DETAILED SOLUTIONS

Let's Recall

1.

			H	T	O
100	+	60	+ 7 =	1	6	7

2. 998 = Nine hundred ninety-eight.

3. 768 = 7 hundreds and 6 tens.

4. (a) 10 ones = 1 ten (b) 10 tens = 1 hundred
(c) 1 hundred = 100 ones.
(d) The smallest 3-digit number is 100.
(e) Smallest three digit number = 100
Predecessor of 100 = 100 – 1 = 99

Think and Answer (Page 11)

Practice Time 1A

1. (a)

Th	H	T	O
1	4	5	5

(b)

Th	H	T	O
2	0	3	3

(c)

Th	H	T	O
3	2	1	4

(d)

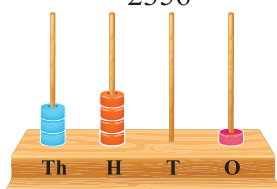| Th	H	T	O
6	4	8	0

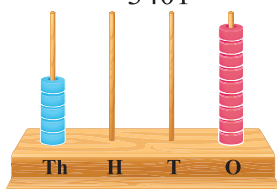**2.** (a) 5057 (b) 4102 (c) 3676

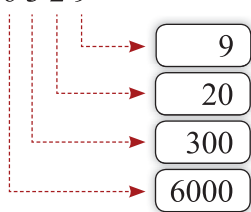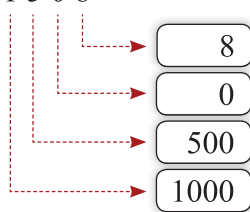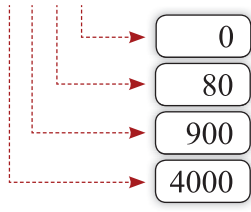**3.** (a)
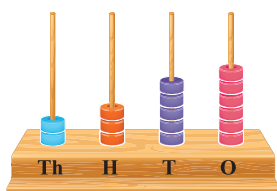
2356

(b)

3401

(c)

5009

4. (a) 1,358 = One thousand three hundred fifty-eight.
(b) 2,643 = Two thousand six hundred forty-three.
(c) 7,005 = Seven thousand five.
(d) 9,700 = Nine thousand seven hundred.

5. (a) Two thousand one hundred sixty-eight = 2,168
(b) Four thousand ninety-nine = 4,099
(c) Six thousand four hundred eleven = 6,411
(d) Five thousand six hundred = 5,600

Practice Time 1B

1. (a) 6 3 2 9 (b) 1 5 0 8

9
20
300
6000

8
0
500
1000

(c) 4 9 8 0

0
80
900
4000

2. (a) 1234 (b) 7851
Face value: 3 Face value: 8
Place value: 30 Place value: 800
(c) 9802
Face value: 9
Place value: 9000

3. (a) 6,375 = 6000 + 300 + 70 + 5
(b) 5,082 = 5000 + 0 + 80 + 2
(c) 8,421 = 8 thousands + 4 hundreds + 2 tens + 1 one
(d) 4,095 = 4 thousands + 0 hundreds + 9 tens + 5 ones

4. (a) 3914 = 3000 + 900 + 10 + 4
(b) 4590 = 4000 + 500 + 90 + 0
(c) 2605 = 2000 + 600 + 0 + 5
(d) 7002 = 7000 + 0 + 0 + 2

5. (a) 4000 + 800 + 30 + 2 = 4,832
(b) 7000 + 500 + 4 = 7,504
(c) 5 thousands + 6 hundreds + 1 ten + 7 ones = 5,617
(d) 9 thousands + 6 tens + 3 ones = 9,063

Practice Time 1C

1. (a) $524 \leq 2{,}193$ (b) $7{,}329 \geq 3{,}279$
   (c) $8{,}028 \leq 8{,}208$ (d) $2{,}613 \leq 2{,}631$
   (e) $9{,}162 \geq 9{,}126$ (f) $9{,}325 = 9{,}325$
2. (a) Smallest number = 2,513
      Greatest number = 7,346
   (b) Smallest number = 2,015
      Greatest number = 7,116
   (c) Smallest number = 5,039
      Greatest number = 8,611
   (d) Smallest number = 5,001
      Greatest number = 5,101
3. (a) $6873 > 6738 > 6387 > 6378$
   (b) $8132 > 7093 > 3506 > 239$
   (c) $3548 > 3458 > 1320 > 1023$
   (d) $6985 > 6895 > 6598 > 6589$
4. (a) $5146 < 5346 < 5446 < 5846$
   (b) $857 < 8275 < 8725 < 9814$
   (c) $9037 < 9073 < 9307 < 9703$
   (d) $267 < 967 < 2679 < 9672$

Practice Time 1D

1.

	Digits	Greatest 4-digit number	Smallest 4-digit number
(a)	3, 7, 1, 9	9,731	1,379
(b)	9, 8, 4, 2	9,842	2,489
(c)	5, 7, 1, 0	7,510	1,057
(d)	4, 7, 9, 7	9,774	4,779
(e)	0, 3, 6, 2	6,320	2,036

2. (a) 4 thousands + 8 hundreds + 5 tens + 2 ones
      = 4,852
   (b) 9 thousands + 1 hundred + 0 tens + 6 ones
      = 9,106

Practice Time 1E

1.

	Predecessor	Number	Successor
(a)	5,671	5,672	5,673
(b)	8,790	8,791	8,792
(c)	998	999	1,000
(d)	4,039	4,040	4,041
(e)	4,989	4,990	4,991

2. Even numbers = 4628, 7132, 6000, 3784, 5828, 1116, 1358, 1000
   Odd numbers = 2371, 8903, 3925, 8143, 9465, 2047, 9999

3. (a) Even numbers between 402 and 409
      = 404, 406, 408
   (b) Even numbers between 1,023 and 1,029
      = 1,024, 1,026, 1,028
   (c) Even numbers between 2,448 and 2,456
      = 2,450, 2,452, 2,454
4. (a) Odd numbers between 111 and 119
      = 113, 115, 117
   (b) Odd numbers between 1,031 and 1,038
      = 1,033, 1,035, 1,037
   (c) Odd numbers between 4,444 and 4,450
      = 4,445, 4,447, 4,449

Practice Time 1F

1. (a) 50 56 60. (b) 70 72 80. (c) 40 44 50.
   (d) 80 89 90. (e) 100 106 110.
2. (a) 17 $\xrightarrow{\text{nearest tens}}$ 20
   (b) 36 $\xrightarrow{\text{nearest tens}}$ 40
   (c) 93 $\xrightarrow{\text{nearest tens}}$ 90
   (d) 26 $\xrightarrow{\text{nearest tens}}$ 30
   (e) 45 $\xrightarrow{\text{nearest tens}}$ 50
   (f) 51 $\xrightarrow{\text{nearest tens}}$ 50
   (g) 39 $\xrightarrow{\text{nearest tens}}$ 40
   (h) 64 $\xrightarrow{\text{nearest tens}}$ 60
   (i) 78 $\xrightarrow{\text{nearest tens}}$ 80
   (j) 82 $\xrightarrow{\text{nearest tens}}$ 80
3. 4 numbers round up to 80 = 76, 77, 78 and 79
4. 4 numbers round down to 100 = 101, 102, 103 and 104

Practice Time 1G

1. (a) 16 = XVI (b) 25 = XXV
   (c) 39 = XXXIX (d) 27 = XXVII
2. (a) XVIII = 18 (b) XXIX = 29
   (c) XXXVII = 37 (d) XXXIV = 34
3. (a) The Roman numeral for 26 is XXVI.
   (b) The successor of XXX is XXXI.
   (c) The predecessor of 20 in Roman numeral is XIX.
   (d) The greatest 1-digit number in Roman numeral is IX.
   (e) When we add V to X and then subtract I from the number, we get XIV.
      V + X − I = 5 + 10 − 1 = 15 − 1 = 14, *i.e.*, XIV

Teacher's Resource Manual-3

Chapter Assessment

1. (a) — (iv) The place value of the digit 8 in 5869 is 800.
Hence, option (iv) is correct.

(b) — (iii) 4739 because its tens place digit is 3 which is greater than 2.
Hence, option (iii) is correct.

(c) — (iv) The greatest 3-digit number formed using the digit 0, 1 and 2 is 210.
Hence, option (iv) is correct.

(d) — (i) Number = 4507, Face value = 7, Place value = 7
The face value of coloured digit = Place Value of coloured digit.
∴ 7 = 7
Hence, option (i) is correct.

(e) — (iii) Smallest 4-digit number = 1000
Predecessor of 1000 = 1000 − 1 = 999
Hence, option (iii) is correct.

(f) — (ii) Arrange the numbers in place value chart.
5000 + 700 + 10 + 3 = 5713
Hence, option (ii) is correct.

(g) — (ii) 7304 = 7000 + 300 + 4
Hence, option (ii) is correct.

2. (a) The even number after four thousand fourteen is 4016.

(b) The smallest 4-digit number using all the digits 9, 3, 0 and 2 is 2039.

(c) The successor of 1999 is 2000.

(d) The odd number just after the successor of 3019 is 3021.

(e) The greatest 4-digit even number is 9998.

(f) 8 thousands + 5 tens + 4 ones = 8054.

(g) 14 tens = 14 × 10 = 140 ones.

3. (a) 1213 = One thousand two hundred thirteen.

(b) 8925 = Eight thousand nine hundred twenty-five.

(c) 8888 = Eight thousand eight hundred eighty-eight.

(d) 2023 = Two thousand twenty-three.

4. (a) Eight thousand five hundred thirty-eight = 8,538

(b) Nine thousand eight hundred = 9,800

5. (a) The number is 7**6**52.
Place value of coloured digit = 600

(b) The number is **8**945.
Place value of coloured digit = 8000

(c) The number is 50**7**6.
Place value of coloured digit = 70

6. (a) 3860 > 3680   (b) 4885 > 4566

(c) 8088 < 8808

7. (a) Ascending order = 5008 < 5080 < 5088 < 5800
Descending order = 5800 > 5088 > 5080 > 5008

(b) Ascending order = 7071 < 7107 < 7170 < 7701
Descending order = 7701 > 7170 > 7107 > 7071

8. The place value and face value of 0 is always the same.

9. (a) 259 and 89 are the numbers with 9 in the ones place.

(b) 619 and 19 are the numbers with 1 in the tens place.

(c) 8561 and 3572 are the numbers with 5 in the hundreds place.

10. Thousands place is between 6 and 8 = 7
Hundreds place is successor of 2 = 3
Tens place is 3 less than the hundreds place = 0
Ones place is predecessor of 5 = 4
Hence, the number is 7304.

11.

	Predecessor	Number	Successor
(a)	XXIII	XXIV	XXV
(b)	XXXVI	XXXVII	XXXVIII
(c)	IX	X	XI
(d)	XIV	XV	XVI

Brain Sizzlers (Page 27)

Tens digit is an even number between 3 and 6 = 4
Hundreds place is greatest 1-digit even number = 8
Thousands place is smallest 1-digit = 1
Ones place is half of hundreds place = 4
The four digit number is 1,844.

Mental Maths (Page 27)

1. The four digit number = 5555
The place value of all the digits is 5.

2. Predecessor of the odd number just before 7088 = 7088 − 1 = 7087
The number before 7087 is 7086.

3. Place value of 6 in the number 2065 = 60
Face value of 6 in the number 2065 = 6
Difference between place value and face value = 60 − 6 = 54

4. Odd numbers between 3,110 and 3,120 = 3111, 3113, 3115, 3117, 3119

CHAPTER 2 : ADDITION

Let's Recall

1. (a)

H	T	O
①		
	8	5
+	4	3
1	2	8

(b)

H	T	O
①		
6	4	6
+ 2	7	1
9	1	7

(c)

H	T	O
4	2	1
+	6	4
4	8	5

(d)

H	T	O
①		
	8	0
+ 2	5	9
3	3	9

2. Total number of plants planted by the school this year = 452 + 89 = 541.

Practice Time 2A

1. (a)

H	T	O
2	1	7
+ 3	4	2
5	5	9

(b)

H	T	O
4	8	7
+ 1	1	1
5	9	8

(c)

H	T	O
5	5	5
+ 1	3	1
6	8	6

(d)

H	T	O
2	3	4
+ 5	1	1
7	4	5

2. (a) 217 + 562 Arrange the numbers in columns.

H	T	O
2	1	7
+ 5	6	2
7	7	9

(b) 481 + 318 Arrange the numbers in columns.

H	T	O
4	8	1
+ 3	1	8
7	9	9

(c) 645 + 152 Arrange the numbers in columns.

H	T	O
6	4	5
+ 1	5	2
7	9	7

(d) 516 + 273 Arrange the numbers in columns.

H	T	O
5	1	6
+ 2	7	3
7	8	9

(e) 424 + 263 Arrange the numbers in columns.

H	T	O
4	2	4
+ 2	6	3
6	8	7

(f) 385 + 512 Arrange the numbers in columns.

H	T	O
3	8	5
+ 5	1	2
8	9	7

Think and Answer (Page 35)

		182		
	94		88	
46		48		40
20	26		22	18

Practice Time 2B

1. (a) Grouping = ones place

H	T	O
	①	
7	0	9
+ 1	0	4
8	1	3

(b) Regrouping = tens place

H	T	O
①		
5	2	3
+ 1	8	3
7	0	6

(c) Regrouping = ones and tens places

H	T	O
①	①	
7	8	5
+ 1	1	5
9	0	0

2. (a)

H	T	O
	①	
2	4	7
+ 3	3	5
5	8	2

(b)

H	T	O
①	①	
5	4	9
+ 3	6	4
9	1	3

(c)

H	T	O
①		
3	5	8
+ 2	7	0
6	2	8

(d)

Th	H	T	O
①	①	①	
	5	6	4
+	4	4	8
1	0	1	2

(e)

Th	H	T	O
①			
	8	0	8
+	8	8	0
1	6	8	8

(f)

Th	H	T	O
①	①	①	
	7	9	6
	3	4	8
+	4	2	2
1	5	6	6

3. (a) 622 + 297
Arrange the numbers in columns.

H	T	O
①		
6	2	2
+ 2	9	7
9	1	9

(b) 636 + 243
Arrange the numbers in columns.

H	T	O
6	3	6
+ 2	4	3
8	7	9

(c) 399 + 455
Arrange the numbers in columns.

H	T	O
①	①	
3	9	9
+ 4	5	5
8	5	4

(d) 632 + 398
Arrange the numbers in columns.

Th	H	T	O
	①	①	①
	6	3	2
+	3	9	8
1	0	3	0

(e) 424 + 263 + 364
Arrange the numbers in columns.

Th	H	T	O
①	①	①	
	4	3	6
	2	4	3
+	3	6	4
1	0	4	3

(f) 326 + 836 + 248
Arrange the numbers in columns.

Th	H	T	O
①	①	②	
	3	2	6
	8	3	6
+	2	4	8
1	4	1	0

Practice Time 2C

1. (a)

Th	H	T	O
4	4	2	1
+ 2	5	1	7
6	9	3	8

(b)

Th	H	T	O
5	6	0	4
+ 4	0	4	0
9	6	4	4

(c)

Th	H	T	O
5	4	2	7
+ 3	5	4	0
8	9	6	7

(d)

Th	H	T	O
2	4	3	5
1	0	5	0
+ 2	4	1	0
5	8	9	5

(e)

Th	H	T	O
4	2	0	8
1	0	2	1
+ 1	0	3	0
6	2	5	9

(f)

Th	H	T	O
1	0	2	1
3	0	5	3
+ 4	0	0	3
8	0	7	7

2. (a) 2415 + 3120
Write the numbers in the place value columns and add using the following steps:
Step 1. Add the ones.
5 + 0 = 5 ones.
Step 2. Add the tens.
1 + 2 = 3 tens.
Step 3. Add the hundreds.
4 + 1 = 5 hundreds
Step 4. Add the thousands.
2 + 3 = 5 thousands.

Th	H	T	O
2	4	1	5
+ 3	1	2	0
5	5	3	5

Thus, the sum of 2415 and 3120 is 5535.

(b) 4345 + 2632.
Write the numbers in the place value columns and add using the following steps:
Step 1. Add the ones.
5 + 2 = 7 ones.
Step 2. Add the tens.
4 + 3 = 7 tens.
Step 3. Add the hundreds.
3 + 6 = 9 hundreds.
Step 4. Add the thousands.
4 + 2 = 6 thousands.

Th	H	T	O
4	3	4	5
+ 2	6	3	2
6	9	7	7

Thus, the sum of 4345 and 2632 is 6977.

(c) 6302 + 2475.
Write the numbers in the place value columns and add using the following steps:
Step 1. Add the ones.
2 + 5 = 7 tens.
Step 2. Add the tens.
0 + 7 = 7 ones.
Step 3. Add the hundreds.
Step 4. Add the thousands.
3 + 4 = 7 hundreds.
6 + 2 = 8 thousands.

Th	H	T	O
6	3	0	2
+ 2	4	7	5
8	7	7	7

Thus, the sum of 6302 and 2475 is 8777.

(d) 6473 + 3515.
Write the numbers in the place value columns and add using the following steps:
Step 1. Add the ones.
3 + 5 = 8 ones.
Step 2. Add the tens.
7 + 1 = 8 tens.

Th	H	T	O
6	4	7	3
+ 3	5	1	5
9	9	8	8

Detailed Solutions

Step 3. Add the hundreds.

