

Lesson-3 : Addition and Subtraction

Exercise-1

1. (a) (iii) Total money spent = ₹ 3215 + ₹ 2347 + ₹ 1178 = ₹ 6740

$$\begin{array}{r} \textcircled{1} \textcircled{2} \\ 3215 \\ 2347 \\ + 1178 \\ \hline 6740 \end{array}$$

- (b) (ii) Number of bags of wheat left = $9778 - 5489 = 4289$

$$\begin{array}{r} \textcircled{6} \textcircled{16} \textcircled{18} \\ 9778 \\ - 5489 \\ \hline 4289 \end{array}$$

2. (a) $2451 + 3097 - 4025 = 1523$

Step 1: $\textcircled{1}$

$$\begin{array}{r} 2451 \\ + 3097 \\ \hline 5548 \end{array}$$

Step 2:

$$\begin{array}{r} 5548 \\ - 4025 \\ \hline 1523 \end{array}$$

- (b) $5081 + 1098 - 2999 = 3180$

Step 1: $\textcircled{1}$

$$\begin{array}{r} 5081 \\ + 1098 \\ \hline 6179 \end{array}$$

Step 2:

$$\begin{array}{r} \textcircled{5} \textcircled{10} \textcircled{17} \\ \cancel{6} \cancel{1} \cancel{7} 9 \\ - 2999 \\ \hline 3180 \end{array}$$

Exercise-2

1. (a) (i) $12341 + 67325 = 79666$

$$\begin{array}{r} 12341 \\ + 67325 \\ \hline 79666 \end{array}$$

- (b) (iv) The number that is 2354 more than 90491 is $90491 + 2354 = 92845$

$$\begin{array}{r} \textcircled{1} \\ 90491 \\ + 2354 \\ \hline 92845 \end{array}$$

$$\begin{array}{r} 2. (a) \quad 3 \ 3 \ 0 \ 2 \ 1 \\ + 2 \ 3 \ 5 \ 6 \ 8 \\ \hline 5 \ 6 \ 5 \ 8 \ 9 \end{array}$$

$$\begin{array}{r} (b) \quad 4 \ 1 \ 8 \ 5 \ 3 \\ + 2 \ 2 \ 0 \ 1 \ 4 \\ \hline 6 \ 3 \ 8 \ 6 \ 7 \end{array}$$

$$\begin{array}{r} (c) \quad 2 \ 4 \ 5 \ 1 \ 3 \\ + 5 \ 2 \ 3 \ 4 \ 0 \\ \hline 7 \ 6 \ 8 \ 5 \ 3 \end{array}$$

$$\begin{array}{r} (d) \quad \textcircled{1}\textcircled{1} \\ 3 \ 8 \ 4 \ 2 \ 7 \\ + 4 \ 2 \ 8 \ 1 \ 2 \\ \hline 8 \ 1 \ 2 \ 3 \ 9 \end{array}$$

$$\begin{array}{r} (e) \quad \textcircled{1} \\ 5 \ 2 \ 7 \ 6 \ 8 \\ + 1 \ 6 \ 7 \ 2 \ 0 \\ \hline 6 \ 9 \ 4 \ 8 \ 8 \end{array}$$

$$\begin{array}{r} (f) \quad \textcircled{1}\textcircled{1} \\ 7 \ 5 \ 7 \ 8 \ 3 \\ + 1 \ 4 \ 7 \ 0 \ 2 \\ \hline 9 \ 0 \ 4 \ 8 \ 5 \end{array}$$

Exercise-3

1. (a) (ii) Greatest 5-digit number = 99999

Greatest 6-digit number = 999999

Sum = 99999 + 999999 = 1099998

$$\begin{array}{r} \textcircled{1}\textcircled{1}\textcircled{1}\textcircled{1}\textcircled{1} \\ 9 \ 9 \ 9 \ 9 \ 9 \ 9 \\ + 9 \ 9 \ 9 \ 9 \ 9 \\ \hline 1 \ 0 \ 9 \ 9 \ 9 \ 8 \end{array}$$

