{~g} \\
20000 \mathrm{~g}=20000 \div 1000 \mathrm{~kg}=20 \mathrm{~kg} 6000 \mathrm{~g}=6000 \div 1000 \mathrm{~kg}=6 \mathrm{~kg} \\
20925 \mathrm{~g}=20 \mathrm{~kg}+925 \mathrm{~g} & 6889 \mathrm{~g}=6 \mathrm{~kg}+889 \mathrm{~g} \\
=20 \mathrm{~kg} \mathrm{925g} & =6 \mathrm{~kg} 889 \mathrm{~g}
\end{array}
$$

## Practice Coach-5:

1. (a) kg g

| 4 | 350 |
| ---: | ---: |
| +3 | 825 |
| 8 | 175 |

(d) $\mathrm{kg} \quad \mathrm{g}$

| 3 |
| ---: | | 405 |
| ---: |
| $+\quad 7 \quad 615$ |
| $11 \quad 020$ |

(g) kg g
$32 \quad 920$
$+21532$
$54 \quad 452$

(b) | kg | g |
| ---: | :---: |
| 8 | 243 |
| $+\quad 2$ | 472 |
| 10 | 715 |

(e) kg g
$36 \quad 580$
$\begin{array}{r}3671 \\ +\quad 7 \quad 281 \\ \hline 43 \quad 861 \\ \hline\end{array}$
(h) kg g
$16 \quad 950$
$+17 \quad 210$
$34 \quad 160$
2. (a) $\begin{array}{rc}\mathrm{kg} & \mathrm{g} \\ 5 & 350\end{array}$

| 2 | 180 |
| ---: | ---: |
| $+\quad 6$ | 110 |
| 13 | 640 |

(b) $\begin{array}{cc}\mathrm{kg} & \mathrm{g} \\ 10 & 500\end{array}$
(c) $\mathrm{kg} \quad \mathrm{g}$

7408
4270

(d) | kg | g |
| ---: | :--- |
| 9 |  |

| 9 | 250 |
| ---: | ---: |
| 8 | 750 |
| $+\quad 9$ | 000 |
| 27 | 000 |

3. (a) $\begin{array}{cc}\mathrm{kg} & \mathrm{g} \\ 785 & 956\end{array}$

$$
\begin{array}{r}
-562350 \\
\hline 223606 \\
\hline
\end{array}
$$

(e) $\begin{array}{cc}\mathrm{kg} & \mathrm{g} \\ 59 & 290\end{array}$

| -41 | 210 |
| ---: | ---: |
| 18 | 080 |

(b) $\mathrm{kg} \quad \mathrm{g}$
$\begin{array}{r}6210 \quad 210 \\ -\quad 210 \quad 140 \\ \hline\end{array}$
(c) kg

32495
(d) $\begin{array}{cc}\mathrm{kg} & \mathrm{g} \\ 26 & 800\end{array}$

| -15 | 770 |
| ---: | ---: |
| 16 | 725 |


| -12 | 910 |
| ---: | ---: |
| 13 | 890 |

4. (a) $\begin{array}{cc}\mathrm{kg} & \mathrm{g} \\ 72 & 246\end{array}$

| $-18 \quad 979$ |
| ---: | ---: |
| $53 \quad 267$ |

(b) $\begin{array}{cc}\mathrm{kg} & \mathrm{g} \\ 66 & 392\end{array}$
(c) $\begin{array}{cc}\mathrm{kg} & \mathrm{g} \\ 50 & 850\end{array}$
(d) $\begin{array}{cc}\mathrm{kg} & \mathrm{g} \\ 20 & 320\end{array}$
(f) $\begin{array}{cc}\mathrm{kg} & \mathrm{g} \\ 10 & 808\end{array}$
$\begin{array}{r}1798 \\ -\quad 7 \quad 908 \\ \hline 2 \quad 892 \\ \hline\end{array}$
(g) $\begin{array}{cc}\mathrm{kg} & \mathrm{g} \\ 15 & 180\end{array}$
(h) $\begin{array}{cc}\mathrm{kg} & \mathrm{g} \\ 49 & 830\end{array}$

| -10 | 100 |
| ---: | ---: |
| 5 | 080 |


| -30 | 750 |
| ---: | ---: |
| 19 | 080 |

## Practice Coach-6:

1. (a) 10 l
$1 \mathrm{l}=1000 \mathrm{ml}$
$10 \mathrm{l}=10 \times 1000 \mathrm{ml}$ $=10000 \mathrm{ml}$
(c) 541
$1 \mathrm{l}=1000 \mathrm{ml}$
$54 \mathrm{l}=54 \times 1000 \mathrm{ml}$ $=54000 \mathrm{ml}$
(e) $44 \mathrm{l} 839 \mathrm{ml}=44 \mathrm{l}+839 \mathrm{ml}$
$=(44 \times 1000 \mathrm{ml})+839 \mathrm{ml}$
$=44000+839 \mathrm{ml}$
$=44839 \mathrm{ml}$
(g) $30 \mathrm{l} 628 \mathrm{ml}=30 \mathrm{l}+628 \mathrm{ml}$
$=(30 \times 1000 \mathrm{ml})+628 \mathrm{ml}$
$=30000+628 \mathrm{ml}$
$=30628 \mathrm{ml}$
(i) $56 \mathrm{l} 670 \mathrm{ml}=56 \mathrm{l}+670 \mathrm{ml}$
$=(56 \times 1000 \mathrm{ml})+670 \mathrm{ml}$
$=56000 \mathrm{ml}+670 \mathrm{ml}$
$=56670 \mathrm{ml}$
2. (a) 26000 ml
$1000 \mathrm{ml}=11$
$26000 \mathrm{ml}=26000 \div 1000 \mathrm{l}$