$4 + 5 = 9$ hundreds.

Step 4. Add the thousands.

$6 + 3 = 9$ thousands.

Thus, the sum of 6473 and 3515 is 9988.

(e) $1243 + 4535 + 1201$.

Write the numbers in the place value columns and add using the following steps:

Step 1. Add the ones.

$3 + 5 + 1 = 9$ ones.

Step 2. Add the tens.

$4 + 3 + 0 = 7$ tens.

Step 3. Add the hundreds.

$2 + 5 + 2 = 9$ hundreds

Step 4. Add the thousands.

$1 + 4 + 1 = 1$ thousand.

Th	H	T	O
1	2	4	3
4	5	3	5
+ 1	2	0	1
6	9	7	9

Thus, the sum of 1243, 4535 and 1201 is 6979.

(f) $2345 + 1023 + 4001$.

Write the numbers in the place value columns and add using the following steps:

Step 1. Add the ones.

$5 + 3 + 1 = 9$ ones.

Step 2. Add the tens.

$4 + 2 + 0 = 6$ tens.

Step 3. Add the hundreds.

$3 + 0 + 0 = 3$ hundreds.

Step 4. Add the thousands.

$2 + 1 + 4 = 7$ thousands.

Th	H	T	O
2	3	4	65
1	0	2	3
+ 4	0	0	1
7	3	6	9

Thus, the sum of 2345, 1023 and 4001 is 7369.

Practice Time 2D

1. (a)

Th	H	T	O
		①	
3	4	3	5
+ 2	5	5	9
5	9	9	4

(b)

Th	H	T	O
	①	①	
4	6	7	9
+ 3	2	8	7
7	9	6	6

(c)

Th	H	T	O
①		①	
2	6	1	6
+ 3	5	4	8
6	1	6	4

(d)

Th	H	T	O
①	①	①	
2	4	7	5
3	5	6	2
+ 2	1	0	3
8	1	4	0

(e)

Th	H	T	O
①	①	①	
2	0	4	8
1	8	5	9
+ 3	2	2	0
7	1	2	7

(f)

Th	H	T	O
①	①	①	
5	7	8	3
1	4	7	
+	9	0	3
6	8	3	3

2. (a) $890 + 619$

Arrange the numbers in the place value columns and add using the following steps:

Step 1. Add the ones.

$0 + 9 = 9$ ones.

Step 2. Add the tens.

$9 + 1 = 10$ tens

$= 1$ hundred $+ 0$ tens.

Th	H	T	O
①	①		
	8	9	0
+	6	1	9
1	5	0	9

Write 0 tens in the tens column and carry over.

1 hundred in the hundreds column.

Step 3. Add the hundreds.

1 (carried over) $+ 8 + 6 = 15$ hundreds.

$= 1$ thousand $+ 5$ hundreds.

Write 5 hundreds in the hundreds column and carry over.

1 thousand in the thousands column.

Step 4. Add the thousands.

$1 + 0 = 1$ thousand.

Write 1 in the thousands column.

Thus, the sum of 890 and 619 is 1509.

(b) $7613 + 1387$.

Arrange the numbers in the place value columns and add using the following steps:

Step 1. Add the ones.

$3 + 7 = 10$ ones.

$= 1$ ten $+ 0$ ones.

Th	H	T	O
①	①	①	
7	6	1	3
+ 1	3	8	7
9	0	0	0

Write 0 ones in the ones column and carry over.

1 ten in the tens column.

Step 2. Add the tens.

1 (carried over) $+ 1 + 8 = 10$ tens.

$= 1$ hundred $+ 0$ tens.

Write 0 tens in the tens column and carry over

1 hundred in the hundreds column.

Step 3. Add the hundreds.

1 (carried over) $+ 6 + 3 = 10$ hundreds

$= 1$ thousand $+ 0$ hundreds

Write 0 hundreds in the hundreds column and carry over 1 thousand in the thousands column.

Step 4. Add the thousands.

1 (carried over) + 7 + 1 = 9 thousands.

Write 9 in the thousands column.

Thus, the sum of 7613 and 1387 is 9000.

(*c*) 6401 + 3299

Arrange the numbers in the place value columns and add using the following steps:

Th	H	T	O
	①	①	
6	4	0	1
+ 3	2	9	9
9	7	0	0

Step 1. Add the ones.

1 + 9 = 10 ones
= 1 ten + 0 ones

Write 0 ones in the ones column and carry over 1 ten to the tens column.

Step 2. Add the tens.

1 (carried over) + 0 + 9 = 10 tens
= 1 hundred + 0 tens

Write 0 tens in the tens column and carry over 1 hundred in the hundreds column.

Step 3. Add the hundreds.

1 (carried over) + 4 + 2 = 7 hundreds.
Write 7 in the hundreds column.

Step 4. Add the thousands.

6 + 3 = 9 thousands.
Write 9 in the thousands column.

Thus, the sum of 6401 and 3299 is 9700.

(*d*) 7395 + 1608.

Arrange the numbers in the place value columns and add using the following steps:

Th	H	T	O
①	①	①	
7	3	9	5
+ 1	6	0	8
9	0	0	3

Step 1. Add the ones.

5 + 8 = 13 ones
= 10 ones + 3 ones
= 1 ten + 3 ones

Write 3 in the ones column and carry over 1 ten to the tens column.

Step 2. Add the tens.

1 (carried over) + 9 + 0 = 10 tens
= 1 hundred + 0 tens

Write 0 tens in the tens column and carry over 1 hundred to the hundreds column.

Step 3. Add the hundreds.

1 (carried over) + 3 + 6 = 10 hundreds
= 1 thousand + 0 hundreds

Write 0 in the hundreds column and carry over 1 thousand to the thousands column.

Step 4. Add the thousands.

1 (carried over) + 7 + 1 = 9 thousands
Write 9 in the thousands column.

Thus, the sum of 7395 + 1608 is 9003.

(*e*) 4373 + 1023 + 532

Arrange the numbers in the place value columns and add using the following steps:

Th	H	T	O
	①		
4	3	7	3
1	0	2	3
+	5	3	2
5	9	2	8

Step 1. Add the ones.

3 + 3 + 2 = 8 ones.

Write 8 in the ones column.

Step 2. Add the tens.

7 + 2 + 3 = 12 tens
= 10 tens + 2 tens
= 1 hundred + 2 tens

Write 2 in the tens column and carry over 1 hundred in the hundreds column.

Step 3. Add the hundreds.

1 (carried over) + 3 + 0 + 5 = 9 hundreds
Write 9 in the hundreds column.

Step 4. Add the thousands.

4 + 1 = 5 thousands
Write 5 in the thousands column.

Thus, the sum of 4373, 3299 and 532 is 5928.

(*f*) 2020 + 3030 + 460

Arrange the numbers in the place value columns and add using the following steps:

Th	H	T	O
	①		
2	0	2	0
3	0	3	0
+	4	6	0
5	5	1	0

Step 1. Add the ones.

0 + 0 + 0 = 0 ones

Write 0 in the ones column.

Step 2. Add the tens.

2 + 3 + 6 = 11 tens
= 10 tens + 1 ten
= 1 hundred + 1 ten

Write 1 ten in the tens column and carry over 1 hundred to the hundreds column.

Step 3. Add the hundreds.

1 (carried over) + 0 + 0 + 0 = 5 hundreds
Write 5 in the hundreds column.

Step 4. Add the thousands.

2 + 3 = 5 thousands
Write 5 in the thousands column.

Thus, the sum of 2020, 3030 and 460 is 5510.

(g) 4576 + 2748 + 1652

Arrange the numbers in the place value column and add using the following steps:

Step 1. Add the ones.

Th	H	T	O
①	①	①	
4	5	7	6
2	7	4	8
+ 1	6	5	2
8	9	7	6

6 + 8 + 2 = 16 ones
= 1 ten + 6 ones

Write 6 in the ones column and carry over 1 ten to the tens column.

Step 2. Add the tens.

1 (carried over) + 7 + 4 + 5 = 17 tens
= 10 tens + 7 tens
= 1 hundred + 7 tens

Write 7 in the tens column and carry over 1 hundred to the hundreds column.

Step 3. Add the hundreds.

1 (carried over) + 5 + 7 + 6 = 19 hundreds
= 10 hundreds + 9 hundreds
= 1 thousand + 9 hundreds

Write 9 in the hundreds column and carry over 1 thousand to the thousands column.

Step 4. Add the thousands.

1 (carried over) + 4 + 2 + 1 = 8 thousands

Write 8 in the thousands column.

Thus, the sum of 4576, 2748 and 1562 is 8976.

(h) and (i) — Same as above parts.

Practice Time 2E

1. First, add the numbers downwards.

H	T	O	
8	7	2	Down
+ 1	2	7	
9	9	9	

Now, check your answer by adding upwards.

Check:

9	9	9	
H	T	O	
8	7	2	Up
+ 1	2	7	
9	9	9	

∴ The answer is correct.

2. Same as 1.

3. First, add the numbers downwards.

Th	H	T	O	
3	0	9	0	Down
+ 6	3	0	7	
9	3	9	7	

Now, check your answer by adding upwards.

Check:

	9	3	9	7	
	Th	H	T	O	
	3	0	9	0	Up
+	6	3	0	7	
	9	3	9	7	

∴ The answer is correct.

Practice Time 2F

1. (a) 124 + 0 = 124   (b) 675 + 0 = 675
   (c) 8926 + 0 = 8926   (d) 4678 + 1 = 4679
   (e) 3564 + 1 = 3565   (f) 4575 + 1 = 4576

2. (a) 74 + 10 = 84   (b) 10 + 55 = 65
   (c) 4362 + 100 = 4462   (d) 100 + 5346 = 5446
   (e) 3040 + 100 = 3140   (f) 1000 + 1736 = 2736

3. (a) 542 + 10 = 552   (b) 789 + 100 = 889
   (c) 10 + 7235 = 7245   (d) 4178 + 100 = 4278
   (e) 6965 + 100 = 7065   (f) 6743 + 100 = 6843
   (g) 100 + 3144 = 3244   (h) 612 + 1000 = 1612
   (i) 6283 + 1000 = 7283

4. (a) 635 + 298

H	T	O
①	①	
6	3	5
+ 2	9	8
9	3	3

H	T	O
①	①	
2	9	8
+ 6	3	5
9	3	3

We observe that in both the cases, we get the same answer.

(b) 563 + 375

H	T	O
①		
5	6	3
+ 3	7	5
9	3	8

H	T	O
3	7	5
+ 5	6	3
9	3	8

We observe that in both the cases, we get the same answer.

5. (c) and (d) — Same as 4.

Maths Fun (Page 43)

(a) 2875 + 10 = 2885   (b) 4438 + 10 = 4448
(c) 7547 + 100 = 7647   (d) 6399 + 10 = 6409
(e) 8930 + 100 = 9030   (f) 8913 + 1000 = 9913
(g) 9398 + 100 = 9498   (h) 7843 + 1000 = 8843
(i) 4538 + 1000 = 5538   (j) 6464 + 10 = 6474

Secret message: I LOVE MATHS

Practice Time 2G

1.

T	O
3	4
+ 6	5
9	9

round off →
round off →

	H	T	O
	①		
		3	0
+		7	0
	1	0	0

Actual Sum ≤ Estimated Sum

2.

	H	T	O
	①		
		2	2
+		8	7
	1	0	9

round off →
round off →

	H	T	O
	①		
		2	0
+		9	0
	1	1	0

Actual Sum ≤ Estimated Sum

3.

	T	O
	①	
	4	6
+	3	7
	8	3

round off →
round off →

	T	O
	5	0
+	4	0
	9	0

Actual Sum ≤ Estimated Sum

4.

	T	O
	①	
	2	5
+	6	9
	9	4

round off →
round off →

	H	T	O
	①		
		3	0
+		7	0
	1	0	0

Actual Sum ≤ Estimated Sum

5. and **6.** — Same as above parts.

Practice Time 2H

1.

	Th	H	T	O
		①	①	
Number of storybooks of Hindi =	1	2	3	4
Number of storybooks of English =	2	3	5	6
Number of books of art and craft = +	2	2	2	0
	5	8	1	0

Thus, total number of books in the school library is 5810.

2.

	Th	H	T	O
	①			
Number of bicycles manufactured in a year =	4	6	1	7
Number of more bicycles manufactured in next year = +	2	5	0	0
Total number of bicycles in both the years =	7	1	1	7

Thus, total number of bicycles manufactured in both the years is 7117.

3.

	Th	H	T	O
		②	①	
Number of men in the village =	4	2	6	5
Number of women in the village =	4	0	7	5
Number of more children in the village = +	1	5	7	0
Total number of people living in the village =	9	9	1	0

Thus, total number of people living in a village is 9910.

4.

		H	T	O
Contribution of Radha in the gift =	₹	1	2	5
Contribution of Rishi in the gift = +	₹	1	7	0
Total cost of the gift =	₹	2	9	5

Thus, total cost of the gift is ₹295.

5.

	H	T	O
Number of red balloons =	2	4	8
Number of green balloons = +	1	7	3
	4	2	1

Rounded to nearest 10 →

	H	T	O
	2	5	0
+	1	7	0
	4	2	0

Answer is 420, more than 400.

6. Same as above.

Chapter Assessment

1. $(a) - (i)$ $740 + 260 = 1000.$
$\because$ $1000 = 100$ tens.
Hence, option (i) is correct.

$(b) - (iv)$

H	T	O
5	1	A
+	2	B

→

H	T	O
	(1)	
5	1	8
+	2	9
5	4	7

$\therefore$ A = 8, B = 9
Hence, option (iv) is correct.

$(c) - (iv)$ $1673 < 673 + \underline{1100}$
$1673 < 1773$
Hence, option (iv) is correct.

$(d) - (ii)$ 4 tens = $4 \times 10 = 40,$
5 hundreds = $5 \times 100,$
6 tens = $6 \times 1 = 6$
The number is = $500 + 40 + 6 = 546$
Add 3867 and 546

Th	H	T	O
(1)	(1)	(1)	
3	8	6	7
+	5	4	6
4	4	1	3

Hence, option (ii) is correct.
$(e) - (iii)$ The greatest 3-digit number = 999
According to question,
$999 + 12 = 1011$
Hence, option (iii) is correct.
$(f) - (iii)$ $2000 + 100 = 2100$
$(g) - (i)$ $3452 + 6278 = 9730$

2.

	Th	H	T	O
	(1)	(1)		
Number of passengers in a train =	1	1	5	0
Number of passengers board at the next station = +		8	9	0
Number of passengers travelling on train now =	2	0	4	0

Thus, 2040 passengers are travelling on the train now.

3.

	Th	H	T	O
		(1)		
The price of the dress = ₹	2	5	5	0
The price of pair of shoes (2550 + 250 = 2800) = + ₹	2	8	0	0
Total price of shoes and dress together = ₹	5	3	5	0

Thus, total price of dress and shoes are ₹5350.

4.

	Th	H	T	O
			(1)	
Number of toys in stock =	1	2	1	7
Number of toys he ordered = +	4	5	2	8
Total number of toys =	5	7	4	5

Thus, the shop have 5745 toys in all.

5.

	Th	H	T	O
	②	①	①	
Neeru saved in a month = ₹	1	4	0	0
Tarun saved in a month = ₹	1	6	7	8
Sandhya saved in a month + ₹	0	9	4	5
Total money saved = ₹	4	0	2	3

Thus, ₹4023 saved in that month altogether.

Brain Sizzlers (Page 47)
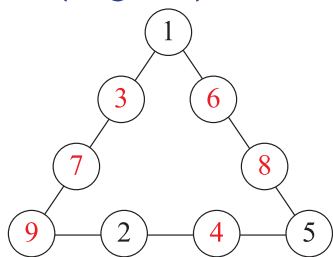
Mental Maths (Page 48)
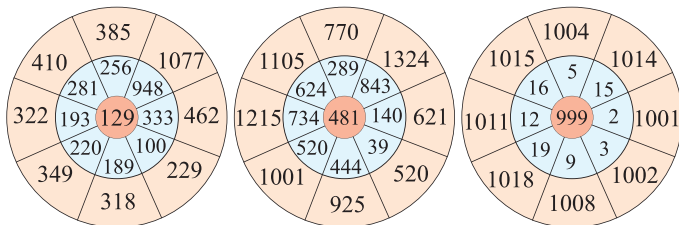
CHAPTER 3 : SUBTRACTION

Let's Recall

1. (a)

T	O
9	7
− 7	5
2	2

(b)

T	O
⑥	⑮
7̸	5̸
− 6	6
0	9

(c)

H	T	O
5	7	2
− 1	2	1
4	5	1

(d)

H	T	O
	⑯	
⓪	⑥̸	⑬
1̸	7̸	3̸
−	9	7
0	7	6

2. Subtraction statements
(a) 79 – 40 = 39, 79 – 39 = 40
(b) 275 – 143 = 132, 275 – 132 = 143

3. (a) 285 – 1 = <u>284</u>   (b) 305 – 0 = <u>305</u>
(c) 206 – 100 = <u>106</u>   (d) 699 – <u>699</u> = 0

4. 182 – 54 = 128 metres.