(b) (iv) Required number = 8,76,543 + 32,586 = 9,09,129

$$\begin{array}{r} \textcircled{1} \quad \textcircled{1}\textcircled{1} \\ 8 \ 7 \ 6 \ 5 \ 4 \ 3 \\ + 3 \ 2 \ 5 \ 8 \ 6 \\ \hline 9 \ 0 \ 9 \ 1 \ 2 \ 9 \end{array}$$

$$\begin{array}{r} 2. (a) \quad 6 \ 5 \ 4 \ 3 \ 2 \ 1 \\ + 1 \ 2 \ 3 \ 4 \ 5 \ 6 \\ \hline 7 \ 7 \ 7 \ 7 \ 7 \ 7 \end{array}$$

$$\begin{array}{r} (b) \quad 3 \ 2 \ 8 \ 5 \ 1 \ 7 \\ + 2 \ 1 \ 0 \ 3 \ 2 \ 1 \\ \hline 5 \ 3 \ 8 \ 8 \ 3 \ 8 \end{array}$$

$$\begin{array}{r} (c) \quad \textcircled{1}\textcircled{1}\textcircled{1} \\ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \\ + 4 \ 3 \ 2 \ 7 \ 6 \ 5 \\ \hline 6 \ 6 \ 7 \ 3 \ 3 \ 2 \end{array}$$

$$\begin{array}{r} (d) \quad \textcircled{1} \quad \textcircled{1}\textcircled{1}\textcircled{1} \\ 5 \ 3 \ 1 \ 7 \ 8 \ 6 \\ + 1 \ 7 \ 3 \ 4 \ 3 \ 8 \\ \hline 7 \ 0 \ 5 \ 2 \ 2 \ 4 \end{array}$$

3. (a) 1,54,023 + 4,21,746 = 5,75,769

(b) 2,45,386 + 4,25,297 = 6,70,683

$$\begin{array}{r} 1 \ 5 \ 4 \ 0 \ 2 \ 3 \\ + 4 \ 2 \ 1 \ 7 \ 4 \ 6 \\ \hline 5 \ 7 \ 5 \ 7 \ 6 \ 9 \end{array}$$

$$\begin{array}{r} \textcircled{1} \quad \textcircled{1}\textcircled{1} \\ 2 \ 4 \ 5 \ 3 \ 8 \ 6 \\ + 4 \ 2 \ 5 \ 2 \ 9 \ 7 \\ \hline 6 \ 7 \ 0 \ 6 \ 8 \ 3 \end{array}$$

Practice Time (Page 29)

1. 0 2. 14357 3. 234567

Exercise-4

1. (a) (iv) Total money spent = ₹ 8,42,560 + ₹ 78,850
= ₹ 9,21,410

$$\begin{array}{r} \textcircled{1}\textcircled{1}\textcircled{1}\textcircled{1} \\ 8 \ 4 \ 2 \ 5 \ 6 \ 0 \\ + 7 \ 8 \ 8 \ 5 \ 0 \\ \hline 9 \ 2 \ 1 \ 4 \ 1 \ 0 \end{array}$$



(b) (i) Total number of locks manufactured in two years

$$= 72,584 + 37,846$$

$$= 1,10,430$$

$$\begin{array}{r} \textcircled{1}\textcircled{1}\textcircled{1}\textcircled{1}\textcircled{1} \\ 72584 \\ + 37846 \\ \hline 110430 \end{array}$$

(c) (iii) Population of the town

$$= 2,34,786 + 1,93,877$$

$$= 4,28,663$$

$$\begin{array}{r} \textcircled{1} \quad \textcircled{1}\textcircled{1}\textcircled{1} \\ 234786 \\ + 193877 \\ \hline 428663 \end{array}$$

(d) (ii) Total number of persons who visited Kanyakumari in two years

$$= 2,53,761 + 4,08,829$$

$$= 6,62,590$$

$$\begin{array}{r} \textcircled{1}\textcircled{1} \quad \textcircled{1} \\ 253761 \\ + 408829 \\ \hline 662590 \end{array}$$

(e) (ii) Total money collected

$$= ₹ 74,278 + ₹ 93,297 + ₹ 89,600$$

$$= ₹ 2,57,175$$

$$\begin{array}{r} \textcircled{2}\textcircled{1}\textcircled{1}\textcircled{1}\textcircled{1} \\ 74278 \\ 93297 \\ + 89600 \\ \hline 257175 \end{array}$$

2. Required number = $8,76,543 + 12,345 = 8,88,888$

$$\begin{array}{r} 876543 \\ + 12345 \\ \hline 888888 \end{array}$$

3. Total amount paid by Rani

$$= ₹ 34,700 + ₹ 12,800 + ₹ 6,836$$

$$= ₹ 54,336$$

Thus, Rani paid ₹ 54,336 to the shopkeeper.

$$\begin{array}{r} \textcircled{1}\textcircled{2} \\ 34700 \\ 12800 \\ + 6836 \\ \hline 54336 \end{array}$$