$$
=261
$$

(c) 31000 ml
$1000 \mathrm{ml}=1 \mathrm{l}$
$31000 \mathrm{ml}=31000 \div 1000 \mathrm{l}$ $=31 \mathrm{l}$
(e) 23567 ml
$1000 \mathrm{ml}=1 \mathrm{l}$
$23567 \mathrm{ml}=23000 \mathrm{ml}+567 \mathrm{ml}$
$23000 \mathrm{ml}=23000 \div 1000 \mathrm{l}=23 \mathrm{l} \quad 1004=1 \mathrm{l}+4 \mathrm{ml}$
$23567=23 \mathrm{l}+567 \mathrm{ml}=23 \mathrm{l} 567 \mathrm{l}=1 \mathrm{l} 4 \mathrm{ml}$
(g) 19000 ml
$1000 \mathrm{ml}=11$
$19000 \mathrm{ml}=19000 \div 1000$
= 19 l
(b) 221
$1 \mathrm{l}=1000 \mathrm{ml}$
$22 \mathrm{l}=22 \times 1000 \mathrm{ml}$
$=22000 \mathrm{ml}$
(d) $11722 \mathrm{ml}=1 \mathrm{l}+722 \mathrm{ml}$

$$
\begin{aligned}
& =(1 \times 1000 \mathrm{ml})+722 \mathrm{ml} \\
& =1000 \mathrm{ml}+722 \mathrm{ml} \\
& =1722 \mathrm{ml}
\end{aligned}
$$

(f) $4 \mathrm{l} 155 \mathrm{ml}=4 \mathrm{l}+155 \mathrm{ml}$

$$
\begin{aligned}
& =(4 \times 1000 \mathrm{ml})+155 \mathrm{ml} \\
& =4000 \mathrm{ml}+155 \mathrm{ml} \\
& =4155 \mathrm{ml}
\end{aligned}
$$

(h) $49 \mathrm{l} 109 \mathrm{ml}=49 \mathrm{l}+109 \mathrm{ml}$ $=(49 \times 1000 \mathrm{ml})+109 \mathrm{ml}$ $=49000 \mathrm{ml}+109 \mathrm{ml}$ $=49109 \mathrm{ml}$
(j) $53 \mathrm{l} 635 \mathrm{ml}=53 \mathrm{l}+635 \mathrm{ml}$ $=(53 \times 1000 \mathrm{ml})+635 \mathrm{ml}$ $=53000 \mathrm{ml}+635 \mathrm{ml}$ $=53635 \mathrm{ml}$
(b) 12000 ml
$1000 \mathrm{ml}=1 \mathrm{l}$
$12000 \mathrm{ml}=12000 \div 1000 \mathrm{l}$

$$
=121
$$

(d) 36000 ml
$1000 \mathrm{ml}=1 \mathrm{l}$
$36000 \mathrm{ml}=36000 \div 1000 \mathrm{l}$

$$
=361
$$

$$
=1004 \mathrm{ml}
$$

(f) $1004 \mathrm{ml}=11$
$1004 \mathrm{ml}=1000 \mathrm{ml}+4 \mathrm{ml}$
$1000 \mathrm{ml}=1000 \div 1000 \mathrm{l}=1 \mathrm{l}$
(h) 6606 ml
$1000 \mathrm{ml}=1 \mathrm{l}$
$6606 \mathrm{ml}=6000 \mathrm{ml}+606 \mathrm{ml}$
$6000 \mathrm{ml}=6000 \div 1000 \mathrm{l}=6 \mathrm{l}$
$6606 \mathrm{ml}=6 \mathrm{l}+606 \mathrm{ml}$
$=61606 \mathrm{ml}$
(i) 50270 ml
(j) 43025 ml
$1000 \mathrm{ml}=11$
$50270 \mathrm{ml}=50000 \mathrm{ml}+270 \mathrm{ml}$
$50000 \mathrm{ml}=50000 \div 1000 \mathrm{l}=50 \mathrm{l}$
$50270 \mathrm{ml}=50 \mathrm{l}+270 \mathrm{ml}$ $=501270 \mathrm{ml}$
$1000 \mathrm{ml}=11$
$43025 \mathrm{ml}=43000 \mathrm{ml}+025 \mathrm{ml}$
$43000 \mathrm{ml}=43000 \div 1000=431$
$43025 \mathrm{ml}=43 \mathrm{l}+025 \mathrm{ml}$
$=431025 \mathrm{ml}$