Practice Time 3A

1. (a)

H	T	O
9	3	7
− 4	3	2
5	0	5

(b)

H	T	O
8	6	9
− 5	0	2
3	6	7

(c)

H	T	O
6	4	3
− 3	1	1
3	3	2

(d)

H	T	O
	⑫	
⑧	2̸	⑭
9̸	3̸	4̸
− 6	4	6
2	8	8

(e)

H	T	O
	⑨	
④	⑩	⑭
5̸	0̸	4̸
− 2	4	8
2	5	6

(f)

H	T	O
⑦	⑭	
8̸	4̸	6
− 4	8	3
3	6	3

(g)

H	T	O
	⑨	
⑧	⑩	⑩
9̸	0̸	0̸
− 4	8	8
4	1	2

(h)

H	T	O
	⑪	
⑧	1̸	⑩
6̸	2̸	0̸
− 3	8	9
2	3	1

2. (a) 628 – 436
Write the numbers in columns and follow the given steps:
Step 1. Subtract the ones.
8 ones – 6 ones = 2 ones

H	T	O
6	2	8
− 4	3	6
		2

Step 2. Subtract the tens.

3 tens cannot be subtracted from 2 tens.

So, regroup hundreds and tens, that is; borrow 1 hundred to tens.

So, 6 hundreds 2 tens = 5 hundreds 12 tens.

Now, 12 tens – 3 tens = 9 tens.

H	T	O
(5)	(12)	
6̶	2̶	8
− 4	3	6
	9	2

Step 3. Subtract the hundreds.

5 hundreds – 4 hundreds = 1 hundred

Thus, 628 – 436 = 192.

H	T	O
(5)	(12)	
6̶	2̶	8
− 4	3	6
1	9	2

(b) 843 – 257

Write the numbers in columns and follow the given steps:

Step 1. Subtract the ones.

Since 3 < 7. So, regroup tens and ones.

4 tens 3 ones = 3 tens 13 ones.

Now, 13 ones – 7 ones = 6 ones

H	T	O
	(3)	(13)
8	4̶	3̶
− 2	5	7
		6

Step 2. Subtract the tens.

Since 3 < 5. So, regroup hundreds and tens.

8 hundreds 3 tens = 7 hundreds 13 tens

13 tens – 5 tens = 8 tens

H	T	O
	(13)	
(7)	(3)	(13)
8̶	4̶	3̶
− 2	5	7
	8	6

Step 3. Subtract the hundreds.

7 hundreds – 2 hundreds = 5 hundreds.

Thus, 843 – 257 = 586.

H	T	O
	(13)	
(7)	(3)	(13)
8̶	4̶	3̶
− 2	5	7
5	8	6

(c) to (h) — Same as (a) and (b)

Quick Check (Page 57)

Th	H	T	O
	(11)	(12)	
(5)	(1)	(2)	(11)
6̶	2̶	3̶	1̶
− 2	4	4	8
3	7	8	3

Practice Time 3B

1. (a)

Th	H	T	O
6	9	9	5
− 4	8	9	4
2	1	0	1

(b)

Th	H	T	O
8	4	5	6
− 8	4	5	5
0	0	0	1

(c)

Th	H	T	O
9	9	4	9
− 7	8	3	1
2	1	1	8

(d)

Th	H	T	O
(3)	(16)	(6)	(15)
4̶	6̶	7̶	5̶
− 3	8	4	6
0	8	2	9

(e)

Th	H	T	O
	(13)	(9)	
(5)	(3)	(10)	(10)
6̶	4̶	0̶	0̶
− 3	9	9	9
2	4	0	1

(f)

Th	H	T	O
	(12)	(13)	
(3)	(2)	(3)	(14)
4̶	3̶	4̶	4̶
− 2	6	5	5
1	6	8	9

(g)

Th	H	T	O
	(15)	(14)	
(7)	(5)	(4)	(12)
8̶	6̶	5̶	2̶
− 5	9	7	6
2	6	7	6

(h)

Th	H	T	O
		(9)	(14)
(6)	(10)	(4)	(14)
7̶	0̶	5̶	4̶
− 3	9	6	7
3	0	8	7

2. (*a*) 5667 – 3994

Write the numbers in columns and follow the given steps:

Th	H	T	O
	(15)		
(4)	(5̶)	(16)	
5̶	6̶	6̶	7
– 3	9	9	4
1	6	7	3

Step 1. 7 ones – 4 ones = 3 ones.
Write 3 in ones column.
Step 2. Since 6 < 9, so, regroup the hundreds into tens to subtract the tens.
6 hundreds 6 tens = 5 hundreds 16 tens.
16 tens – 9 tens = 7 tens.
Step 3. Again, 6 < 9, so, regroup the thousands into hundreds to subtract the hundreds.
15 hundreds – 9 hundreds = 6 hundreds.
Step 4. Subtract the thousands.
4 thousands – 3 thousands = 1 thousand.
Thus, 5667 – 3994 = 1673.

(*b*) 8777 – 4997.

Write the numbers in columns and follow the given steps:

Th	H	T	O
	(16)		
(7)	(6̶)	(17)	
8̶	7̶	7̶	7
– 4	9	9	7
3	7	8	0

Step 1. Subtract the ones.
7 ones – 7 ones = 0 ones.
Write 0 in ones columns.
Step 2. Since 7 < 9, so, regroup the hundreds into tens to subtract the tens.
7 hundreds 7 tens = 6 hundreds 17 tens.
17 tens – 9 tens = 8 tens.
Step 3. Again, 7 < 9, so, regroup the thousands into hundreds to subtract the hundreds.
8 thousands 6 hundreds = 7 thousands 16 hundreds.
16 hundreds – 9 hundreds = 7 hundreds.
Step 4. Subtract the thousands.
7 thousands – 4 thousands = 3 thousands.
Thus, 8777 – 4997 = 3780.

(*c*) to (*h*) — Same as (*a*) and (*b*)

Detailed Solutions

Think and Answer (Page 58)

1. Since,   1000 – 9 = 991.
   Then,   9000 – 9 = 8991.
2. 723 tens = 7 thousands 23 tens.
   ∴ 7 thousands 23 tens – 7 thousands 23 tens = 0.

Practice Time 3C

1. (*a*) 273 – 0 = 273   (*b*) 564 – 0 = 564
   (*c*) 7364 – 0 = 7364   (*d*) 575 – 1 = 574
   (*e*) 649 – 1 = 648   (*f*) 277 – 1 = 276
2. (*a*) 425 – 10 = 415   (*b*) 896 – 10 = 886
   (*c*) 567 – 100 = 467   (*d*) 4364 – 100 = 4264
   (*e*) 2645 – 1000 = 1645   (*f*) 5730 – 1000 = 4730

Practice Time 3D

1. Actual difference   Estimated difference

T	O
8	7
– 2	3
6	4

round off →

T	O
9	0
– 2	0
7	0

Actual difference < Estimated difference

2. Actual difference   Estimated difference

T	O
(8)	(14)
9̶	4̶
– 6	5
2	9

round off →

T	O
9	0
– 7	0
2	0

Actual difference > Estimated difference

3. Actual difference   Estimated difference

H	T	O
(0)	(16)	
1̶	6̶	7
–	9	4
0	7	3

round off →

H	T	O
(0)	(17)	
1̶	7̶	0
–	9	0
0	8	0

Actual difference < Estimated difference

4. Actual difference   Estimated difference

H	T	O
	(15)	
(1)	(5̶)	(14)
2̶	6̶	4̶
– 1	8	5
0	7	9

round off →

H	T	O
(1)	(16)	
2̶	6̶	0
– 1	9	0
0	7	0

Actual difference > Estimated difference

Think and Answer (Page 61)

1. (a)

H	T	O
4	4	7
− 3	5	8
0	8	9

(b)

H	T	O
5	2	6
+ 4	1	8
9	4	4

(c)

H	T	O
6	9	1
− 4	7	8
2	1	3

Practice Time 3E

1. (a) 3231 − 1965 + 987.

Firstly, subtract 1965 from 3231 and then add 987 to the difference obtained.

Th	H	T	O
	⑪	⑫	
③	①	②	⑪
3̶	2̶	3̶	1̶
− 1	9	6	5
1	2	6	6

Th	H	T	O
①	①	①	
1	2	6	6
+	9	8	7
2	2	5	3

(b) 4589 − 3256 + 1634.

Firstly, subtract 3256 from 4589 and then add 1634 to the difference obtained.

Th	H	T	O
4	5	8	9
− 3	2	5	6
1	3	3	3

Th	H	T	O
1	3	3	3
+ 1	6	3	4
2	9	6	7

(d) 8532 − 1986 + 3756 − 5288.

Firstly, subtract 1986 from 8532. Then add 3756 to the difference obtained and subtract 5288 from the sum to get the answer.

Th	H	T	O
	⑭	⑫	
⑦	④	②	⑫
8̶	5̶	3̶	2̶
− 1	9	8	6
6	5	4	6

TTh	Th	H	T	O
	①	①	①	
	6	5	4	6
+	3	7	5	6
1	0	3	0	2

TTh	Th	H	T	O
				⑨
	⑩	②	⑩	⑫
1	0̶	3̶	0̶	2̶
−	5	2	8	8
0	5	0	1	4

(c), (e), (f), (g) and (h) — Same as above.

2. (a) 574 − 283.

Subtraction

H	T	O	
④	⑰		
5̶	7̶	4	---▶ Minuend
− 2	8	3	---▶ Subtrahend
2	9	1	---▶ Difference

Checking

H	T	O	
①			
2	9	1	---▶ Minuend
+ 2	8	3	---▶ Subtrahend
5	7	4	---▶ Difference

Clearly, the sum of the 'difference' and 'subtrahend' is equal to the 'minuend'.

Thus, the difference is correct.

(*b*) same as part (*a*)
(*c*) 4326 – 1564.

Subtraction					Checking			

Subtraction

Th	H	T	O	
	⑫			
③	②	⑫		
4̶	3̶	2̶	6	→ Minuend
− 1	5	6	4	→ Subtrahend
2	7	6	2	→ Difference

Checking

Th	H	T	O	
①	①			
2	7	6	2	→ Minuend
+ 1	5	6	4	→ Subtrahend
4	3	2	6	→ Difference

Clearly, the sum of the 'difference' and 'subtrahend' is equal to the 'minuend'.
Thus, the difference is correct.
(*d*) same as part (*c*)

3. Sum of 2370 and 4599   Subtracting 6969 from 8220

Th	H	T	O
	①		
2	3	7	0
+ 4	5	9	9
6	9	6	9

Th	H	T	O
⑦	⑪	⑪	⑩
8̶	2̶	2̶	0̶
− 6	9	6	9
1	2	5	1

4. Difference of 4980 and 3895.   Subtracting 1085 from 6910.

Th	H	T	O
		⑰	
	⑧	⑦	⑩
4̶	9̶	8̶	0̶
− 3	8	9	5
1	0	8	5

Th	H	T	O
			⑩
	⑧	⑩	⑩
6	9̶	1̶	0̶
− 1	0	8	5
5	8	2	5

5. Sum of 5334 and 4653   Subtracting 6998 from 9987

Th	H	T	O
	①		
5	3	3	4
+ 4	6	5	3
9	9	8	7

Th	H	T	O
	⑱	⑰	
⑧	⑧	⑦	⑰
9̶	9̶	8̶	7̶
− 6	9	9	8
2	9	8	9

Practice Time 3F

1.

H	T	O
	⑩	
④	0̶	⑩
5̶	1̶	0̶
− 3	9	3
1	1	7

Number of seats in a theater =
Number of persons saw the show = −
Number of seats remained vacant =

Thus, 117 seats are remained vacant.

2.

H	T	O
	⑦	⑪
9	8̶	1̶
− 7	6	9
2	1	2

Thus, 212 should be subtracted from 981 to get 769.

3. Subtract 6054 from 9040.

Th	H	T	O
	⑨	⑬	
⑧	10̶	3̶	⑩
9̶	0̶	4̶	0̶
− 6	0	5	4
2	9	8	6

Thus, 2986 should be added to 6054 to get 9040.

Detailed Solutions

4.

H	T	O
	⑬	
⑦	③	⑩

Number of sweets packets purchased =

H	T	O
8̶	4̶	0̶

Number of packets distributed = −

H	T	O
6	8	1

Number of packets left =

H	T	O
1	5	9

Thus, 159 packets are left.

5.

	Th	H	T	O	
Capacity of tank =	1	1	0	0	L
Quantity of water already in the tank = −		5	0	5	L
Water needed to fill the tank completely =		5	9	5	L

Thus, 595 litres of water needed to fill the tank completely.

6.

		Th	H	T	O
Tanya deposited money in bank account =	₹	8	5	1	5
She withdrew money from bank account = −	₹	5	2	1	6
Money left in her account	₹	3	2	9	9

Thus, ₹3299 left in her account.

7.

Th	H	T	O
⑥	⑯		

The sum of two numbers =

Th	H	T	O
7̶	6̶	2	5

One number = −

Th	H	T	O
3	9	2	1

Other number =

Th	H	T	O
3	7	0	4

Thus, the other number is 3704.

8.

	Th	H	T	O
Total number postcards Priya and Digvijay have =	2	7	5	0
Number of postcards Digvijay has = −	1	6	9	2
Number of postcards Priya has =	1	0	5	8

Thus, Priya has 1058 postcards.

9.

	Th	H	T	O
Number of persons visited the zoo on Friday =	3	5	4	8
Number of persons visited the zoo on Saturday = +	1	6	9	8
Number of persons visited the zoo in these two days =	5	2	4	6

	Th	H	T	O
Now, total number of persons visited in the zoo =	7	0	3	4
Number of persons visited in two days = −	5	2	4	6
Number of persons visited in the zoo on Sunday =	1	7	8	8

Thus, 1788 persons visited in the zoo on Sunday.

10. Divya had = ₹8765

	Th	H	T	O
She gave to her bother = ₹	6	5	4	2
She gave to her sister = + ₹	1	8	9	5
Total money she distributes = ₹	8	4	3	7

	Th	H	T	O
Money left = ₹	8	7	6	5
− ₹	8	4	3	7
₹	0	3	2	8

Thus, ₹328 is left with Divya.

Mental Maths (Page 64)
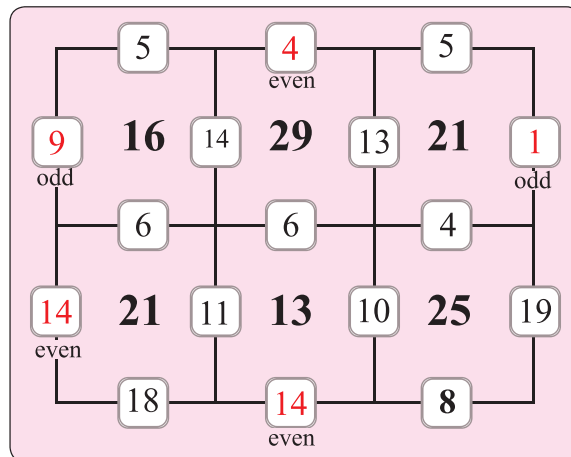
Chapter Assessment

1. (a) – (iv) 800 – 307 = 493

(c) – (iv) 740 – 0 + 225 = 740 + 225 = 965

(b) – (ii) 268 less than 500 = 500 – 268 = 232

(d) – (i) 1000 less than 1756 = 1756 – 1000 = 756

2. (a) 3295 – 0 = 3295 (b) 6782 – 6782 = 0 (c) 168 – 0 = 168 (d) 3578 – 3578 = 0

(e) 6759 – 10 = 6749 (f) 3890 – 100 = 3790

3. (a) 356 – 248 = 108 ; 526 – 417 = 109

Since, 108 < 109

∴ 356 – 248 < 526 – 417

(c) 895 – 380 = 515 ; 675 – 160 = 515

515 = 515

∴ 895 – 380 = 675 – 160

(b) 876 – 495 = 381 ; 671 – 532 = 139

Since, 381 > 139

∴ 876 – 495 > 671 – 532

(d) 3854 – 1699 = 2155 ; 8932 – 7966 = 966

2155 > 966

∴ 3854 – 1699 > 8932 – 7966

4. (a) 9678 – 8032 + 3059

Firstly, subtract 8032 from 9678. Then add 3059 to the difference obtained.

Th	H	T	O
9	6	7	8
− 8	0	3	2
1	6	4	6

Th	H	T	O
1	6	4	6
+ 3	0	5	9
4	7	0	5

(b) 9348 – 2146 + 1678

Th	H	T	O
9	3	4	8
− 2	1	4	6
7	2	0	2

Th	H	T	O
7	2	0	2
+ 1	6	7	8
8	8	8	0

(c) Same as above.

Detailed Solutions

5.

	Th	H	T	O
Number of bicycles in a shop =	6	7	5	2
Number of bicycles sold in one month = −	2	7	5	6
Number of bicycles left in the shop =	3	9	9	6

Thus, 3996 bicycles left in the shop.

6.

	Th	H	T	O
Number of marbles Sumit had =	3	6	1	5
Number of marbles he gave to his friend = −	1	9	8	6
Number of marbles he has now =	1	6	2	9

Thus, 1629 marbles left with him.

7. Smallest 3-digit number = 100
Greatest 4-digit even number = 9998
Difference = 9998 − 100 = 9898

8.

	Th	H	T	O
Number of people in an auditorium =	5	4	0	6
Number of people left the auditorium = −		1	4	0
	5	2	6	6

Number of people more entered = 5266 + 20 = 5286
Thus, 5286 people are there in the auditorium.