Exercise-5

1. (a) (iv) Other number = $98909 - 53798$

$$= 45111$$

So, the other number is 45,111.

$$\begin{array}{r} \textcircled{8}\textcircled{10} \\ 98909 \\ - 53798 \\ \hline 45111 \end{array}$$

(b) (ii) Smaller number = $65432 - 7194$

$$= 58238$$

Thus, the smaller number is 58238.

$$\begin{array}{r} \textcircled{5}\textcircled{15}\textcircled{3}\textcircled{12}\textcircled{12} \\ 65432 \\ - 7194 \\ \hline 58238 \end{array}$$



$$\begin{array}{r} 2. \text{ (a)} \quad 2 \ 8 \ 4 \ 5 \ 6 \\ - 1 \ 4 \ 2 \ 3 \ 2 \\ \hline 1 \ 4 \ 2 \ 2 \ 4 \end{array}$$

$$\begin{array}{r} \text{(b)} \quad 5 \ 7 \ 9 \ 1 \ 3 \\ - 2 \ 4 \ 6 \ 0 \ 1 \\ \hline 3 \ 3 \ 3 \ 1 \ 2 \end{array}$$

$$\begin{array}{r} \text{(c)} \quad 7 \ 7 \ 7 \ 7 \ 7 \\ - 4 \ 2 \ 4 \ 2 \ 4 \\ \hline 3 \ 5 \ 3 \ 5 \ 3 \end{array}$$

$$\begin{array}{r} \text{(d)} \quad \textcircled{4} \textcircled{13} \quad \textcircled{0} \textcircled{15} \\ \cancel{5} \ \cancel{3} \ 2 \ \cancel{1} \ \cancel{5} \\ - 3 \ 9 \ 0 \ 0 \ 6 \\ \hline 1 \ 4 \ 2 \ 0 \ 9 \end{array}$$

$$\begin{array}{r} \text{(e)} \quad \textcircled{5} \textcircled{9} \textcircled{9} \textcircled{9} \textcircled{10} \\ \cancel{6} \ \cancel{0} \ \cancel{0} \ \cancel{0} \ \cancel{0} \\ - 4 \ 5 \ 4 \ 5 \ 4 \\ \hline 1 \ 4 \ 5 \ 4 \ 6 \end{array}$$

$$\begin{array}{r} \text{(f)} \quad \textcircled{5} \textcircled{17} \\ 7 \ 5 \ 4 \ \cancel{6} \ 7 \\ - 4 \ 1 \ 3 \ 5 \ 8 \\ \hline 3 \ 4 \ 1 \ 0 \ 9 \end{array}$$

Puzzle (Page 33)

Saumya is the 24th fastest runner in her class and also 24th slowest runner in her class.

Number of students in the class = $23 + 1 + 23 = 47$.

Exercise-6

1. (a) (i) $8,16,258 - 3,64,800 = 4,51,458$

$$\begin{array}{r} \textcircled{7} \textcircled{11} \textcircled{5} \textcircled{12} \\ 8 \ \cancel{1} \ \cancel{6} \ 2 \ 5 \ 8 \\ - 3 \ 6 \ 4 \ 8 \ 0 \ 0 \\ \hline 4 \ 5 \ 1 \ 4 \ 5 \ 8 \end{array}$$

Thus, 8,16,258 is more than 3,64,800 by 4,51,458.

(b) (ii) Required number = $3,09,103 - 2,87,098$
 $= 22,005$

$$\begin{array}{r} \textcircled{2} \textcircled{10} \quad \textcircled{0} \textcircled{9} \textcircled{13} \\ \cancel{3} \ \cancel{0} \ 9 \ \cancel{1} \ \cancel{0} \ \cancel{3} \\ - 2 \ 8 \ 7 \ 0 \ 9 \ 8 \\ \hline 2 \ 2 \ 0 \ 0 \ 5 \end{array}$$

So, 22,005 should be added.