## Practice Coact-7:

1. (a) $1 \begin{gathered}\mathrm{ml}\end{gathered}$
(b) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 36 & 456\end{array}$
(c) $\begin{array}{cl}\mathrm{l} & \mathrm{ml} \\ 179 & 244\end{array}$
(d) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 12 & 050\end{array}$
$12 \quad 950$
$\begin{array}{r}198798 \\ +\quad 987042 \\ \hline 278042\end{array}$

| 120 | 170 |
| ---: | ---: |
| +32 | 220 |

(e) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 35 & 650\end{array}$
$\begin{array}{r}356 \\ +16 \quad 900 \\ \hline 52 \quad 550 \\ \hline\end{array}$

2. | (a) | l | ml |
| ---: | :--- | :--- |
| 7 | 750 |  |
| 8 | 700 |  |
| + | 6 | 100 |
| 22 | 550 |  |
3. (a) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 20 & 875\end{array}$

| -15 | 650 |
| ---: | ---: |
| 5 | 225 |

(b) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 256 & 190\end{array}$
$\begin{array}{r}2569 \\ -10190 \\ \hline 154 \quad 290 \\ \hline\end{array}$
(g) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 49 & 920\end{array}$
(h) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 16 & 840\end{array}$
(f) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 19 & 900\end{array}$
(h) $\begin{array}{cc}1 & \mathrm{ml} \\ 16 & 840\end{array}$

| 19 | 170 |
| ---: | ---: |
| $+\quad 5$ | 170 |
| 25 | 070 |


| $+10 \quad 532$ |
| ---: |
| $+60 \quad 452$ |


| +17 |
| ---: |
| +33 |
| 390 |

(b) $\begin{array}{ll}\mathrm{l} & \mathrm{ml} \\ 12 & 110\end{array}$
2405
$\begin{array}{r}18 \\ +\quad 167 \\ \hline 32 \quad 682 \\ \hline\end{array}$
(c) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ & 20\end{array}$
$20 \quad 875$
$21 \quad 101$

| 210 |  |
| ---: | ---: |
| +46 | 074 |
| $88 \quad 050$ |  |

(e) 1 ml
$95 \quad 392$

|  |
| ---: |
| -36 |
| $58 \quad 996$ |

(f) 1 ml
86459
$\begin{array}{r}863 \\ -47 \\ \hline 39 \\ \hline\end{array}$
(g) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 34 & 930\end{array}$
(h) 1 ml

18981
(c) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 462 & 405\end{array}$

| -362 | 342 |
| ---: | ---: |
| $100 \quad 063$ |  |

(d) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 68 & 245\end{array}$

| -34 | 345 |
| ---: | ---: |
| 33 | 900 |


| -12 | 320 |
| ---: | ---: |
| 22 | 610 |

$$
\begin{array}{rr}
-11 & 250 \\
\hline 7 & 731 \\
\hline
\end{array}
$$

4. (a) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 79 & 932\end{array}$
(b) $\begin{array}{cc}\mathrm{l} & \mathrm{ml} \\ 83 & 837\end{array}$
(c) $\begin{array}{cl}\mathrm{l} & \mathrm{ml} \\ 97 & 924\end{array}$
(d) $\begin{array}{cl}\mathrm{l} & \mathrm{ml} \\ 97 & 926\end{array}$

| -38 | 394 |
| ---: | ---: |
| 41 | 538 |


| -13 |
| ---: |
| 70 |

- 21954

| -62 | 275 |
| ---: | ---: |
| $35 \quad 651$ |  |

## Mental Matbs

1. metre 2. multiply, 100 3. kilometre $\mathbf{4 .} 81 \mathrm{~m} 39 \mathrm{~cm} \mathrm{5}. \mathrm{1,00,000} \mathrm{~cm} 6$. 1000 ml 7 . $1000 \mathrm{~g} \mathrm{8.gram} 9.1$ 10. litree

## Multiple Cboice Questions (MCQs) :

1. (a) 1000 m 2. (a) 74 mm 3 . (a) 30000 4. (b) 500 g 5 . (c) 3000 ml

## Chapter

## 9

## Area and Perimeter

## Practice Coach-1:

1. (a) Perimeter of square $=4 \times$ sides

$$
=4 \times 10 \mathrm{~cm}=40 \mathrm{~cm}
$$

(b) Perimeter of rectangle $=2(1+b)$

$$
\begin{aligned}
& =2(4 \mathrm{~cm}+12 \mathrm{~cm}) \\
& =8 \mathrm{~cm}+24 \mathrm{~cm} \\
& =32 \mathrm{~cm}
\end{aligned}
$$

(c) Perimeter of triangle $=$ sum of all sides

$$
\begin{aligned}
& =\mathrm{AB}+\mathrm{BC}+\mathrm{AC} \\
& =13 \mathrm{~cm}+7 \mathrm{~cm}+20 \mathrm{~cm} \\
& =40 \mathrm{~cm}
\end{aligned}
$$