9. Gaurav had some amount of money in his wallet.

		Th	H	T	O
He spent money on buying clothes =	₹	3	1	0	0
He spent money for parking =	₹		1	0	0
Amount left in his wallet = +	₹		8	0	0
Amount he have in his wallet at the beginning =	₹	4	0	0	0

Thus, ₹4000 he have in the beginning in his wallet.

10. Greater number = Successor of number 8970
= 8970 + 1 = 8971
Smaller number = 1479 less than the greater number.
Smaller number = 8971 − 1479 = 7492

Brain Sizzlers (Page 66)

1.

H	T	O
5	1	5
− 3	5	7
1	5	8

2. ◯ + △ + ⌒ = 420
◯ + △ = 220
◯ + △ − ⌒ = 420 − 220 = 20

CHAPTER 4 : MULTIPLICATION

Let's Recall

1.
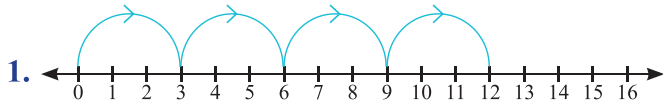
$4 \times 3 = \underline{12}$

4 times 3 is $\underline{12}$

2. (a) $22 + 22 + 22 + 22 + 22 = \underline{5} \times \underline{22} = \underline{110}$

(b) $31 + 31 + 31 + 31 + 31 = \underline{5} \times \underline{31} = \underline{155}$

3. (a)

	T	O
	①	
		4
×		4
	1	6

(b)

	H	T	O
		①	
		5	2
×			3
	1	5	6

(c)

	H	T	O
		①	
		3	0
×			5
	1	5	0

(d)

	H	T	O
	②	③	
		4	6
×			6
	2	7	6

Quick Check (Page 68)

1. The number to be multiplied is called <u>multiplicand</u>.

2. The number by which we multiply is called the <u>multiplier</u>.

3. The result of multiplication is called the <u>product</u>.

Practice Time 4A

1.

	Multiplication Fact	Multiplicand	Multiplier	Product
(a)	$3 \times 2 = 6$	3	2	6
(b)	$4 \times 4 = 16$	4	4	16
(c)	$10 \times 5 = 50$	10	5	50

2. (a)

	6
×	2
	12

(b)

	9
×	3
	27

(c)

	10
×	4
	40

(d)

	2
×	7
	14

(e)

	10
×	9
	90

Practice Time 4B

1.

	T	O
	3	4
×		2
	6	8

2.

	T	O
	2	2
×		4
	8	8

3.

	T	O
	3	0
×		3
	9	0

4.

	H	T	O
	2	3	3
×			2
	4	6	6

5.

	H	T	O
	1	2	3
×			3
	3	6	9

6.

	H	T	O
	4	5	3
×			1
	4	5	3

7.

	H	T	O
	3	2	2
×			3
	9	6	6

8.

	H	T	O
	2	1	2
×			4
	8	4	8

Practice Time 4C

1. (a)

	H	T	O
	⑦	⑦	
		8	8
×			9
	7	9	2

(b)

	H	T	O
	②	②	
	1	6	8
×			3
	5	0	4

(c)

	Th	H	T	O
	⑤	⑦	③	
		6	9	4
×				8
	5	5	5	2

(d)

	Th	H	T	O
		①	①	
		5	3	4
×				4
	2	1	3	6

2. (a) 83×8.

Write the number in correct column and multiply using the following steps:

Step 1. Multiply the ones.

3 ones $\times 8 = 24$ ones

$= 2$ tens 4 ones

Write 4 in ones column and carry over 2 in the tens column.

	H	T	O
		②	
		8	3
×			8
			4

Step 2. Multiply the tens and regroup.

8 tens $\times 8 = 64$ tens

64 tens $+ 2$ tens (carried over)

$= 66$ tens

$= 6$ hundreds and 6 tens

Write 6 in the tens column and carry over 6 in the hundreds column.

	H	T	O
	⑥	②	
		8	3
×			8
	6	6	4

Thus, $83 \times 8 = 664$.

(b) 77×6.

H	T	O
	④	
	7	7
×		6
		2

Write the number in correct column and multiply using the following steps:

Step 1. Multiply the ones.

$8 \text{ tens} \times 8 = 64 \text{ tens}$

$7 \text{ ones} \times 6 = 42 \text{ ones}$

$= 4 \text{ tens } 2 \text{ ones}$

Write 2 in ones column and carry over 4 in the tens column.

Step 2. Multiply the tens and regroup.

H	T	O
④	④	
	7	7
×		6
4	6	2

$7 \text{ tens} \times 6 = 42 \text{ tens}$

$42 \text{ tens} + 4 \text{ tens (carried over)}$

$= 46 \text{ tens.}$

$= 4 \text{ hundreds } 6 \text{ tens.}$

Write 6 in the tens column and carry over 4 in the hundreds column.

Thus, $77 \times 6 = 462$.

(c) 305×2.

H	T	O
	①	
3	0	5
×		2
		0

Write the number in correct column and multiply using the following steps:

Step 1. Multiply the ones.

$5 \text{ ones} \times 2 = 10 \text{ ones}$

$= 1 \text{ tens } 0 \text{ ones}$

Write 0 in ones column and carry over 1 in the tens column.

Step 2. Multiply the tens.

H	T	O
	①	
3	0	5
×		2
6	1	0

$0 \text{ tens} \times 2 = 0 \text{ tens}$

$0 \text{ tens} + 1 \text{ tens (carried over)}$

$= 1 \text{ tens.}$

Write 1 in the tens column.

Step 3. Multiply the hundreds.

H	T	O
	①	
3	0	5
×		2
6	1	0

$3 \text{ hundreds} \times 2$

$= 6 \text{ hundreds}$

Write 6 in the tens column.

Thus, $305 \times 2 = 610$

(d), (e), (f) Same as above part (c).

Practice Time 4D

1. (a)

H	T	O
	2	1
×	3	4
	8	4
+ 6	3	0
7	1	4

(b)

Th	H	T	O
		4	2
×		4	2
		8	4
+	1	6	8	0
	1	7	6	4

(c)

Th	H	T	O
		2	3
×		5	6
	1	3	8
+	1	1	5	0
	1	2	8	8

(d)

Th	H	T	O
		7	3
×		6	4
	2	9	2
+	4	3	8	0
	4	6	7	2

(e)

Th	H	T	O
	2	0	4
×		1	2
	4	0	8
+	2	0	4	0
	2	4	4	8

(f)

Th	H	T	O
	3	4	3
×		2	2
	6	8	6
+	6	8	6	0
	7	5	4	6

(g)

Th	H	T	O
	2	1	6
×		4	3
	6	4	8
+	8	6	4	0
	9	2	8	8

(h)

Th	H	T	O
	2	7	3
×		2	7
1	9	1	1
+	5	4	6	0
	7	3	7	1

2. (a) 14×22.

Expand the multiplier 22 as 2 tens + 2 ones now, follow these steps:

Step 1. Multiply 14 by 2 ones.

H	T	O
	1	4
×	2	2
	2	8

$14 \times 2 \text{ ones} = 28 \text{ ones}$

Write 28 as the first line product.

Step 2. Multiply 14 by 2 tens.

H	T	O
	1	4
×	2	2
	2	8
2	8	0

$14 \times 2 \text{ tens} = 280$

Write 280 as the second line product.

Step 3. Multiply the hundreds.

H	T	O
	1	4
×	2	2
	2	8
+ 2	8	0
3	0	8

$14 \times 2 \text{ tens} = 280$

$3 \text{ hundreds} \times 2 = 6 \text{ hundreds}$

Write 6 in the tens column.

Thus, $305 \times 2 = 610$

(b) 31×16.

Expand the multiplier 16 as 1 tens + 6 ones now, follow these steps:

Step 1. Multiply 31 by 6 ones.

31×6 ones = 186 ones

Write 186 as the first line product.

H	T	O
	3	1
×	1	6
1	8	6

Step 2. Multiply 31 by 1 ten.

31×1 ten = 310

Write 310 as the second line product.

H	T	O
	3	1
×	1	6
1	8	6
3	1	0

Step 3. Add the products obtained in step and step 2.

$186 + 310 = 496$

Thus, $31 \times 16 = 496$.

(c) and (d) → Same as above part (a) and (b).

H	T	O
	3	1
×	1	6
1	8	6
+ 3	1	0
4	9	6

(e) 234×12.

Expand the multiplier 12 as $10 + 2 = 1$ ten + 2 ones and multiply 234 with it by using the following steps:

Step 1. Multiply 234 by 2 ones.

234×2 ones = 468 ones

Write 468 as the first line product.

Th	H	T	O
	2	3	4
×		1	2
	4	6	8

Step 2. Multiply 234 by 1 ten.

234×1 ten = 234 ×

10 ones

= 2340

Write 2340 as second line product.

Th	H	T	O
	2	3	4
×		1	2
	4	6	8
+ 2	3	4	0

Step 3. Add the products.

$468 + 2340 = 2808$

Thus, $234 \times 12 = 2808$.

(f), (g) and (h) → Same as above part (e).

Th	H	T	O
	2	3	4
×		1	2
	4	6	8
+ 2	3	4	0
2	8	0	8

3. (a) 21×11.

Multiply 21 by 11 using lattice multiplication step by step as shown below:

Step 1. Since 21 and 11 are both 2-digit numbers. So, draw a 2 × 2 grid.

Also, draw diagonal lines in each box as shown.
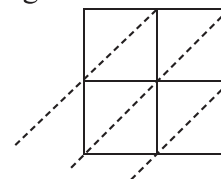
Step 2. Write the multiplicand on top and the multiplier on the right of the grid as shown.

Step 3. Multiply the numbers and write the tens place digit in the upper triangle of each box and the ones digit at the lower triangle of each box.

Step 4. Add the numbers of boxes diagonally to find the answer while adding the numbers diagonally.

Thus, $21 \times 11 = 231$

(b) and (c) → Same as above part (a).
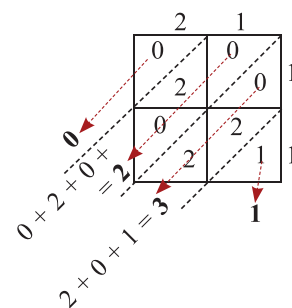
Think and Answer (Page 78)

Given multiplication fact $\boxed{10} \times 100 = \boxed{1000}$

Pair is 10 and 1000.

Practice Time 4E

1. (a) $\underline{100} \times 10 = 1000$ (b) $6 \times 100 = \underline{600}$

(c) $7 \times \underline{500} = 3500$ (d) $\underline{700} \times 3 = 2100$

(e) $8 \times 60 = 480$ (f) $11 \times 60 = \underline{660}$

(g) $5 \times 20 = \underline{100}$ (h) $8 \times \underline{40} = 320$

(i) $\underline{6} \times 20 = 120$

2. (a) 96×9.

Step 1. Write 96 as $90 + 6$.

Step 2. Multiply each term of expanded form by 9 and add the products so obtained.

$90 \times 9 =$

	8	1	0

$6 \times 9 = +$

		5	4

	8	6	4

Thus, $96 \times 9 = 864$

Detailed Solutions

(c) 36 × 4.
Step 1. Write 36 as 30 + 6.
Step 2. Multiply each term of expanded form by 4 and add the products so obtained.

30 × 4 =	1	2	0
6 × 4 = +		2	4
	1	4	4

Thus, 36 × 4 = 144

(b), (d), (e) and (f) → Same as part (a), and (c).

3. (a) 50 × 10 = 500 (b) 10 × 16 = 160
(c) 12 × 30 = 360 (d) 20 × 60 = 1200
(e) 124 × 10 = 1240 (f) 8 × 100 = 800
4. (a) 20 × 700 = 14000 (b) 500 × 16 = 8000
(c) 900 × 9 = 8100 (d) 200 × 19 = 3800
(e) 31 × 300 = 9300 (f) 17 × 100 = 1700

Practice Time 4F

1. (a) 11 × 1 = 11 (b) 28 × 1 = 28
(c) 15 × 6 = 6 × 15 (d) 25 × 39 = 39 × 25
(e) 0 × 29 = 0 (f) 175 × 0 = 0
2. (a) 14 × 8 = 112 = 8 × 14 (b) 53 × 7 = 371 = 7 × 53
(c) 42 × 16 = 672 = 16 × 42
(d) 14 × 20 = 280 = 20 × 14
3. (a) 55 × 24.

55 × 24 = 1320
Thus, the actual product is 1320.

Th	H	T	O
		6	0
×		2	0
		0	0
+ 1	2	0	0
1	2	0	0

Now, 55 rounded off to the nearest 10 is 60.
24 rounded off to the nearest 10 is 20.
Now, 60 × 20 = 1200
Thus, the estimated product = 1200.
(b) 28 × 13.

28 × 13 = 364
Thus, the actual product is 364.
Now, 28 rounded off to the nearest 10 is 30.
13 rounded off to the nearest 10 is 10.

H	T	O
	3	0
×	1	0
	0	0
+ 3	0	0
3	0	0

Now, 30 × 10 = 300
Thus, the estimated product = 300.
(c) 63 × 34.

63 × 34 = 2142
Thus, the actual product is 2142.

Now, 63 rounded off to the nearest 10 is 60.
34 rounded off to the nearest 10 is 30.
Now, 60 × 30 = 1800
Thus, the estimated product = 1800.

Th	H	T	O
		6	0
×		3	0
		0	0
+ 1	8	0	0
1	8	0	0

(d) 44 × 33.

44 × 33 = 1452
Thus, the actual product is 1452.
Now, 44 rounded off to the nearest 10 is 40.
33 rounded off to the nearest 10 is 30.
Now, 40 × 30 = 1200
Thus, the estimated product = 1200.

Th	H	T	O
		4	0
×		3	0
		0	0
+ 1	2	0	0
1	2	0	0

(e), (f), (g) and (h) → Same as above explanations.

Practice Time 4G

1. Number of students in a class = 46
Number of each student contributes = ₹25
Total money collected in the class = 46 × 25 = ₹1150
Therefore, Total money collected in the class is ₹1150.

Th	H	T	O
		4	6
×		2	5
	2	3	0
+	9	2	0
1	1	5	0

2. Number of matchsticks in one matchbox = 50
Number of matchboxes = 73
50 × 73 = 3650 matchsticks
Therefore, 73 matchboxes contains 3650 matchsticks.

Th	H	T	O
		5	0
×		7	3
	1	5	0
+ 3	5	0	0
3	6	5	0

3. Number of paper clips in one packet = 184
Number of packets = 24
So, the number of paper clips in 24 packets = 184 × 24 = 4416 paper clips.
Therefore, 24 packets contain 4416 paper clips.

Th	H	T	O
	1	8	4
×		2	4
	7	3	6
+ 3	6	8	0
4	4	1	6

4. Number of beads in one garland = 135
Number of garlands = 36
So, the number of beads in 36 garlands = 135 × 36 = 4860 beads.
Therefore, 36 garlands contain 4860 beads.

Th	H	T	O
	1	3	5
×		3	6
	8	1	0
+ 4	0	5	0
4	8	6	0

5. Number of slabs in one box of chocolates = 24

Number of boxes = 134

So, the number of slabs in 134 boxes = 24 × 134 = 3216 slabs.

Therefore, 134 boxes contain 3216 slabs.

Th	H	T	O
	1	3	4
×		2	4
	5	3	6
+ 2	6	8	0
3	2	1	6

6. Cost of one wooden chair = ₹175

Cost of 34 such chairs

= ₹175 × 34 = ₹5950.

Therefore, 34 chairs cost is ₹5950.

Th	H	T	O
	1	7	5
×		3	4
	7	0	0
+ 5	2	5	0
5	9	5	0

Mental Maths (Page 81)

1.

3	×	3	=	9
×		×		×
100		15		10
=		=		=
300		45	×	90	=	4050

2.

8	×	9	=	72
×				×
10	=	2	×	5
=				=
80				360

Chapter Assessment

1. (a) – (i) The place value of 8 in 9834 is = 8 × 100

(b) – (ii) Five ₹20 notes = 5 × 20 = ₹100

2. (a) 9 × 1 = <u>9</u>   (b) 4 × <u>0</u> = 0

(c) 8 × 0 = <u>0</u>   (d) 0 × 0 = <u>0</u>

(e) 5 × 1 = <u>5</u>   (f) 8 × <u>1</u> = 8

(g) 9 × 7 = <u>7</u> × 9   (h) 4 × 5 = 5 × <u>4</u>

(i) <u>7</u> × 8 = 8 × 7

3. (a) 1 × 8 = 8   (10 − 2   = 8)

2 × 8 = 16   (20 − 4   = 16)

3 × 8 = <u>24</u>   (30 − 6   = <u>24</u>)

4 × 8 = 32   (40 − 8   = 32)

5 × 8 = 40   (50 − 10 = 40)

6 × 8 = <u>48</u>   (60 − 12 = 48)

7 × 8 = <u>56</u>   (70 − 14 = 56)

8 × 8 = 64   (80 − <u>16</u> = 64)

9 × 8 = <u>72</u>   (90 − 18 = <u>72</u>)

10 × 8 = <u>80</u>   (100 − 20 = 80)

(b) 1 × 9 = 9   (0 + 9 = 9)

2 × 9 = 18   (1 + 8 = 9)

3 × 9 = <u>27</u>   (2 + 7 = <u>9</u>)

4 × 9 = 36   (<u>3</u> + 6 = 9)

5 × 9 = 45   (4 + 5 = 9)

6 × 9 = 54   (5 + 4 = 9)

7 × 9 = <u>63</u>   (6 + 3 = 9)

8 × 9 = 72   (7 + <u>2</u> = 9)

9 × 9 = 81   (8 + <u>1</u> = 9)

10 × 9 = 90   (9 + <u>0</u> = 9)

4. (a) 72 × 1 = 72

(b) 67 × 23 = 1541   (c) 73 × 36 = 2628

Th	H	T	O
		6	7
×		2	3
	2	0	1
+ 1	3	4	0
1	5	4	1

Th	H	T	O
		7	3
×		3	6
	4	3	8
+ 2	1	9	0
2	6	2	8

(d) and (e) — Same as part (b).