$$\begin{array}{r} 2. \text{ (a)} \quad 2 \ 8 \ 5 \ 4 \ 6 \ 9 \\ - 1 \ 3 \ 5 \ 3 \ 4 \ 4 \\ \hline 1 \ 5 \ 0 \ 1 \ 2 \ 5 \end{array}$$

$$\begin{array}{r} \text{(b)} \quad 7 \ 1 \ 9 \ 6 \ 5 \ 4 \\ - 4 \ 0 \ 8 \ 5 \ 3 \ 1 \\ \hline 3 \ 1 \ 1 \ 1 \ 2 \ 3 \end{array}$$

$$\begin{array}{r} \text{(c)} \quad 8 \ 6 \ 4 \ 3 \ 1 \ 8 \\ - 4 \ 4 \ 3 \ 2 \ 0 \ 7 \\ \hline 4 \ 2 \ 1 \ 1 \ 1 \ 1 \end{array}$$

$$\begin{array}{r} \text{(d)} \quad \textcircled{7} \textcircled{13} \textcircled{16} \textcircled{13} \\ 3 \ 5 \ 8 \ \cancel{4} \ 7 \ \cancel{3} \\ - 1 \ 0 \ 1 \ 9 \ 8 \ 6 \\ \hline 2 \ 5 \ 6 \ 4 \ 8 \ 7 \end{array}$$

$$\begin{array}{r} \text{(e)} \quad \textcircled{4} \textcircled{12} \textcircled{12} \quad \textcircled{3} \textcircled{10} \\ \cancel{5} \ \cancel{3} \ 2 \ 6 \ \cancel{4} \ \cancel{0} \\ - 2 \ 7 \ 5 \ 3 \ 2 \ 4 \\ \hline 2 \ 5 \ 7 \ 3 \ 1 \ 6 \end{array}$$

$$\begin{array}{r} \text{(f)} \quad \textcircled{3} \textcircled{13} \quad \textcircled{6} \textcircled{12} \\ 6 \ \cancel{4} \ \cancel{3} \ 6 \ 7 \ 2 \\ - 3 \ 1 \ 9 \ 5 \ 1 \ 7 \\ \hline 3 \ 2 \ 4 \ 1 \ 5 \ 5 \end{array}$$

Exercise-7

1. (a) (iii) Number of males = $909385 - 333785$
 $= 575600$

$$\begin{array}{r} \textcircled{8} \textcircled{10} \textcircled{8} \textcircled{13} \\ 9 \ 0 \ 9 \ 3 \ 8 \ 5 \\ - 3 \ 3 \ 3 \ 7 \ 8 \ 5 \\ \hline 5 \ 7 \ 5 \ 6 \ 0 \ 0 \end{array}$$

(b) (ii) Money got back by Raja
 $= ₹ 40,000 - ₹ 38,450$
 $= ₹ 1,550$

$$\begin{array}{r} \textcircled{3} \textcircled{9} \textcircled{9} \textcircled{10} \\ 4 \ 0 \ 0 \ 0 \ 0 \\ - 3 \ 8 \ 4 \ 5 \ 0 \\ \hline 0 \ 1 \ 5 \ 5 \ 0 \end{array}$$

2. Money left
 $= ₹ 8,28,050 - ₹ 4,57,375$
 $= ₹ 3,70,675$

$$\begin{array}{r} \textcircled{7} \textcircled{12} \textcircled{7} \textcircled{9} \textcircled{14} \textcircled{10} \\ 8 \ 2 \ 8 \ 0 \ 5 \ 0 \\ - 4 \ 5 \ 7 \ 3 \ 7 \ 5 \\ \hline 3 \ 7 \ 0 \ 6 \ 7 \ 5 \end{array}$$

Thus, the money left in her bank account is ₹ 3,70,675.

3. $694834 - 576956 = 117878$

$$\begin{array}{r} \textcircled{8} \textcircled{13} \textcircled{17} \textcircled{12} \textcircled{14} \\ 6 \ 9 \ 4 \ 8 \ 3 \ 4 \\ - 5 \ 7 \ 6 \ 9 \ 5 \ 6 \\ \hline 1 \ 1 \ 7 \ 8 \ 7 \ 8 \end{array}$$

Thus, Bobby earned 117878 points more.

Exercise-8

1. (a) (ii) Required number = $150000 - (46450 + 82425)$
 $= 21125$

$$\begin{array}{r} \textcircled{1} \\ 4 \ 6 \ 4 \ 5 \ 0 \\ + 8 \ 2 \ 4 \ 2 \ 5 \\ \hline 1 \ 2 \ 8 \ 8 \ 7 \ 5 \end{array} \quad \begin{array}{r} \textcircled{4} \textcircled{9} \textcircled{9} \textcircled{9} \textcircled{10} \\ 1 \ 5 \ 0 \ 0 \ 0 \ 0 \\ - 1 \ 2 \ 8 \ 8 \ 7 \ 5 \\ \hline 2 \ 1 \ 1 \ 2 \ 5 \end{array}$$