(d) Perimeter of quadrilateral $=$ sum of all sides

$$
\begin{aligned}
& =\mathrm{AB}+\mathrm{BC}+\mathrm{CD}+\mathrm{AD} \\
& =4 \mathrm{~cm}+10 \mathrm{~cm}+4 \mathrm{~cm}+12 \mathrm{~cm} \\
& =30 \mathrm{~cm}
\end{aligned}
$$

(e) Perimeter of quadrilateral $=$ sum of all sides

$$
\begin{aligned}
& =\mathrm{AB}+\mathrm{BC}+\mathrm{CD}+\mathrm{AD} \\
& =8 \mathrm{~cm}+10 \mathrm{~cm}+5 \mathrm{~cm}+4 \mathrm{~cm} \\
& =37 \mathrm{~cm}
\end{aligned}
$$

(f) Perimeter of square $=4 \times$ sides

$$
=4 \times 5 \mathrm{~cm}=20 \mathrm{~cm}
$$

(g) Perimeter of other shape $=$ sum of all sides

$$
\begin{aligned}
& =8 \mathrm{~cm}+1 \mathrm{~cm}+1 \mathrm{~cm}+8 \mathrm{~cm}+1 \mathrm{~cm}+1 \mathrm{~cm}+8 \mathrm{~cm} \\
& +1 \mathrm{~cm}+1 \mathrm{~cm}+8 \mathrm{~cm}+1 \mathrm{~cm}+1 \mathrm{~cm} \\
& =40 \mathrm{~cm}
\end{aligned}
$$

(h) Perimeter of shape $=$ sum of all sides

$$
\begin{aligned}
& =2 \mathrm{~cm}+6 \mathrm{~cm}+6 \mathrm{~cm}+1 \mathrm{~cm}+8 \mathrm{~cm}+7 \mathrm{~cm} \\
& =32 \mathrm{~cm}
\end{aligned}
$$

(i) Perimeter of shape $=$ sum of all sides

$$
\begin{aligned}
& =6 \mathrm{~cm}+1 \mathrm{~cm}+4 \mathrm{~cm}+2 \mathrm{~cm}+1 \mathrm{~cm}+2 \mathrm{~cm} \\
& +4 \mathrm{~cm}+2 \mathrm{~cm}+7 \mathrm{~cm}+10 \mathrm{~cm} \\
& =39 \mathrm{~cm}
\end{aligned}
$$

(j) Perimeter of quadrilateral $=$ sum of all sides
$=3 \mathrm{~cm}+9 \mathrm{~cm}+12 \mathrm{~cm}+6 \mathrm{~cm}+13 \mathrm{~cm}$
$=43 \mathrm{~cm}$
2. (a) Perimeter of square $=4 \times$ sides

$$
=4 \times 12 \mathrm{~cm}=48 \mathrm{~cm}
$$

(b) Perimeter of square $=4 \times$ sides

$$
=4 \times 2 \mathrm{~m}=8 \mathrm{~cm}
$$

(c) Perimeter of square $=4 \times$ sides

$$
\begin{aligned}
& =4 \times 30 \mathrm{~cm} \\
& =120 \mathrm{~cm}
\end{aligned}
$$

(d) Perimeter of square $=4 \times$ sides

$$
\begin{aligned}
& =4 \times 28 \mathrm{~m} \\
& =112 \mathrm{~m}
\end{aligned}
$$

3. (a) Perimeter of Rectangle $=2(1+\mathrm{b})$

$$
\begin{aligned}
& =2(2 \mathrm{~cm}+4 \mathrm{~cm}) \\
& =4 \mathrm{~cm}+8 \mathrm{~cm} \\
& =12 \mathrm{~cm}
\end{aligned}
$$

(b) Perimeter of Rectangle $=2(1+b)$

$$
=2(8 \mathrm{~cm}+8 \mathrm{~cm})
$$

$$
=16 \mathrm{~cm}+16 \mathrm{~cm}
$$

$$
=32 \mathrm{~cm}
$$

(c) Perimeter of Rectangle $=2(1+\mathrm{b})$

$$
\begin{aligned}
& =2(9 \mathrm{~m}+12 \mathrm{~m}) \\
& =18 \mathrm{~m}+24 \mathrm{~m} \\
& =42 \mathrm{~m}
\end{aligned}
$$

(d) Perimeter of Rectangle $=2(1+b)$

$$
\begin{aligned}
& =2(20 \mathrm{~m}+18 \mathrm{~m}) \\
& =40 \mathrm{~m}+36 \mathrm{~m} \\
& =76 \mathrm{~m}
\end{aligned}
$$

4. Side of a garden $=32 \mathrm{~cm}$

Perimeter of garden $=4 \times 32 \mathrm{~cm}$

$$
=128 \mathrm{~cm}
$$

Thus, 128 cm wire needed for fencing around a garden.
5. The length of a rectangular field $=200 \mathrm{~m}$

The breadth of a rectangular field $=48 \mathrm{~cm}$
Perimeter of rectangular field $=2(1+b)$

$$
\begin{aligned}
& =2(200 \mathrm{~cm}+48 \mathrm{~cm}) \\
& =400 \mathrm{~cm}+96 \mathrm{~cm} \\
& =496 \mathrm{~cm}
\end{aligned}
$$

The total distance covered by them in 2 rounds $=496 \times 2$

$$
=992 \mathrm{~cm}
$$

Thus, the total distance covered by students of school is 992 cm .