5. (a) Number of passengers a aeroplane can carry = 485

Number of aeroplanes = 17

So, number of passengers that 17 aeroplanes can carry = 485 × 17 = 8245

Therefore, 17 aeroplanes can carry 8245 passengers.

Th	H	T	O
	4	8	5
×		1	7
3	3	9	5
+ 4	8	5	0
8	2	4	5

(b) The cost of one water bottle = ₹25

The cost of 10 such water bottles = ₹25 × 10 = ₹250.

Therefore, the cost of 10 water bottles is ₹250.

(c) Number of toys in one box = 12

Number of toys in 382 boxes = 382 × 12 = 4584

Therefore, 4584 toys are there in all.

Th	H	T	O
	3	8	2
×		1	2
	7	6	4
+ 3	8	2	0
4	5	8	4

Detailed Solutions

(*d*) Number of chairs in each row = 9

Number of chairs in 28 rows = 28 × 9 = 252

Therefore, 252 chairs are there in all.

Brain Sizzlers (Page 83)

1.

×	3	5	6
9	27	45	54
8	24	40	48
7	21	35	42

2.

×	5	6	3
9	45	54	27
4	20	24	12
2	10	12	6

CHAPTER 5 : DIVISION

Let's Recall

1. (*a*) 16 ÷ 4 = 4 ; Each child gets 4 ice-creams.

(*b*) 9 ÷ 3 = 3 ; Each child gets 3 lollipops.

2. (*a*) 10 ÷ 5 = 2   (*b*) 18 ÷ 3 = 6

(*c*) 20 ÷ 4 = 5

3. (*a*) 25 ÷ 5 = 5   (*b*) 21 ÷ 3 = 7

Think and Answer (Page 87)

Distance travelled by a snail in 5 minutes = 30 inches

Distance travelled by a snail in 1 minute

= 30 inches ÷ 5 = 6 inches.

Quick Check (Page 87)

1. 93 ÷ 31 = 3

$$\begin{array}{r} 93 \\ -\ 31 \\ \hline 62 \\ -\ 31 \\ \hline 31 \\ -\ 31 \\ \hline 0 \end{array}$$

2. 32 ÷ 8 = 4

$$\begin{array}{r} 32 \\ -\ 8 \\ \hline 24 \\ -\ 8 \\ \hline 16 \\ -\ 8 \\ \hline 8 \\ -\ 8 \\ \hline 0 \end{array}$$

3. 420 ÷ 105 = 4

$$\begin{array}{r} 420 \\ -\ 105 \\ \hline 315 \\ -\ 105 \\ \hline 210 \\ -\ 105 \\ \hline 105 \\ -\ 105 \\ \hline 0 \end{array}$$

Practice Time 5A

1. (*a*) 12 ÷ 2 = 6   (*b*) 18 ÷ 6 = 3

2. (*a*) 15 ÷ 3 = 5   (*b*) 20 ÷ 5 = 4

(*c*) 36 ÷ 6 = 6

3. (*a*) 18 – 2 = 16, 16 – 2 = 14, 14 – 2 = 12,

12 – 2 = 10, 10 – 2 = 8, 8 – 2 = 6,

6 – 2 = 4, 4 – 2 = 2, 2 – 2 = 0, *i.e.*, 9 times

(*b*) 27 – 3 = 24, 24 – 3 = 21, 21 – 3 = 18,

18 – 3 = 15, 15 – 3 = 12, 12 – 3 = 9,

9 – 3 = 6, 6 – 3 = 3, 3 – 3 = 0, *i.e.*, 9 times

(*c*) 28 – 4 = 24, 24 – 4 = 20, 20 – 4 = 16,

16 – 4 = 12, 12 – 4 = 8, 8 – 4 = 4, 4 – 4 = 0,

i.e., 7 times

(*d*) 40 – 8 = 32, 32 – 8 = 24, 24 – 8 = 16,

16 – 8 = 8, 8 – 8 = 0, *i.e.*, 5 times

4. (*a*) 48 – 6 = 42, 42 – 6 = 36, 36 – 6 = 30,

30 – 6 = 24, 24 – 6 = 18, 18 – 6 = 12,

12 – 6 = 6, 6 – 6 = 0

∴ 48 ÷ 6 = 8

(*b*) 65 – 13 = 52, 52 – 13 = 39, 39 – 13 = 26,

16 – 13 = 13, 13 – 13 = 0

∴ 65 ÷ 13 = 5

(*c*) 60 – 15 = 45, 45 – 15 = 30, 30 – 15 = 15,

15 – 15 = 0

∴ 60 ÷ 15 = 4

(*d*), (*e*) and (*f*) — Same as above

(*g*) 318 – 106 = 212, 212 – 106 = 106,

106 – 106 = 0

∴ 318 ÷ 106 = 3

(*h*) 500 – 100 = 400, 400 – 100 = 300,

300 – 100 = 200, 200 – 100 = 100,

100 – 100 = 0

∴ 500 ÷ 100 = 5

Think and Answer (Page 89)

	Dividend	Divisor	Quotient	Division fact
1.	32	4	8	32 ÷ 4 = 8
2.	63	7	9	63 ÷ 7 = 9
3.	30	3	10	30 ÷ 3 = 10
4.	56	4	14	56 ÷ 4 = 14
5.	60	5	12	60 ÷ 5 = 12

Practice Time 5B

1. (*a*) 4 × 8 = 32   (*b*) 9 × 6 = 54   (*c*) 7 × 8 = 56

32 ÷ 4 = 8   54 ÷ 6 = 9   56 ÷ 8 = 7

32 ÷ 8 = 4   54 ÷ 9 = 6   56 ÷ 7 = 8

2. (a) $40 \div 5 = 8$ (b) $44 \div 11 = 4$

        $8 \times 5 = 40$ $4 \times 11 = 44$

  (c) $48 \div 8 = 6$

        $6 \times 8 = 48$

3.   **Multiplication fact**   **Division fact**

  (a) $3 \times 4 = 12$ $12 \div 4 = 3$

      $4 \times 3 = 12$ $12 \div 3 = 4$

  (b) $5 \times 10 = 50$ $50 \div 10 = 5$

      $10 \times 5 = 50$ $50 \div 5 = 10$

  (c) $5 \times 7 = 35$ $35 \div 7 = 5$

      $7 \times 5 = 35$ $35 \div 5 = 7$

  (d) $8 \times 5 = 40$ $40 \div 5 = 8$

      $5 \times 8 = 40$ $40 \div 8 = 5$

4. (a) $43 \div 1 = \underline{43}$ (b) $0 \div 14 = \underline{0}$

  (c) $10 \div 10 = \underline{1}$ (d) $71 \div \underline{1} = 71$

  (e) $26 \div 26 = \underline{1}$ (f) $38 \div 1 = \underline{38}$

5. (a) $32 \div 8 = \boxed{4}$ (b) $48 \div 12 = \boxed{4}$

  (c) $49 \div 7 = \boxed{7}$ (d) $54 \div 9 = \boxed{6}$

  (e) $15 \div 5 = \boxed{3}$ (f) $27 \div 9 = \boxed{3}$

  (g) $18 \div 2 = \boxed{9}$ (h) $30 \div 3 = \boxed{10}$

6. (a)

$$\text{Divisor} \, \nearrow \, 8)\overline{67}(8 \leftarrow \text{Quotient}$$
$$\underline{-64}$$
$$3 \leftarrow \text{Remainder}$$
$$Q = 8, \, R = 3$$

Dividend (labelled above 67)

> **Checking:**
> Quotient × Divisor + Remainder = $8 \times 8 + 3$
>   = $64 + 3$
>   = 67 = Dividend
> Thus, the answer is correct.

(b)

$$9)\overline{50}(5$$
$$\underline{-45}$$
$$5$$
$$Q = 5, \, R = 5$$

> **Checking:**
> Quotient × Divisor + Remainder = $5 \times 9 + 5$
>   = $45 + 5$
>   = 50 = Dividend
> Thus, the answer is correct.

(c)

$$3)\overline{25}(8$$
$$\underline{-24}$$
$$1$$
$$Q = 8, \, R = 1$$

> **Checking:**
> Quotient × Divisor + Remainder = $8 \times 3 + 1$
>   = $24 + 1$
>   = 25 = Dividend
> Thus, the answer is correct.

(d)

$$6)\overline{38}(6$$
$$\underline{-36}$$
$$2$$
$$Q = 6, \, R = 2$$

> **Checking:**
> Quotient × Divisor + Remainder = $6 \times 6 + 2$
>   = $36 + 2$
>   = 38 = Dividend
> Thus, the answer is correct.

Think and Answer (Page 93)

1. $Q = 12$, $D = 4$ and $R = 0$

     Dividend = (Quotient × Divisor) + Remainder

              = $12 \times 4 + 0$

     Dividend = 48

2. $Q = 320$, $D = 3$ and $R = 0$

     Dividend = (Quotient × Divisor) + Remainder

              = $320 \times 3 + 2 = 960 + 2 = 962$

Practice Time 5C

1. $67 \div 6$

  Step 1. First, arrange the number in the long-division form.

$$6)\overline{67}(11 \rightarrow Q$$
$$\underline{-6\downarrow}$$
$$07$$
$$\underline{-6}$$
$$1 \rightarrow R$$

  Step 2. Then decide 6 tens by 6.

  We know that, $6 \times 1 = 6$.

  So, 6 tens $\div$ 6 = 1 ten

  Write 1 in the tens place of the quotient and write 6 in the tens place below the dividend.

  Step 3. Subtract the digits of the column.

               $6 - 6 = 0$

  Step 4. Now, $0 < 6$, So bring down 7 ones.

  Step 5. Divide 7 ones by 6.

  We know that $6 \times 1 = 6 < 7$.

  Write 1 in the ones place of the quotient and 6 in the ones place below the dividend as shown.

Step 6. Subtract the digits of the ones column.

$$7 - 6 = 1$$

Thus, quotient (Q) = 11, remainder = 1

> **Checking:**
> Quotient × Divisor + Remainder = 11 × 6 + 1
> $$= 66 + 1$$
> $$= 67 = \text{Dividend}$$
> Thus, the answer is correct.

2. to **8.** — Same as question 1.

Think and Answer (Page 95)

1.
$$3 \overline{)76} \,(②⑤$$
$$-6 \downarrow$$
$$①6$$
$$-①⑤$$
$$①$$

2.
$$4 \overline{)984} \,(②④⑥$$
$$-⑧\downarrow$$
$$①\,8$$
$$-①⑥\downarrow$$
$$②④$$
$$-\quad②④$$
$$⓪$$

3.
$$7 \overline{)5749} \,(⑧②①$$
$$-56 \downarrow$$
$$①4$$
$$-\quad①④\downarrow$$
$$⓪9$$
$$-\quad⓪⑦$$
$$②$$

Practice Time 5D

1. $63 \div 4$
$$4 \overline{)63} \,(15 \to Q$$
$$-4\downarrow$$
$$23$$
$$-20$$
$$03 \to R$$

> **Checking:**
> Quotient × Divisor + Remainder = 15 × 4 + 3
> $$= 60 + 3$$
> $$= 63 = \text{Dividend}$$
> Thus, the answer is correct.

2. $89 \div 5$
$$5 \overline{)89} \,(17 \to Q$$
$$-5\downarrow$$
$$39$$
$$-35$$
$$4 \to R$$

> **Checking:**
> Quotient × Divisor + Remainder = 17 × 5 + 4
> $$= 85 + 4$$
> $$= 89 = \text{Dividend}$$
> Thus, the answer is correct.

3. to **6.** — Same as above.

7. $803 \div 6$
$$6 \overline{)803} \,(133 \to Q$$
$$-6\downarrow$$
$$20$$
$$-18\downarrow$$
$$023$$
$$-\quad18$$
$$05 \to R$$

> **Checking:**
> Quotient × Divisor + Remainder = 133 × 6 + 5
> $$= 798 + 5$$
> $$= 803 = \text{Dividend}$$
> Thus, the answer is correct.

8. to **16.** — Same as above.

17. $4002 \div 6$
$$6 \overline{)4002} \,(667 \to Q$$
$$-36\downarrow$$
$$040$$
$$-\quad36\downarrow$$
$$042$$
$$-\quad42$$
$$0 \to R$$

> **Checking:**
> Quotient × Divisor + Remainder = 667 × 6 + 0
> $$= 4002 + 0$$
> $$= 4002 = \text{Dividend}$$
> Thus, the answer is correct.

18. to **20.** — Same as above.

Think and Answer (Page 96)

$$412 \div 10$$
$$10 \overline{)412} \,(41 \to Q$$
$$-40\downarrow$$
$$012$$
$$-\quad10$$
$$02 \to R$$

41 packets and 2 pencils are left.

Practice Time 5E

	Dividend	Divisor	Quotient	Remainder
1.	50	10	5	0
2.	478	10	47	8
3.	379	10	37	9
4.	1265	100	12	65
5.	4278	100	42	78
6.	8000	100	80	0

Practice Time 5F

1. Total no. of legs = 84

Number of legs of a cow = 4

Number of cows = 84 ÷ 4 = 21

Thus, 21 cows were there.

```
4) 84 (21
  − 8↓
    04
  −  4
     0
```

2. The cost of 3 clocks = ₹825

The cost of 1 clock = ₹825 ÷ 3

$\qquad$ = ₹275

$\qquad$ Thus, the cost of 1 clock is ₹275

```
3) 825 (275
  − 6↓
    22
  − 21↓
    015
  − 015
      0
```

3. Total number of pens = 368

Number of boxes = 7

Number of pens in each box = 368 ÷ 7

Thus, each box contains 52 pens and 4 pens will remain unpacked.

```
7) 368 (52
  − 35↓
     18
  −  14
      4
```

4. Total number of chairs in an auditorium = 832

Number of rows = 8

Number of chairs in each row

$\qquad$ = 832 ÷ 8

Thus, 104 chairs are there in each row.

```
8) 832 (104
  − 8↓↓
    032
  − 032
      0
```

5. Distance travelled by a car in 6 days

$\qquad$ = 636 km

Distance covered by the car in a day

$\qquad$ = 636 ÷ 6 = 106 km

Thus, the distance covered by the car in a day is 106 km.

```
6) 636 (106
  − 6↓↓
    036
  − 036
      0
```

6. Total no. of students = 656

Number of students can sit on a bench = 4

Required benches = 656 ÷ 4 = 164

Thus, 164 benches will be required for 656 students.

```
4) 656 (164
  − 4↓
    25
  − 24↓
    016
  − 016
      0
```

7. Total collection = ₹735

Number of children = 5

Contribution of each child

$\qquad$ = ₹735 ÷ 5 = 147

Thus, each child collect ₹147.

```
5) 735 (147
  − 5↓
    23
  − 20↓
    035
  −  35
      0
```

8. Total number of sweets = 146

Number of boys = 9

Number of sweets each boy got

$\qquad$ = 146 ÷ 9

Thus, each boy got 16 sweets and 2 sweets will remain undivided.

```
9) 146 (16
  − 9↓
    56
  − 54
    02
```

9. A man earns in a week = ₹994

Since, 1 week = 7 days

∴ A man earns in a day = ₹994 ÷ 7

$\qquad$ = ₹142

Thus, man earns ₹142 in one day.

```
7) 994 (142
  − 7↓
    29
  − 28↓
    014
  − 014
      0
```

10. Total number of straws = 1508

Number of straws in each bundle

$\qquad$ = 100

Number of bundles = 1508 ÷ 100

Thus, 15 bundles can be made and 8 straw are left.

```
100) 1508 (15
   − 100↓
     0508
   −  500
       08
```

Practice Time 5G

1. Keyword used is went (left). So, choose the operation −.

15 − 2 = 13

Therefore, 13 students attended the class.

2. Keyword used is 'in all'. So, choose the operation +.

16 + 13 = 29

Therefore, she buys 29 carrots in all.

3. The value of '1 unit' is given. To find the value of 'more units', choose the operation ×.

$8 \times 5 = 40$

Therefore, 8 pens cost ₹40.

4. The value of '1 unit' is given. To find the value of 'more units', choose the operation ×.

$25 \times 6 = 150$

Therefore, 150 mangoes are there in 6 such baskets.

5. The value of 'more units' is given. To find the value of '1 unit', choose the operation ÷.
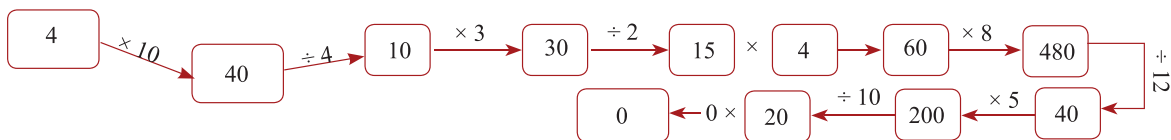
$200 \div 10 = 20$

Therefore, 20 towers can be made.