(b) (ii) Number of students who got less than 80 marks
 $= 459203 - (89712 + 95389)$
 $= 274102$

$$\begin{array}{r} \textcircled{1} \textcircled{1} \textcircled{1} \textcircled{1} \textcircled{1} \\ 8 \ 9 \ 7 \ 1 \ 2 \\ + 9 \ 5 \ 3 \ 8 \ 9 \\ \hline 1 \ 8 \ 5 \ 1 \ 0 \ 1 \end{array} \quad \begin{array}{r} \textcircled{3} \textcircled{15} \\ 4 \ 5 \ 9 \ 2 \ 0 \ 3 \\ - 1 \ 8 \ 5 \ 1 \ 0 \ 1 \\ \hline 2 \ 7 \ 4 \ 1 \ 0 \ 2 \end{array}$$



2. (a) $2,51,743 + 6,21,301 - 1,19,254 = 7,53,790$

①		⑥ ⑫ ⑨ ⑭
2 5 1 7 4 3		8 7 3 0 4 4
+ 6 2 1 3 0 1		- 1 1 9 2 5 4
<u>8 7 3 0 4 4</u>		<u>7 5 3 7 9 0</u>

(b) $9,99,999 - 2,22,222 + 3,33,333 = 11,11,110$

	①① ①① ①①
9 9 9 9 9 9	7 7 7 7 7 7
- 2 2 2 2 2 2	+ 3 3 3 3 3 3
<u>7 7 7 7 7 7</u>	<u>1 1 1 1 1 0</u>

(c) $5,29,516 - 1,02,053 + 25,970 - 18,325 = 4,35,108$

④ ⑪	① ① ①	④ ⑬ ② ⑬
5 2 9 5 1 6	4 2 7 4 6 3	4 5 3 4 6 3
- 1 0 2 0 5 3	+ 2 5 9 7 0	- 1 8 3 2 5
<u>4 2 7 4 6 3</u>	<u>4 5 3 4 3 3</u>	<u>4 3 5 1 0 8</u>

Exercise-9

1. (a) (ii) 45960 rounded to the nearest thousands is 46000.
 96113 rounded to the nearest thousands is 96000.
 Estimated difference = $96000 - 46000 = 50000$
 So, there are about 50000 more petrol cars than diesel cars.
- (b) (i) 3240 rounded to the nearest thousands is 3000.
 3990 rounded to the nearest thousands is 4000.
 Estimated sum = $3000 + 4000 = 7000$
 So, there are 7000 kids in total approximately.
2. (a) 49532 rounded off to the nearest thousands is 50000.
 30029 rounded off to the nearest thousands is 30000.
 Estimated sum = $50000 + 30000 = 80000$
- (b) 57623 rounded off to the nearest thousands is 58000.
 8245 rounded off to the nearest thousands is 8000.
 Estimated sum = $58000 + 8000 = 66000$
- (c) 2103 rounded off to the nearest thousands is 2000.
 8999 rounded off to the nearest thousands is 9000.
 Estimated sum = $2000 + 9000 = 11000$

(d) 4459 rounded off to the nearest thousands is 4000.

38599 rounded off to the nearest thousands is 39000.

$$\text{Estimated sum} = 4000 + 39000 = 43000$$

3. (a) 60051 rounded off to the nearest thousands is 60000.

46484 rounded off to the nearest thousands is 46000.

$$\text{Estimated difference} = 60000 - 46000 = 14000$$

(b) 65536 rounded off to the nearest thousands is 66000.

2916 rounded off to the nearest thousands is 3000.

$$\text{Estimated difference} = 66000 - 3000 = 63000$$

(c) 9271 rounded off to the nearest thousands is 9000.

7563 rounded off to the nearest thousands is 8000.

$$\text{Estimated difference} = 9000 - 8000 = 1000$$

(d) 73588 rounded off to the nearest thousands is 74000.

4500 rounded off to the nearest thousands is 5000.

$$\text{Estimated difference} = 74000 - 5000 = 69000$$

Mental Maths Corner

1. Greatest 3-digit number 9 9 9

$$\begin{array}{r} \text{Smallest 6-digit number} \quad + 100000 \\ \hline 100999 \end{array}$$

Thus, the required sum is 100999.

2. 1 lakh - 100 thousands

$$= 100000 - 100000 = 0$$

3. 100 more than 99999 is 100099.

$$\begin{array}{r} \textcircled{1} \textcircled{1} \textcircled{1} \\ 99999 \\ + 100 \\ \hline 100099 \end{array}$$

4. 100000 more than 60606 is 160606.

$$\begin{array}{r} 100000 \\ + 60606 \\ \hline 160606 \end{array}$$