## Mental Matbs

1. $1 \mathrm{~m}=100 \mathrm{~cm} 2.1 \mathrm{~km}=1000 \mathrm{~m} 3.1 \mathrm{l}=1000 \mathrm{ml} 4.1 \mathrm{~kg}=1000 \mathrm{~g}$
2. $5 \mathrm{~m}=500 \mathrm{~cm} \mathbf{6 . 8 l}=8000 \mathrm{ml}$ 7. perimeter 9. area $\mathbf{1 0 . 4 \mathrm { mm }}$

## Multiple Cboice Questions (MCQs):

1. (a) square 2. (c) 255 m 3 . (c) sq units of length 4 . perimeter 5. (a) $1 \mathrm{~mm}^{2}$

## Chapter

## 10

## Patterns

## Practice Coact-1 :

1. (a) $4+5+6=15,5+6+7=18,6+7+8=21,7+8+9=24$ (b) 10, 1 (c) 2222, 22222 (d) 60, 75 (e) NO6, OP5, (f) J, L 2. Do yourself 3. Do yourself

## Practice Coach-2:

1. (a)

(b)

(c)

(d) $62,60,58$ (e) $\mathrm{AB}, \mathrm{AA}, \mathrm{AB}$ (f) 200, 220, 240

## Mental Matbs

1. 4 times 2. 3 times 3. (a) five (b) two

## Maltiple Cboice Questions (MCQs) :

1. (a) $\square$
2. (b) 4803
3. (b) $\downarrow \uparrow 4$
4. (a) 命
5. (c) $\square$

## Chapter

## 11

## Practice Coach-1:

1. (b) $4: 10$ (c) $5: 50$ (d) $6: 35$ (e) $7: 30$ (f) $8: 20$ (g) $11: 15$ (h) $1: 35$
2. (a) Quarter to 5 (b) 10 minutes past 5 (c) Quarter past 6 (d) 35 minutes past 4 (e) Half past 9 (f) Half past 12 3. Do yourself
3. (a) Friday (b) Monday 5.

## Practice Coach-2:

1. (a) $7: 20$ p.m. (b) $2: 35$ p.m. (c) $12: 30$ a.m. (d) $1: 00$ p.m. (e) $8: 15$ p.m. (f) $10: 35$ a.m. 2. (a) $10: 30$ a.m. (b) $2: 00$ a.m. (c) $1: 00$ p.m. (d) $1: 00$ p.m. (e) $1: 15$ a.m.
2. (a) 1 hour before $12: 20$ a.m. $\Rightarrow$ (2) $11: 20$ p.m.
(b) 2 hour after $10: 30 \mathrm{a} . \mathrm{m} . \quad \Rightarrow$ (6) $12: 30 \mathrm{p} . \mathrm{m}$.
(c) 10 hours after $6: 30$ p.m. $\Rightarrow$ (3) $4: 30$ a.m.
(d) 1 hour before $9: 00 \mathrm{a} . \mathrm{m} . \quad \Rightarrow \quad(5) \quad 8: 00 \mathrm{a} . \mathrm{m}$.
(e) 3 hours after $8: 30 \mathrm{a} . \mathrm{m} . \quad \Rightarrow$ (4) $11: 30 \mathrm{a} . \mathrm{m}$.
(f) 4 hours after 8 p.m.
$\Rightarrow$ (1) 12 midnight

## Practice Coacb-3:

1. (a) 0945 hrs (b) 0900 hrs (c) 2330 hrs (d) 1130 hrs (e) 0715 hrs (f) 1430 hrs
2. (a) 2 hrs 20 min (b) 9 hrs 12 min (c) 3 hrs (d) 5 hrs 20 min (e) 2 hrs 20 min
3. (a) 0730 hrs (b) 1230 hrs (c) 24 hrs (d) 1430 hrs (e) 0930 hrs

## Practice Coach-4:

1. (a) 43 days (b) 88 days (c) 57 days (d) 62 days (e) 71 days
2. (a) $2: 49$ (b) $5: 12$ (c) $12: 44$ (d) $9: 28$ (e) $8: 17$ (f) $1: 32$ (g) $2: 32$
(h) 9:52 3. Do yourself

## Practice Coach - 5 :

1. (a) No (b) No (c) Yes (d) Yes (e) Yes
2. (a), (b)

## Mental Matbs

1. Monday 2. 5: 30 3. Tuesday 4. Sunday 5. Sunday 6. 366 days
2. $3: 458.7: 30 \mathbf{9 .} 3: 05 \mathbf{1 0 .} 60$

## Multiple Cboice Questions (MCQs) :

1. (b) $9: 30$ a.m. 2. (b) $11: 30$ p.m. 3. (a) 1040 hours 4. (c) 4 5. (c) 1200

## Chapter

## 12

## Practice Coach-1:

1. (a) ₹ $729.95=₹ 729+95 \mathrm{p}$

$$
\begin{aligned}
& \text { ₹ } 1=100 \mathrm{p} \\
& \text { ₹ } 729=729 \times 100 \mathrm{p}=72900 \mathrm{p} \\
& \text { ₹ } 729.95=72900 \mathrm{p}+95 \mathrm{p} \\
& \quad=72995 \mathrm{p}
\end{aligned}
$$