Mental Maths (Page 99)

Start: → 30 42 9 52 3
30 15 8 18 22
35 49 5 57 33
14 1 ← 6 7 10
25 12 18 ← 3 ← 21
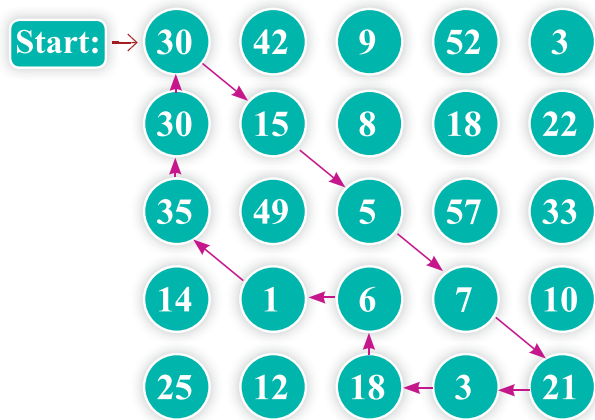
You will reach the number 30.

Brain Sizzlers (Page 100)

4 → ×10 → 40 → ÷4 → 10 → ×3 → 30 → ÷2 → 15 → × → 4 → 60 → ×8 → 480 → ÷12 →
40 → ×5 → 200 → ÷10 → 20 → 0× → 0

Chapter Assessment

1. (a) – (iii) $84 \div 7 = 12$

(b) – (iii) If $4424 \div 4 = 1106$, then remainder = 0

$$4 \overline{)4424} (1106$$
$$\underline{-4}$$
$$\quad 04$$
$$\underline{-\ 4}$$
$$\quad 024$$
$$\underline{-\ 024}$$
$$\qquad 0$$

(c) – (ii) When a number is divided by 10, then the remainder is the ones digit of that number.

So, in the given numbers the number 1889 has the greatest digit at ones place.

Hence, when we divide 1889 by 10, we get the greatest remainder, i.e., 9.

2. (a) False   (b) True   (c) False
(d) True   (e) False

3. (a) $492 \div 7$

$$7 \overline{)492} (70 \to Q$$
$$\underline{-49}$$
$$\quad 02$$
$$\underline{-\ 00}$$
$$\quad\ 2 \to R$$

$\therefore$ Q = 70, R = 2

Checking:
Quotient × Divisor + Remainder = $7 \times 70 + 2$
$= 490 + 2$
$= 492 =$ Dividend
Thus, the answer is correct.

(b) $747 \div 8$

$$8 \overline{)747} (93 \to Q$$
$$\underline{-72}$$
$$\quad 027$$
$$\underline{-\ 24}$$
$$\quad\ 03 \to R$$

$\therefore$ Q = 93, R = 3

Checking:
Quotient × Divisor + Remainder = $93 \times 8 + 3$
$= 744 + 3$
$= 747 =$ Dividend
Thus, the answer is correct.

(c) and (d) — Same as part (a) and (b).

4. (a) The cost of 5 toy cars = ₹100
The cost of 1 toy car = ₹100 ÷ 5
= ₹20

$$5 \overline{)100} (20$$
$$\underline{-10}$$
$$\quad 00$$
$$\underline{-\ 00}$$
$$\qquad 0$$

Thus, the cost of 1 toy car is ₹20.

(b) The product of two numbers
= 725
One number = 5
Other number = $725 \div 5 = 145$
Thus, the other number is 145.

$$5 \overline{)725} (145$$
$$\underline{-5}$$
$$\quad 22$$
$$\underline{-20}$$
$$\quad 025$$
$$\underline{-\ 25}$$
$$\qquad 0$$

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(c) 9 students planted trees on earth day = 891

1 student planted trees on earth day = 891 ÷ 9 = 99

Thus, 99 trees were planted by one student.

$$9)\overline{891}(99$$
$$\underline{-\ 81\downarrow}$$
$$081$$
$$\underline{-\ 81}$$
$$0$$

(d) Cost of 6 tickets = ₹540

Cost of 1 ticket = ₹540 ÷ 6

= ₹90

Thus, the cost of 1 ticket is ₹90.

$$6)\overline{540}(90$$
$$\underline{-\ 54\downarrow}$$
$$0$$
$$\underline{-\ 0}$$
$$0$$

(e) Distance covered by an aeroplane in 2 hours = 968 km.

= 968 ÷ 2

= 484 km

Thus the aeroplane flies 484 km in 1 hour.

$$2)\overline{968}(484$$
$$\underline{-\ 8\downarrow}$$
$$16$$
$$\underline{-\ 16\downarrow}$$
$$08$$
$$\underline{-\ 8}$$
$$0$$

(f) Total no. of notebooks = 865

Number of notebooks given to each child = 8

Number of notebooks each child will get = 865 ÷ 8

Thus, each child got 108 notebooks and 1 notebook left undistributed.

$$8)\overline{865}(108$$
$$\underline{-\ 8\downarrow\downarrow}$$
$$065$$
$$\underline{-\ 64}$$
$$01$$

(g) Total number of bananas = 2 dozen = 2 × 12 = 24 bananas

(Since, 1 dozen =12 items)

Number of monkeys = 4

Number of bananas each monkey will get = 24 ÷ 4 = 6

Thus, each monkey got 6 bananas.

$$4)\overline{24}(6$$
$$\underline{-\ 24}$$
$$0$$

Maths Fun (Page 102)

1. ×4 → ÷6 → −3 → +9

12 | 48 | 8 | 5 | 14

2. ÷8 → ×5 → −31 → +11

56 | 7 | 35 | 4 | 15

3. ÷8 → ×9 → +20 → −46

32 | 4 | 36 | 56 | 10

4. ÷10 → +8 → ×3 → −36
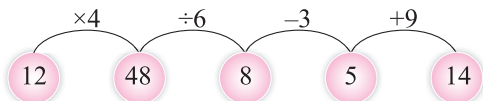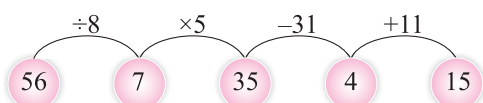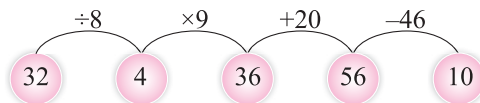
120 | 12 | 20 | 60 | 24
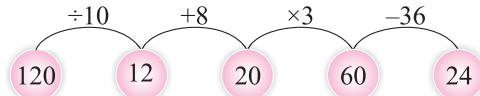
Who has become the new king of the jungle? Lion.

CHAPTER 6 : FRACTIONS

Let's Recall

1. Equal parts = (a) and (c)

Unequal parts = (b) and (d)

2. (a), (b) and (d)

Think and Answer (Page 107)

MATHEMATICS; Total letters = 11

Vowels = 4; Fraction = $\dfrac{4}{11}$

Think and Answer (Page 107)

1. Total triangles = 25

Shaded triangles = 10

Fraction = $\dfrac{10}{25}$

2. Total triangles = 25

Unshaded triangles = 15

Fraction = $\dfrac{15}{25}$

Practice Time 6A (Page 108)

1. Shaded · Shaded · Shaded
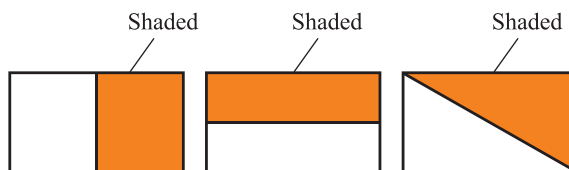
2.

Figure	Number of shaded parts	Total number of equal parts	Fraction for shaded parts	Fraction for unshaded parts
(a)	3	8	$\dfrac{3}{8}$	$\dfrac{5}{8}$
(b)	3	5	$\dfrac{3}{5}$	$\dfrac{2}{5}$
(c)	4	8	$\dfrac{4}{8}$	$\dfrac{4}{8}$

Detailed Solutions

3. (*a*) 2 halves make a whole.

(*b*) 3 one-thirds make a whole.

(*c*) 4 quarters make a whole.

(*d*) 5 one-fifths make a whole.

4. (*a*) Two-tenths = $\dfrac{2}{10}$ (*b*) Five-eighths = $\dfrac{5}{8}$

(*c*) Four-fifths = $\dfrac{4}{5}$ (*d*) Three-sevenths = $\dfrac{3}{7}$

5. Total number of equal parts of a chocolate = 6

Number of eaten parts = 1

Fraction of the chocolate Ritu ate = $\dfrac{1}{6}$

6. (*a*) Numerator = 4, denominator = 8

Fraction = $\dfrac{4}{8}$ = $\dfrac{1}{2}$

(*b*) Numerator = 3, denominator = 14

Fraction = $\dfrac{3}{14}$

(*c*) Numerator = 8, denominator = 12

Fraction = $\dfrac{8}{12}$

(*d*) Numerator = 10, denominator = 17

Fraction = $\dfrac{10}{17}$

Quick Check (Page 109)

1. Total parts = 4

Coloured parts = 2

Fraction = $\dfrac{2}{4}$

2. Total parts = 5

Coloured parts = 2

Fraction = $\dfrac{2}{5}$

3. Total parts = 4

Coloured parts = 2

Fraction = $\dfrac{6}{9}$

Practice Time 6B

2. (*a*) 8 ÷ 2 = 4

So, $\dfrac{1}{2}$ of 8 = 4

(*b*) 12 ÷ 2 = 6

So, $\dfrac{1}{2}$ of 12 = 6

(*c*) 6 ÷ 2 = 3

So, $\dfrac{1}{2}$ of 6 = 3

(*d*) 14 ÷ 2 = 7

So, $\dfrac{1}{2}$ of 14 = 7

3. (*a*) 18 ÷ 3 = 6

So, $\dfrac{1}{3}$ of 18 = 6

(*b*) 12 ÷ 3 = 4

So, $\dfrac{1}{3}$ of 12 = 4

(*c*) 15 ÷ 3 = 5

So, $\dfrac{1}{3}$ of 15 = 5

(*d*) 6 ÷ 3 = 2

So, $\dfrac{1}{3}$ of 6 = 2

4. (*a*) 4 ÷ 4 = 1

So, $\dfrac{1}{4}$ of 4 = 1

(*b*) 12 ÷ 4 = 3

So, $\dfrac{1}{4}$ of 12 = 3

(*c*) 16 ÷ 4 = 4

So, $\dfrac{1}{4}$ of 16 = 4

(*d*) 8 ÷ 4 = 2

So, $\dfrac{1}{4}$ of 8 = 2

5. (*a*) $\dfrac{1}{2}$ of 36 = $\dfrac{1}{2}$ × 36 = 36 ÷ 2 = 18

(*b*) $\dfrac{1}{3}$ of 63 = $\dfrac{1}{3}$ × 63 = 63 ÷ 3 = 21

(*c*) $\dfrac{1}{4}$ of 52 = $\dfrac{1}{4}$ × 52 = 52 ÷ 4 = 13

(*d*) $\dfrac{1}{2}$ of 40 = $\dfrac{1}{2}$ × 40 = 40 ÷ 2 = 20

(*e*) $\dfrac{1}{3}$ of 51 = $\dfrac{1}{3}$ × 51 = 51 ÷ 3 = 17

(*f*) $\dfrac{1}{4}$ of 72 = $\dfrac{1}{4}$ × 72 = 72 ÷ 4 = 18

6. Apples = ₹96 per kg, Orange = ₹120 per kg,

Grapes = ₹60 per kg

(*a*) Apples = $\dfrac{1}{2}$ × 96 = ₹48,

Oranges = $\dfrac{1}{3}$ of 120 = ₹40,

Grapes = $\dfrac{1}{4}$ × 60 = ₹15.

So, total cost = ₹48 + ₹40 + ₹15 = ₹103

(*b*) Apples = $\dfrac{1}{4}$ × 96 = ₹24,

Oranges = $\dfrac{1}{2}$ × 120 = ₹60 ,

Grapes = $\dfrac{1}{3}$ × 60 = ₹20

So, total cost = ₹24 + ₹60 + ₹20 = ₹104

Think and Answer (Page 113)

Total number of marbles = 30

Number of marbles he gave to Kareem

$$= \frac{1}{5} \times 30 = 6 \text{ marbles}$$

Number of marbles he gave to Kavita

$$= \frac{1}{3} \times 30 = 10 \text{ marbles}$$

Therefore, number of marbles Anuj have

$$= 30 - (6 + 10) = 30 - 16 = 14 \text{ marbles.}$$

Thus, Kareem has 6 marbles, Kavita has 10 marbles and Anuj has 14 marbles.

Practice Time 6C

1. Total number of questions = 10

   Number of solved questions = 7

   Number of unsolved questions = 10 – 7 = 3

   Fraction of unsolved questions = $\frac{3}{10}$

2. Total number of passengers in the bus = 16

   Number of passengers who got down = 9

   Fraction of the passengers who got down = $\frac{9}{10}$

3. Total number of pages = 32

   Number of pages Sujoy read = 15

   Number of unread pages = 32 – 15 = 17

   Fraction of unread pages = $\frac{17}{32}$

4. Total number of toffees = 18

   (a) I ate = $\frac{1}{2}$ of 18 = $\frac{1}{2} \times 18 = 18 \div 2 = 9$

   (b) I gave to my sister = $\frac{1}{3} \times 18 = 18 \div 3 = 6$

5. Total money Raju had = ₹90

   Raju spent on stationery = $\frac{1}{3}$ of 90 = 90 ÷ 3

   $= ₹30$

   Raju spent on toys = $\frac{1}{3}$ of 90 = 90 ÷ 3 = ₹30

(a) He spend on stationery and toys taken together
   = 30 + 30 = ₹60

(b) Money left with Raju = 90 – (30 + 30)
   90 – 60 = ₹30

6. (a) Green colour = $\frac{1}{3}$ (b) Saffron colour = $\frac{1}{3}$

   (c) White colour = $\frac{1}{3}$

Mental Maths (Page 114)

1. Word = DENOMINATOR; Total letters = 11.
   Fraction of the word represented by the letter
   N = $\frac{2}{11}$.

2. Total colours of rainbow = 7.

   Fraction of each colour in the rainbow = $\frac{1}{7}$.

3. Given fraction = $\frac{3}{5}$.

   After adding 3 to numerator and 5 to the denominator, we get,

   $$= \frac{3+3}{5+5} = \frac{6}{10}$$

   ∴ New fraction = $\frac{6}{10}$.

4. Given fraction = $\frac{7}{16}$.

   After multiplying the multiply numerator by 3 and adding 10 to the denominator, we get

   $$= \frac{7 \times 3}{16 + 10} = \frac{21}{26}.$$

   New fraction = $\frac{21}{26}$.

5. (a) $\frac{1}{2}$ of one year = $\frac{1}{2} \times 12$ = 6 months.

   (b) $\frac{1}{4}$ of an hour = $\frac{1}{4} \times 60$ = 15 minutes.

   (c) $\frac{1}{3}$ of a a dozen = $\frac{1}{3} \times 12$ = 4 item.

   (d) $\frac{1}{5}$ of a score = $\frac{1}{5} \times 20$ = 4 items.

Chapter Assessment

1. (a) – (iii)   (b) – (i)

2. (a) $\frac{2}{5}$ (b) $\frac{1}{4}$ (c) $\frac{3}{20}$

3. (a) $\frac{1}{3}$ of 24 = 24 ÷ 3 = 8

   (b) $\frac{1}{2}$ of 60 = 60 ÷ 2 = 30

   (c) $\frac{1}{3}$ of 63 = 63 ÷ 3 = 21

   (d) $\frac{1}{4}$ of 88 = 88 ÷ 4 = 22

4. (a) 4 halves make a whole.

   (b) 3 one-thirds make a whole.

   (c) 2 quarters make a whole.

   (d) 5 one-fifths make a whole.

5. Number of girls playing in a park = 4

   Number of boys playing in a part = 8

   Total children = 4 + 18 = 12

   Fraction of the children are girls = $\frac{4}{12}$

6. Fraction of the waffle did Atul ate = $\frac{1}{3}$

7. Total number of pages in a Maths project
         = 36 pages

   Number of pages Riya completed

      = $\frac{1}{4}$ × 36 = 36 ÷ 4 = 9

   Number of pages Joe completed

      = $\frac{1}{3}$ × 36 = 36 ÷ 3 = 12

8. (a) Total parts = 10

   Fractional part of the liquid = $\frac{4}{10}$

   (b) Total parts = 10

   Fractional part of the liquid = $\frac{3}{10}$

   (c) Total parts = 10

   Fractional part of the liquid = $\frac{7}{10}$

   (d) Total parts = 10

   Fractional part of the liquid = $\frac{5}{10}$

   (e) Total parts = 10

   Fractional part of the liquid = $\frac{8}{10}$

Brain Sizzlers (Page 116)

Input	Brand	Drained water	Fresh water
20 L	A	10 L	10 L
24 L	B	8 L	16 L
36 L	C	9 L	27 L

MODEL TEST PAPER – 1

1. (b)

Thousands	Hundreds	Tens	Ones
7	0	6	9

   Thus, the number is 7069.

2. (c) Number of legs of a spider = 8

   ∴ Total number of legs of 26 spiders
                = 26 × 8 = 208 legs

3. (c) The number that is left over in division is called remainder.

4. (c) 2 halves make a whole.

5. (b) $\frac{1}{3}$ as 3 − 1 = 2.

6. (a) 5 beads will put in hundreds rods of an abacus for the number 8531.

7. (b) There are 9 times can 9 be taken away from 81. As 9 × 9 = 81.

8. (b) Two-fifths = $\frac{2}{5}$

9. (b) Weight of a packet of sugar = 1000 g
       200 g sugar spreaded on the floor.
    ∴ Sugar left in the packet = (1000 − 200) g
                = 800 g
   Number of polybags need to pack the remaining
   sugar = $\frac{800 \text{ g}}{200 \text{ g}}$ = 4 polybags.

10. (c) Largest 3-digit number = 999
    17 hundreds = 1700
    Three thousand twenty-two = 3022
    ∴ Their their sum = 999 + 1700 + 3022 = 5721
    Five thousand seven hundred twenty-one.

11. (a) We use <u>addition</u> when we put together two or more things.

    (b) The smallest 4-digit number minus 1 is <u>999</u>.

    (c) The number to be divided is called <u>dividend</u>.

    (d) 5225 + 448 + 0 = 5225 + <u>448</u> + 0.

    (e) The difference between the greatest 4-digit number and smallest 3-digit number is <u>9899</u>.
                (∵ 9999 − 100) = 9899)

    (f) Divisor × quotient + remainder = Dividend.

12. (*a*) Ascending order = 2397 < 3267 < 6501 < 8709 (*b*) Ascending order = 3076 < 4093 < 7804 < 9712

Descending order = 8709 > 6501 > 3267 > 2397 Descending order = 9712 > 7804 > 4093 > 3076

13. (*a*) – (*iv*) (*b*) – (*iii*) (*c*) – (*i*) (*d*) – (*ii*)

14.

2728	=	2	Thousands	+	7	Hundreds	+	2	Tens	+	8	Ones
+ 111	=	0	Thousands	+	1	Hundred	+	1	Ten	+	1	One
2839	=	2	Thousands	+	8	Hundreds	+	3	Tens	+	9	Ones

15.

17	–	7	=	10
–		–		–
6	–	3	=	3
=		=		=
11	–	4	=	7

16. (*a*) Total number of buttons = 7

Number of red buttons = 3

Required fraction = $\dfrac{3}{7}$

(*b*) Total number of buttons = 7

Number of blue buttons = 4

Required fraction = $\dfrac{4}{7}$

17. Number of caps made in 6 days of a week = 756

Number of caps made in 1 day = $\dfrac{756}{6}$ = 126 caps.

18. Smallest number = 3078

Greatest number = 8730

Difference = 8730 – 3078 = 5652.

19. Total bottles loaded in a delivery van = 6670.

Number of bottles delivered at one shop = 2340.

Number of bottles delivered at another shop = 2300

Number of bottles left in the van

= 6670 – (2340 + 2300) = 6670 – 4640 = 2030

CHAPTER 7 : GEOMETRY

Let's Recall

1. (*a*) Shape → Square

Meaning → Two-way traffic

(*b*) Shape → Circle

Meaning → No entry

(*c*) Shape → Triangle

Meaning → Left hand curve

(*d*) Shape → Rectangle

Meaning → Electric vehicle charging station.

Quick Check (Page 120)

1. Straight path is the shortest route to go from point X to point Y.

2. The shortest path between X and Y is known as a line segment.

Practice Time 7A

1. (*a*) Line segment XY, $\overline{XY}$ (*b*) Line AB, $\overleftrightarrow{AB}$

(*c*) Line MN, $\overleftrightarrow{MN}$ (*d*) Ray PQ, $\overrightarrow{PQ}$

2. (*a*) 4 line segments, AB, BC, CD, DA

(*b*) 3 line segments, PQ, QR, PR

(*c*) 5 line segments, GH, HI, IJ, KJ, KG

(*d*) 6 line segments, EF, FG, GH, HI, IJ, JE

3. (*a*) 4 lines, AE, BF, CG, DH

4. (*a*) The sunlight is an example of ray.

(*b*) Number of line segments = 6.

(*c*) 1 point

Practice Time 7C

1. (*a*) Circle (*b*) Triangle

(*c*) Rectangle (*d*) Square

2. (*a*) 8 Triangles (*b*) 13 Triangles

(*c*) 14 Triangles

3. (*a*) 3 Rectangles (*b*) 3 Rectangles

(*c*) 7 Rectangles

4. (*a*) Square (*b*) Rectangle

(*c*) Circle (*d*) Triangle

5. (*a*) It has four corners. Only its opposite sides are equal. It is a <u>rectangle</u>.

(*b*) It has three sides and three corners. It is a <u>triangle</u>.

Detailed Solutions

(*c*) It is a closed figure. It has no corners. It is a circle.

(*d*) It has four equal sides and four corners. It is a Square.

6. (*a*) True   (*b*) True
   (*c*) False   (*d*) False

Quick Check (Page 129)

1. Cuboid   2. Sphere
3. Cone   4. Cylinder

Practice Time 7D

1. (*a*) Circle   (*b*) Rectangle
   (*c*) Square   (*d*) Triangle
2. (*a*) yes   (*b*) no
   (*c*) no   (*d*) yes
   (*e*) no   (*f*) yes

4. (*a*) The cost of 5 toy cars = ₹100

$$\begin{array}{r} 5\overline{)100}(20 \\ -10\downarrow \\ \overline{00} \\ -00 \\ \overline{0} \end{array}$$

The cost of 1 toy car = ₹100 ÷ 5

= ₹20

Thus, the cost of 1 toy car ₹20.

3.

Shape of the Objects	Number of faces		Number of edges	Number of vertices
	Plane faces	Curved faces		
(*a*) Cube	6	0	12	8
(*b*) Cuboid	6	0	12	8
(*c*) Cone	1	1	1	1
(*d*) Cylinder	2	1	2	0

4. (*a*) Top view   (*b*) Side view   (*c*) Front view

Practice Time 7E

1. (*a*) West   (*b*) North
   (*c*) East   (*d*) West

Brain Sizzlers (Page 132)

1. Number of Squares = 18

Mental Maths (Page 133)

1. **Ray:** A ray is a part of a line which can be extended in one direction endlessly.

A   B
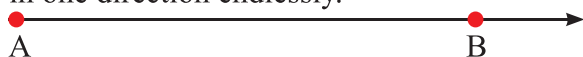
Ray AB is denoted symbolically as $\overrightarrow{AB}$.

Line segment: A line segment is a part of a line.

It has a fixed length.

A   P   Q   B

Line segment PQ or QP is written as $\overline{PQ}$ or $\overline{QP}$, where P and Q are the end points of the line segment.

2. 3 rectangles   3. Sphere
4. There are 4 triangles in the adjacent figure.

Chapter Assessment

1. (*a*) – (*i*)   (*b*) – (*ii*)   (*c*) – (*i*)
2. (*a*) 5 triangles, 1 Square, 2 Rectangles.
   (*b*) 16 triangles, 3 Squares, 1 Rectangles.
3. Water bottle, Dry cell.
4. Ice-cream cone, Birthday cap.
6. (*a*) I have 1 curved and 1 flat face. I am a cone.
   (*b*) I have two flat and one curved face. I am a cylinder.
   (*c*) I have 12 edges and 6 rectangular face. I am a cuboid.
   (*d*) I have only 1 face and no corners. I am a sphere.
   (*e*) I have 8 corners and 6 equal faces. I am a cube.
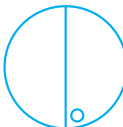
CHAPTER 8 : SYMMETRY AND PATTERNS

Practice Time 8A

1. (*d*), (*e*), (*g*), (*h*)

2. (*a*)   (*b*)   (*c*)

(*d*)   (*e*)   (*f*)

(*g*)   (*h*)

3. (*a*)   (*b*)

(*c*)   (*d*)

4. (a)   (b)

(c)
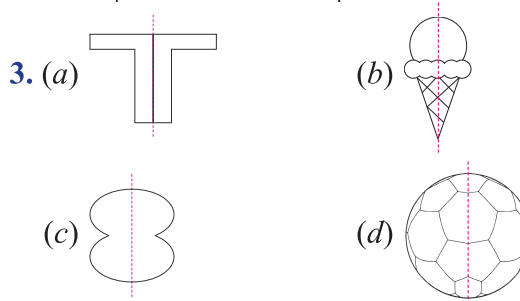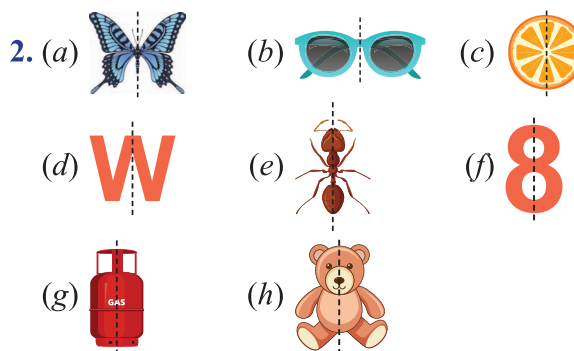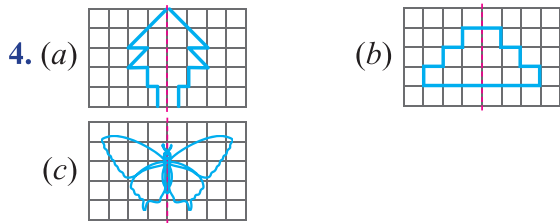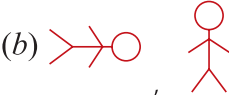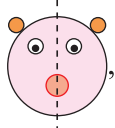
Practice Time 8B

1. (a)   (b)   (c)

2. (a) 2 2 2 0 0 0 2 0 2 2 0 0 2 2 2 0 0 0

(b)

3.

4. (a) 20, 70, 120, 170, <u>220</u>, <u>270</u>, <u>320</u>.

(b) 101, 111, 121, 131, <u>141</u>, <u>151</u>, <u>161</u>.

(c) Abc, Bcd, Cde, <u>Def</u>, <u>Efg</u>, <u>Fgh</u>.

(d) 1045, 1055, 1065, <u>1075</u>, <u>1085</u>, <u>1095</u>.

6. (a) 5 colours are used to create the pattern.

(b) 5 shapes are used to create the pattern.

Mental Maths (Page 143)

1. Floor, Chessboard   **2.** Giraffe

3. (a)

4. TEACHER → R is not symmetrical

5.

Chapter Assessment

1. (a) – (iii) Infinite

(b) – (i) 2   4   8   16   32   <u>64</u>

3. Rectangle, Square, Circle

4. (a) **D4**, **E5**, **F6**   (b)

5. 8, , 6

Brain Sizzlers (Page 145)

1.

2.

Detailed Solutions

CHAPTER 9 : MEASUREMENT

Let's Recall

1. (a) cm   (b) cm   (c) cm

(d) cm   (e) m   (f) m

2. (a) g   (b) kg

(c) g   (d) g

(e) g   (f) g

(g) g   (h) g

3. (a) 200 mL   (b) 5 mL

(c) 1 L   (d) 10 L

4. (a) I am about 1 <u>metre</u> tall.

(b) My weight is about 30 <u>kilograms</u>.

(c) My water bottle holds 1 <u>litre</u> water.

(d) My foot size is about 20 <u>centimetres</u> long.

Maths Fun (Page 149)

1. Route I: A → B → C → F → E → D → A,

i.e., 4 m + 4 m + 6 m + 3 m + 5 m + 6 m = 28 m

Route II: A → D → C → B → E → F → A,

i.e., 6 m + 8 m + 4 m + 8 m + 3 m + 5 m = 34 m

Therefore, the shortest route is Route I.

2. The shortest route from rock A to F is <u>5</u> m long.

3. The length of the route from rock A to rock C via the rock B is <u>8</u> m long.

4. The distance of the shortest route from the rock D to C is <u>8 m.</u>

Practice Time 9A

1. (a) 7 cm   (b) 5 cm

(c) 6 cm   (d) 4 cm

2. (a) We know that   1 m = 100 cm

Therefore,   5 m = (5 × 100) cm = 500 cm

(b) 20 m = (20 × 100) cm = 2000 cm

(c)   12 m 18 cm = (12 × 100) cm + 18 cm

= 1200 cm + 18 cm = 1218 cm

(d)   15 m 10 cm = (15 × 100) cm + 10 cm

= 1500 cm + 10 cm = 1510 cm

3. (a) We know that   1 km = 1000 m

Therefore,   6 km = (6 × 1000) m = 6000 m

(b) 10 km = (10 × 1000) m = 10000 m

(c)   4 km 300 m = (4 × 1000) m + 300 m

= 4000 m + 300 m = 4300 m

(d) 1 km 425 m   = (1 × 1000) m + 425 m

= 1000 m + 425 m = 1425 m

4. (a) 500 cm = (500 ÷ 100) m = 5 m
   (b) 1562 cm = 1500 cm + 62 cm
       = (1500 ÷ 100) m + 62 cm
       = 15 m + 62 cm
   (c) 1610 m = 1000 m + 610 m
       = (1000 ÷ 1000) km + 610 m
       = 1 km 610 m
   (d) 2013 m = 2000 m + 13 m
       = (2000 ÷ 1000) km + 13 m
       = 2 km 13 m

Maths Fun (Page 153)

(T) 1 kg 728 g (D) 2 kg (I) 1210 g (R) 1 kg 301 g
(Y) 2 kg 167 g (A) 2050 g (B) 1 kg 31g (H) 1827 g
Convert into grams.
(T) 1728 g (D) 2000 g (I) 1210 g (R) 1301 g
(Y) 2167 g (A) 2050 g (B) 1031 g (H) 1827 g
Arrange in increasing order.
(B) 1031 g < (I) 1210 g < (R) 1301 g < (T) 1728 g <
(H) 1827 g < (D) 2000 g < (A) 2050 g < (Y) 2167 g
Answer is **BIRTHDAY**.

Practice Time 9B

1. (a) 7 kg = (7 × 1000) g = 7000 g
   (b) 9 kg = (9 × 1000) g = 9000 g
   (c) 14 kg 200 g = (14 × 1000) g + 200 g
       = 14000 g + 200 g = 14200 g
   (d) 59 kg 350 g = (59 × 1000) g = 350 g
       = 59000 g + 350 g = 59350 g
2. (a) We know that 1 kg = 1000 g
       or   1 g = $\dfrac{1}{}$
       So,   3000 g = (3000 ÷ 1000) kg = 3 kg
   (b) 6000 g = (6000 ÷ 1000) kg = 6 kg
   (c) 3124 g = 3000 g + 124 g
       = (3000 ÷ 1000) kg + 124 g
       = 3 kg 124 g
3. (a) 1 kg = 500 g + 200 g + 200 g + 100 g
   (b) 1 kg = 500 g + 200 g + 200 g + 50 g + 50 g
   (c) 1kg = 200 g + 200 g + 200 g + 200 g + 100 g
       + 100 g

Practice Time 9C

1. (a) Water in your water bottle = 500 mL.
   (b) Tea in a cup = 200 mL.
   (c) 3 pouches of milk = 3 L.

(d) Pulses in a pressure cooker = 2 L.
(e) Lemon soda in a glass = 300 mL.
(f) Sanitizer in a bottle = 50 mL.
2. (a) We know that 1L = 1000 mL
       Therefore, 2 L = (2 × 1000) mL = 2000 mL
   (b) 5 L = (5 × 1000) mL = 5000 mL
   (c) 7 L = (7 × 1000) mL = 7000 mL
   (d) 9 L = (9 × 1000) mL = 9000 mL
3. (a) We know that 1L = 1000 mL
       or   1 mL = $\dfrac{1}{1000}$ L
   So,   4 L 3 mL = (4 × 1000) mL + 3 mL
       = 4000 mL + 3 mL = 4003 mL
   (b) 3 L 90 mL = (3 × 1000) mL + 90 mL
       = 3000 mL + 90 mL = 3090 mL
   (c) 2 L 921 mL = (2 × 1000) mL + 921 mL
       = 2000 mL + 921 mL = 2921 mL
   (d) 7 L 600 mL = (7 × 1000) mL + 600 mL
       = 7000 mL + 600 mL = 7600 mL
4. (a) 6000 mL = (6000 ÷ 1000) L = 6 L
   (b) 9000 mL = (9000 ÷ 1000) L = 9 L
   (c) 3920 mL = 3000 mL + 920 mL
       = (3000 ÷ 1000) L + 920 mL
       = 3 L 920 mL.
   (d) 4125 mL = 4000 mL + 125 mL
       = (4000 ÷ 1000) L + 125 mL
       = 4 L 125 mL
5. (a) Two 500 mL = (2 × 500) mL = 1000 mL = 1 L
   (b) Five 200 mL = (5 × 200) mL = 1000 mL = 1 L
   (c) Four 250 mL = (4 × 250) mL = 1000 mL = 1 L
   (d) Four 250 mL = 1 L
   (e) Twenty 50 mL = (20 × 50) mL = 1000 mL = 1 L
   (f) Ten 50 mL = 500 mL

Practice Time 9D

1. (a)

m		cm	
7	1	4	6
+ 2	1	4	3
9	2	8	9

(b)

m			cm	
① ①			①	
1	4	8	4	8
+ 1	9	5	3	9
3	4	3	8	7

(c)

km			m		
	①		①	①	
1	6	8	1	6	6
+ 2	1	4	5	4	7
3	8	2	7	1	3

(d)

kg			g		
		①			
4	6	0	6	1	0
+ 5	1	8	7	1	4
9	7	9	3	2	4

(e)

L			mL		
	①			①	
	6	9	0	0	9
+ 1	0	4	3	0	4
1	7	3	3	1	3

(f)

L				mL		
		①		①	①	
	7	0	6	0	4	5
+		4	5	6	3	7	9
1	1	6	2	4	2	4

(g)

km			m		
	①	①			
	6	2	8	0	0
	9	6	4	4	4
+	8	2	6	0	4
2	4	1	8	4	8

(h)

kg			g	
①				
4	6	6	6	0
2	2	3	2	0
+		9	0	9
7	7	9	8	9

(i)

L			mL		
②	①	①		①	
1	9	6	1	0	5
2	4	5	1	5	6
+		9	0	9	0	6
5	3	2	1	6	7

2. (*a*) 112 km 848 m and 118 km 279 m.
Arrange the given measures in the columns of km and m.