(b) ₹ $165.45=₹ 165+45 \mathrm{p}$

$$
\begin{gathered}
₹ 165=165 \times 100 \mathrm{p}=16500 \mathrm{p} \\
₹ 165.45=16500 \mathrm{p}+45 \mathrm{p} \\
=16545 \mathrm{p}
\end{gathered}
$$

(c) ₹ $862.64=₹ 862+64 \mathrm{p}$

$$
\begin{gathered}
₹ 862=862 \times 100 \mathrm{p}=86200 \mathrm{p} \\
\text { ₹ } 862.64=86200 \mathrm{p}+64 \mathrm{p} \\
=86264 \mathrm{p}
\end{gathered}
$$

(d) ₹ $224.68=₹ 224+68 \mathrm{p}$

$$
\begin{gathered}
₹ 224=224 \times 100 \mathrm{p}=22400 \mathrm{p} \\
\text { ₹ } 224.68=22400 \mathrm{p}+68 \mathrm{p} \\
=22468 \mathrm{p}
\end{gathered}
$$

(e) ₹ $259.32=₹ 259+32 \mathrm{p}$

$$
₹ 259=259 \times 100 \mathrm{p}=25900 \mathrm{p}
$$

₹ $259.32=25900 \mathrm{p}+32 \mathrm{p}$

$$
=25932 \mathrm{p}
$$

(f) ₹ $317.69=₹ 317+69 p$

$$
\begin{aligned}
& ₹ 317=317 \times 100 p=31700 p \\
& ₹ 317.69=31700 p+69 p \\
& \quad=31769 \mathrm{p}
\end{aligned}
$$

2. (a) 24038 p

$$
100 \mathrm{p}=₹ 1
$$

$$
24038 \mathrm{p}=24000 \mathrm{p}+38 \mathrm{p}
$$

$$
24000 \mathrm{p}=24000 \div 100 \mathrm{p}=₹ 240
$$

$$
24038 \mathrm{p}=₹ 240+38 \mathrm{p}
$$

$$
\text { = ₹ } 240.38
$$

(b) $98986 \mathrm{p}=98900 \mathrm{p}+86 \mathrm{p}$

$$
98900 \mathrm{p}=98900 \div 100 ₹=₹ 989
$$

$$
98986 \mathrm{p}=₹ 989+86 \mathrm{p}
$$

$$
\text { = ₹ } 989.86
$$

(c) $86729 \mathrm{p}=86700 \mathrm{p}+29 \mathrm{p}$
$86700 \mathrm{p}=86700 \div 100 ₹=867$

$$
86729=₹ 867+29 p
$$

$$
\text { = ₹ } 867.29
$$

(d) $16930 \mathrm{p}=16900 \mathrm{p}+30 \mathrm{p}$

$$
16900 \mathrm{p}=16900 \div 100 \mathrm{p}=₹ 169
$$

$$
16930 \mathrm{p}=₹ 169+30 \mathrm{p}
$$

$$
\text { = ₹ } 169.30
$$

(e) $43490 \mathrm{p}=43400 \mathrm{p}+90 \mathrm{p}$
$43400 \mathrm{p}=43400 \div 100$ ₹ $=₹ 434$
$43490 \mathrm{p}=₹ 434+90 \mathrm{p}$
= ₹ 434.90
(f) $73295 \mathrm{p}=73200 \mathrm{p}+95 \mathrm{p}$
$73200 \mathrm{p}=73200$ ₹ $\div 100$ ₹ $=$ ₹ 732
73295 p = ₹ $732+95$ p
= ₹ 732.95

## Practice Coact-2:

1. (a) ₹ 547

(b) ₹ 239.74
(c) ₹ 345.26
(d) ₹ 547.38
241.57
₹ 259.53
₹ 136.61

$\square$ | $+₹$ | 268.59 |
| ---: | ---: |
| $+₹$ | 873.38 |


| ₹ $\quad 355.59$ |
| ---: |
| $+₹ 1039.58$ |

(e) ₹ 451.61 (f) ₹ 101.60

2. (a) ₹ 663.24
(b) ₹ 754.62

₹ | 334.81 |
| :--- |

$$
₹ \quad 419.81
$$

| - ₹ | 430.46 |
| ---: | ---: |
| ₹ | 232.78 |

(c) ₹ 436.79

(d) ₹ 866.95
(e) ₹ 543.79
(f) ₹ 637.25

| - ₹ | 132.94 |
| ---: | ---: |
| $₹$ | 410.85 |


| - ₹ | 244.57 |
| ---: | ---: |
| $₹$ | 392.68 |

3. The sum of ₹ 432.75 and ₹ $234.57=₹ 432.75$

| $+₹$ | 234.57 |
| ---: | ---: |
| $₹$ | 667.32 |

Subtract ₹ 500.50 from ₹ 667.32

$$
\begin{array}{rl}
₹ & 667.32 \\
-₹ & 500.50 \\
\hline ₹ & 166.82 \\
\hline
\end{array}
$$

4. Add the following :

$$
\begin{array}{rl}
₹ & 234.41 \\
₹ & 263.74 \\
+₹ & 125.33 \\
\hline ₹ & 623.48 \\
\hline
\end{array}
$$

5. The sum of

$$
\begin{array}{rl}
₹ & 441.64 \\
+₹ & 273.57 \\
\hline ₹ & 715.21 \\
\hline
\end{array}
$$

Subtract ₹ 463.84 from ₹ 715.21

$$
\begin{array}{rr}
₹ & 715.21 \\
-₹ & 463.84 \\
\hline ₹ & 251.37 \\
\hline
\end{array}
$$

## Practice Coach-3:

1. (a) ₹ 121.60

|  | $\times 8$ |
| ---: | ---: |
| $₹ \quad 972.80$ |  |

(b) ₹ 281.64 $\times 2$ |  | 563.28 |
| :--- | :--- |

(e) ₹ 28.50

(h) ₹ 14.05

(c) ₹ 85.91 $\times 4$
₹ 343.64
(f) ₹ 17.62

| $\times 10$ |
| ---: |
| 00000 |
| 176620 |
| $₹ 176.20$ |

(i) ₹ 21.87

|  | $\times 16$ |  |
| :--- | :--- | :--- |
| 1 | 3 | 1 |
| 2 | 1 | 2 |
| 2 | 1 | 8 |

(j) ₹ 48.10

$$
\begin{array}{r}
\times 4 \\
\hline ₹ \quad 192.40 \\
\hline
\end{array}
$$

2. Subtract :-

| $₹$ | 944.34 |
| ---: | ---: |
| $-₹$ | 923.94 |
| $₹$ | 20.40 |

Multiply :-

| 20.40 |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 1632 |  |  |  |
| 20400 |  |  |  |
| ₹ 367.20 |  |  |  |

3. Add :-

Multiply :-

| $₹$ | 236.94 |
| ---: | ---: |
| $+₹$ | 346.41 |
| $₹$ | 610.35 |

₹ 610 . 35
$\times 2$ (b) ₹ 851.16 by 4
$4 \longdiv { 8 5 1 . 1 6 ( 2 1 2 . 7 9 }$
$\begin{array}{r}\begin{array}{r}-8 \downarrow \\ 5 \\ -4 \downarrow \\ 11 \\ -8 \downarrow \\ 3.1 \\ 28 \\ \hline 36 \\ \hline-36 \\ \hline 0\end{array} \\ \hline\end{array}$
(c) ₹ 772.94 by 14
14) 772.94 (55.21

$$
\begin{array}{r}
\begin{array}{r}
-70 \downarrow \\
72 \\
-70 \downarrow \\
\hline 29 \\
-28 \downarrow \\
\hline 14 \\
-14 \\
\hline 0 \\
\hline
\end{array} . \begin{array}{l} 
\\
\hline
\end{array}{ }^{2}+ \\
\hline
\end{array}
$$

(e) ₹ 613.29 by 12
$1 2 \longdiv { 6 1 3 . 2 9 ( 5 1 . 1 0 7 5 }$

$$
\begin{array}{r}
\begin{array}{r}
-60 \downarrow \\
\hline 13 \\
12 \downarrow \\
\hline 12 \\
12 \downarrow \\
\hline 090 \\
-84 \\
\hline 60 \\
-60 \\
\hline 0 \\
\hline
\end{array} . \begin{array}{r} 
\\
\hline
\end{array}{ }^{2}+ \\
\hline
\end{array}
$$

(d) ₹ 970.20 by 15
$1 5 \longdiv { 9 7 0 . 2 0 ( 6 4 . 6 8 }$
$\begin{array}{r}\left.\begin{array}{r}-90 \downarrow \\ 70 \\ -60 \downarrow\end{array} \right\rvert\, \\ \hline 102 \\ -90 \downarrow \\ \hline 120 \\ \hline-120 \\ \hline\end{array}$
(f) ₹ 354.91 by 11
11) $354.91(32.26$

$$
\begin{array}{r}
\begin{array}{r}
-33 \downarrow \\
\hline 24 \\
22 \downarrow \\
\hline 29 \\
-22 \downarrow
\end{array} \\
\hline 71 \\
-66 \\
\hline 5 \\
\hline
\end{array}
$$

(h) ₹ 903.64 by 8
8) $903.64(112.955$

$\begin{array}{r}$| $-8 \downarrow$ |
| ---: |
| 10 |
| $-8 \downarrow$ |
| 23 |
| $-16 \downarrow$ |\(| <br>

\hline 76\end{array}\)
$\frac{-72 \downarrow}{44}$
$\begin{array}{r}-40 \\ \hline 40\end{array}$
$\begin{array}{r}-40 \\ \hline 0 \\ \hline\end{array}$
(i) ₹ 641.50 by 13
13) $641.50(49.34$

| $-52 \downarrow$ <br> 121 <br> $-117 \downarrow$ <br> 45 <br> $-39 \downarrow$ <br> 60 <br> -52 <br> 8 |
| ---: |

(j) ₹ 375.24 by 6
$6 \longdiv { 3 7 5 . 2 4 ( 6 2 . 5 4 }$


## Practice Coach-4:

1. The cost of 1 kg mangoes $=₹ 85$

| 85 |
| ---: |
| $\times 12$ |
| 170 |
| +850 |
| 1020 |

Thus, the cost of 12 kg mangoes is ₹ 1020 .
2. Ashi bought a luggage bag $=₹ 2187.50$

She bought a school bag $=₹ 445.00$
She spent total amount $=₹ 2187.50+₹ 445.00$

$$
=₹ 2632.50
$$

Thus, Ashi ₹ 2632.50 spent.
3. I had money $=₹ 800$

I bought items $=₹ 368.50$
Left amount = ₹ $800-₹ 368.50$

| $₹$ | 2187.50 |
| ---: | ---: |
| $+₹$ | 445.00 |
| $₹$ | 2632.50 |

= ₹ 431.5
4. The cost of hand bag =₹ 429.25

The cost of a belt = ₹ 579.50
₹ 579.50
-₹ 429.25
₹ 150.25
$\therefore$ ₹ 579.50 > ₹ 429.25
Thus, the cost of belt is ₹ 150.25 more than
12) $211.20(17.60$
the cost of hand bag.
5. A man has donated to grant scholarships = ₹ 211.20

The number of scholarships $=12$
The amount in each scholarship $=₹ 211.20 \div 12$
Thus, each will be ₹ 17.60 has scholarship.

| $-12 \downarrow$ <br> 91 <br> -84 <br> 72 <br> -72 <br> 0${ }^{2}$ |
| ---: |

6. Seema has total money $=₹ 459.00$

She wants to divide money equally $=15$ parts
The money will each part have $=₹ 459.00 \div 15$

$$
\text { = ₹ } 30.6
$$

Thus, ₹ 30.6 will each part have.
$1 5 \longdiv { 4 5 9 ( 3 0 . 6 }$
$-45 \downarrow$
090
90
0

| $₹$ | 794 |
| ---: | ---: |
| $₹$ | 150 |
| $+₹$ | 986 |
| $₹$ | 1930 |

$$
\text { = ₹ } 1930
$$

8. Suresh bought mangoes $=₹ 128.50$

He bought oranges $=₹ 78.50$
He bought melons = ₹ 210.50
₹ 128.50
₹ 78.50

| $-₹$ | 210.50 |
| ---: | ---: |
| $₹$ | 417 |

₹ 417.50

The total cost of three items $=128.50+₹ 78.50+₹ 210.50$

$$
=₹ 417.5
$$

Suresh had money $=₹ 900$
Left me = ₹ 900 - ₹ 417.5

$$
=482.5
$$

₹ 900. 00
Thus, ₹ 482.50 is left with him.

## Practice Coach-5:


1.

| Item | Rate | Quantity | Amount |
| :--- | :--- | :---: | :--- |
| Pen | 20.50 | 4 | 82.00 |
| Pizza | 155.50 | 5 | 775.50 |
| Bread | 25.00 | 3 | 75.00 |
| Chocolate | 80.00 | 3 | 240.00 |
|  |  | Total | ₹ 1172.50 |

2. 

| Item | Rate | Quantity | Amount |
| :--- | :--- | :---: | :--- |
| Soap | 18.25 | 6 | 109.50 |
| Detergent | 112.50 | 3 | 337.50 |
| Face pack | 172.50 | 5 | 862.50 |
| Cold Drink | 87.00 | 2 | 174.00 |
|  |  | Total | $₹ 1433.50$ |

Rahul gave money to the shopkeeper $=$ ₹ 2000
Spend money $=₹ 1483.50$
Left money = ₹ 2000 - ₹ 1483.50

$$
\begin{array}{rr}
₹ & 2000.00 \\
-₹ & 1483.50 \\
\hline ₹ & 516.50 \\
\hline
\end{array}
$$

$$
\text { = ₹ } 516.50
$$

Thus, Rahul will get ₹ 516.50 back.

## Mental Matbs

1. 1002.5000 3. 200004.50000 5. 40 6. 10 7. ₹ $72.058 .20,20,2$
2. ₹ 49.5010 .175

## Multiple Cboice Questions (MCQs) :

1. (a) ₹ 2 . (c) ₹ 964.25 3. (c) ₹ 300 4. (b) 100 5. (b) 100

## Chapter

## 13

## Data Handling

## Practice Coacb-1:

1. (a) \# 4 (b) \# 5 (c) $\# 1=15$, \# $2=8$, \# $3=12$, \# $4=16$, $\# 5=6$, $\# 6=9$
2. 3. Sleeping 2.14 hours 3.3 hours
1. (a) July (b) January (c) 110 cm or 1 m 10 cm
2. (a) Village D (b) Village A (c) 100 people (d) Types of villages (e) Population of villages (f) 1500 people
3. (a) School bus (b) 12 (c) 8 (d) 5 (e) 26