Step 1. Add metres.

848 m + 279 m
= 1127 m
= 1 km 127 m

km			m		
1	1	2	8	4	8
+ 1	1	8	2	7	9
2	3	1	1	2	7

Write 127 under m column and carry forward 1 to km column.

Step 2. Add kilometres.

1 km (carried over) + 112 km + 118 km
= 231 km.

Write 231 under the km column.

Thus, 112 km 848 m + 118 km 279 m
= 231 km 127 m.

(b)

m			cm		
		①			
3	3	0	3	8	
+ 1	0	5	7	0	
4	3	6	0	8	

(c)

m			cm		
①			①		
1	7	6	2	6	
+ 1	9	0	0	6	
3	6	6	3	2	

(d)

kg			g		
1	4	3	4	0	
+ 5	0	3	4	6	
6	4	6	8	6	

(e)

kg			g
	①		
2	4	5	0
5	0	6	0
+ 2	1	0	0
9	6	1	0

(f)

kg		g		
①	①			
6	0	7	0	0
1	6	1	5	0
+		8	7	8
7	7	7	2	8

(g)

L		mL		
	①	①		
7	0	9	5	7
+ 4	0	6	6	0
1	1	1	6	1	7

(h)

L			mL		
	①	②	①		
1	2	5	9	7	6
	6	5	7	5	0
+			5	5	3
1	9	2	2	7	9

3. (a)

	5	4	5	mL
+	4	5	0	mL
	9	9	5	mL

(b)

	①	①		mL
		4	9	5	mL
+		6	7	5	mL
	1	1	7	0	mL

Practice Time 9E

1. (a)

km			m		
				⑨	
			②	⑩	⑩
2	8		3̶	0̶	0̶
− 1	4		2	1	6
1	4		0	8	4

(b)

m			cm		
			⑤	⑭	
8	6̶	4̶		0	6
− 3	4	5		0	4
5	1	9		0	2

(c)

kg			g		
			⑤	⑫	
9	6		4	6̶	2̶
− 4	6		2	0	8
5	0		2	5	4

(d)

kg			g		
				⑨	
①	⑪	⑤	⑩	⑯	
2̶	1̶	6̶	0̶	6̶	5
− 1	9	0	0	9	0
0	2	5	9	7	5

(e)

L			mL		
7	9		0	6	8
− 5	1		0	4	6
2	8		0	2	2

(f)

L			mL		
	⑪				
②	1̶	⑪		④	⑩
3̶	2̶	1̶	4	5̶	0̶
−	9	9	3	4	5
2	2	2	1	0	5

2. (a) 128 m 76 cm from 949 m 6 cm

Arrange the given measures in the columns of m and cm and then subtract.

Step 1. Subtract centimetres.

76 cm cannot be subtract from 6 cm

So, regroup m and cm.

949 m 06 cm = 948 m 106 cm

Now, 106 cm – 76 cm = 30 cm

Write 30 under the cm column.

Step 2. Subtract metres.

948 m – 128 m = 820 m

Write 820 under the m column.

Thus, 949 m 6 cm – 128 m 76 cm = 820 m 30 cm.

m			cm		
		⑧		⑩	
9	4	9̶	0̶	6
− 1	2	8	7	6
8	2	0	3	0

(b) 78 m from 4 cm

Arrange the given measures in the columns of m and cm and then subtract.

Step 1. Subtract centimetres.

78 cm cannot subtract form 0 cm

So, regroup m and cm.

4 m = 3 m 100 cm

Now, 100 cm – 78 cm = 22 cm

Write 22 under the cm column.

Step 2. Subtract metres.

3 m – 0 m = 3 m

Write 3 under the m column.

Thus, 4 m – 78 cm = 400 cm – 78 cm = 322 cm.

(c) to (h) — Same as part (a) and (b).

m		cm		
			⑨	
③	⑩	⑩		
4̶	0̶	0̶		
− 0	7	8		
3	2	2		

Practice Time 9F

1. Length of cloth used by the tailor to make a shirt = 1 m 125 cm = 2 m 25 cm

Length of cloth used by the tailor to make trousers = 1 m 750 cm = 8 m 50 cm

Total length of cloth used by tailor to make a shirt and trousers =

m		cm	
	2	2	5
+	8	5	0
10	7	5

Thus, total length of cloth used by the tailor to make a shirt and trousers is 10 m 75 cm.

2. Length of string of kite A = 4570 m

Length of string of kite B = 5250 m

Difference of lengths = 5250 m – 4570 m = 680 m

	⑪		
④	1̶	⑮	
5̶	2̶	5̶	0
− 4	5	7	0
	6	8	0

Thus, kite B is flying higher by 680 m.

3. Weight of Riya's bag = 34 kg 750 g

Weight of Pratham's bag = 22 kg 950 g

Total weight of both bags =

kg		g		
	①	①		
3	4	7	5	0
+ 2	2	9	5	0
5	7	7	0	0

Thus, the total weight of both the bags is 57 kg 700 g.

4. Family A consumes vegetable oil in a month = 15 L 125 mL

Family B consumes vegetable oil in the same month = 14 L

Difference of oil consumption between both the families = 15 L 125 mL – 14 L

= 1 L 125 mL

Thus, family A consumes 1 L 125 mL more oil by family B.

L		mL		
1	5	1	2	5
– 1	4	0	0	0
	1	1	2	5

5. Baggage allowed of a business-class passenger = 35 kg

Baggage allowed to its economy-class passenger = 20 kg 575g

Difference in baggage allowances

= 35 kg – 20 kg 575 g

= 14 kg 425 g

Thus, the difference between the two baggage allowances is 14 kg 425 g.

kg		g		
		⑨	⑨	
	④	⑩	⑩	⑩
3	5̶	0̶	0̶	0̶
– 2	0	5	7	5
1	4	4	2	5

6. Total litres of petrol filled in the bike = 14 L 450 mL

Total fuel left in the bike = 3 L

Petrol used = 14 L 450 mL – 3 L = 11 L 450 mL

L		mL		
1	4	4	5	0
–	3	0	0	0
1	1	4	5	0

Thus, 11 L 450 mL of petrol was used when the indicator first warned me.

Mental Maths (Page 169)

1. Kilogram is used to measure the weight of a television.

2. A tailor uses a <u>measuring tape</u> to measure the length of cloth.

3. <u>Weighing machine</u> is used to measure the weight of a rice bag.

4. The capacity of a cough syrup bottle is measured in <u>mL</u>.

5. 48 km 525 m – 26 km 328 m = 22 km 197 m.

km		m		
		⑪		
		⑷	Ⓧ	⑮
4	8	5̶	2̶	5̶
– 2	6	3	2	8
2	2	1	9	7

Chapter Assessment

1. (a) – (i) 39 m 67 cm = (39 × 100) cm + 67 cm

= 3900 cm + 67 cm

= 3967 cm

(b) – (i) 6 km 55 m = (6 × 1000) m + 55 m

= 6000 m + 55 m

= 6055 m

(c) – (i) 7 kg 784 g = (7 × 1000) g + 784 g

= 7000 g + 784 g

= 7784 g

(d) – (ii) 4 L 65 mL = (4 × 1000) mL + 65 mL

= 4000 mL + 65 mL

= 4065 mL

(e) – (i) 708 L 982 mL + 18 L 95 mL + 9 L 745 mL

= 736 L 822 mL

L		mL		
	②	①	②	①
7	0	8	9	8	2
	1	8		9	5
+		9	7	4	5
7	3	6	8	2	2

(f) – (iii) 130 L 750 mL – 66 L 975 mL

= 63 L 775 mL

L		mL		
	⑫	⑨	⑯	⑭
	②̶	⑩̶	⑥̶	④̶	⑩
1̶	3̶	0̶	7̶	5̶	0̶
–	6	6	9	7	5
	6	3	7	7	5

2. (a) <u>100</u> cm = 1 m   (b) 1 km = <u>1000</u> m

(c) 200 cm = <u>2</u> m   (d) 3000 m = <u>3</u> km

(e) 1 kg = <u>1000</u> g   (f) 1 g = $\dfrac{1}{1000}$ kg

(g) 1 L = <u>1000</u> mL   (h) 6000 mL = <u>6</u> L

3. (a) 38 m 85 cm = (38 × 100) cm + 85 cm
            = 3800 cm + 85 cm = 3885 cm

(b) 9 km 570 m = (9 × 1000) m + 570 m
             = 9000 m + 570 m = 9570 m

(c) 4 L 832 mL = (4 × 1000) mL + 832 mL
             = 4000 mL + 832 mL = 4832 mL

(d) 3 km 911 m = (3 × 1000) m + 911 m
             = 3000 m + 911 m = 3911 m

4. Sum of 216 km 878 m and 329 km 400 m = 546 km 278 m

km			m		
①	①				
2	1	6	8	7	8
+ 3	2	9	4	0	0
5	4	6	2	7	8

Now, subtract 338 km 188 m from 546 km 278 m.

km			m		
③	⑯	①	⑰		
5	4̶	6̶	2̶	7̶	8
− 3	3	8	1	8	8
2	0	8	0	9	0

= 208 km 090 m.

5. Length of silk clothes = 20 m 45 cm

Length of velvet clothes = 42 m 85 cm

Total length of clothes =

m		cm	
①	①		
2	0	4	5
+ 4	2	8	5
6	3	3	0

Thus, total length of clothes bought by the merchant is 63 m 30 cm.

6. Total distance to be covered by the boat = 84 km

Boat sails in one day = 19 km 348 m

Distance left for the boat to cover =

km			m		
	⑬	⑨	⑨		
⑦	2̶	⑩	⑩	⑩	
8̶	4̶	0̶	0̶	0̶	
− 1	9	3	4	8	
6	4	6	5	2	

Thus, 64 km 652 m distance is left for the boat to cover.

7. Total length of rope = 128 m 67 cm

Length of green part of rope = 64 m 11 cm

Length of yellow part of rope = 36 m 45 cm

Total length of green and yellow rope = 100 m 56 cm

m		cm	
①			
6	4	1	1
+ 3	6	4	5
1 0	0	5	6

Length of black part of rope =

Thus, length of black part of the rope is 28 m 11 cm.

m		cm	
1 2	8	6	7
− 1 0	0	5	6
2	8	1	1

8. Weight of first bag = 13 kg 372 g

Weight of second bag = 14 kg 610 g

Total weight carried by the coolie =

Thus, the weight carried by the coolie is 27 kg 982 g.

kg		g		
1	3	3	7	2
+ 1	4	6	1	0
2	7	9	8	2

9. Total weight of machine = 77 kg 656 g

Weight of first part = 58 kg 735 g

Weight of other part =

Thus, weight of the other part of machine is 18 kg 921 g.

kg		g		
	⑯			
⑥	6̶	⑯		
7̶	7̶	6̶	5	6
− 5	8	7	3	5
1	8	9	2	1

10. Total weight of three baskets = 93 kg

Weight of first basket = 25 kg 425 g

Weight of second basket = 33 kg 565 g

Total weight of two baskets =

kg		g		
			①	
2	5	4	2	5
+ 3	3	5	6	5
5	8	9	9	0

Weight of third basket =

kg		g		
	⑫	⑨		
⑧	2̶	⑩	⑩	
9̶	3̶	0̶	0̶	0
− 5	8	9	9	0
3	4	0	1	0

Thus, the weight of the third basket is 34 kg 10 g.

11. Digvijay gave milk to first family = 9 L 280 mL
Digvijay gave milk to second family = 8 L 350 mL

Total milk he gave to two poor families =

L		mL		
	①			
9	2	8	0	
+	8	3	5	0
1	7	6	3	0

Thus, Digvijay gave 17 L 630 mL milk to two poor families.

12. Total drinking water contained in the vessel
= 980 L 400 mL

Water took out from the vessel by the three families
= 138 L 450 mL + 217 L 800 mL + 385 L 500 mL
= 741 L 750 mL

L			mL		
①	②	①			
1	3	8	4	5	0
2	1	7	8	0	0
+ 3	8	5	5	0	0
7	4	1	7	5	0

Water left in the vessel = 980 L 400 mL – 741 L 750 mL = 238 L 650 mL

L			mL		
	⑨	⑬			
	⑦	⑩	⑫	⑩	
9	8̸	0̸	4̸	0̸	0
– 7	4	1	7	5	0
2	3	8	6	5	0

Thus, 238 L 650mL water is left in the vessel.

13.

Soni's Juice				**Rani's Juice**			
⑦	⑭			③	⑭		
8̸	4̸	0	mL	4̸	4̸	5	mL
– 7	5	0	mL	– 3	7	5	mL
0	9	0	mL	0	7	0	mL

Rani drank less amount of juice from the bottle.

Brain Sizzlers (Page 171)

1. New Delhi to Vadodra = 458 km + 267 km + 260 km = 985 km.

2. Ratlam to Surat = 260 km + 129 km = 389 km

3. New Delhi to Mumbai = 458 km + 267 km + 260 km + 129 km + 233 km = 1347 km.

CHAPTER 10 : TIME

Let's Recall

1. (a) 7 o'clock, 7:00   (b) 9 o'clock, 9:00
   (c) 3 o'clock, 3:00   (d) 5 o'clock, 5:00
   (e) 10 o'clock, 10:00

2. (a) The minute hand is longer than the hour hand.
   (b) 1 quarter of an hour is equal to 15 minutes.
   (c) Half of an hour is equal to 30 minutes.
   (d) The minute hand moves faster than the hour hand.

3. (a) – (iv)   (b) – (iii)
   (c) – (i)   (d) – (ii)

Practice Time 10A

1. (b) 4:30, half past four   (c) 5:30, half past five
   (d) 7:30, half past seven

3. (b) 3:15, quarter past 3   (c) 3:45, quarter to 4
   (d) 7:45, quarter to 8

5. (a) The Maths period on Monday starts at 8:30 or half past 8.
   (b) The second period on Monday starts at 9:15 or quarter past 9.
   (c) The break starts at 10:00 or 10 o'clock daily.
   (d) The GK period on Tuesday starts at 10:30 or half past 10.
   (e) On Thursday Maths period starts at 11:15 or quarter past 11 .

Think and Answer (Page 178)
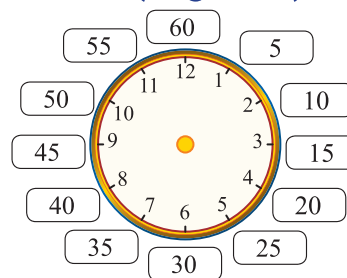
Quick Check (Page 179)

1. 30 minutes part 1, half past 1, 1:30
2. 8:25 or 25 minutes past 8

Practice Time 10B

1. (b) 25 minutes past 10   (c) 15 minutes past 11
   (d) 41 minutes past 4

Detailed Solutions

2. (a) – (i) (b) – (iii)
(c) – (iv) (d) – (ii)

4. (b) 16 minutes past 8 = ⌐ 8:16 ⌐

(c) 5 minutes past 7 = ⌐ 7:05 ⌐

(d) 55 minutes to 11 = ⌐ 10:05 ⌐

Think and Answer (Page 181)

We know that 1 hour = 60 minutes and
1 minute = 60 seconds.
Therefore, 1 hour = 60 × 60 = 3600 seconds.

Practice Time 10C

1. (a) p.m. (b) a.m. (c) p.m.

2. (a) 6:30 in the morning = | 6:30 a.m. |

(b) 5:00 evening = | 5:00 p.m. |

(c) 7:15 in the evening = | 7:15 p.m. |

(d) 8:05 in the night = | 8:05 p.m. |

(e) 9:40 before noon = | 9:40 a.m. |

(f) 10:25 morning = | 10:25 a.m. |

3. (a) It takes about a <u>second</u> to blink your eyes.
(b) It takes about 15 <u>minutes</u> to eat breakfast.
(c) It takes about 1 <u>hour</u> in doing homework.
(d) It takes about a <u>minute</u> to tie your shoelaces.
(e) It takes about 5 <u>minutes</u> to cook noodles.
(f) You should sleep 8 <u>hours</u>.

Practice Time 10D

2. (a) 5:30 (b) 3:15 (c) 7:00
3. (a) 9:30 (b) 2:15 (c) 11:45
4. Time when Ankit reached the school = 8:00 a.m.
Time he studied in the school = 6 hours.
Time when he leave the school
= 8:00 a.m. + 6 hours = 2 p.m.
Therefore, he leave the school at 2 p.m.
5. Ram gets up in the morning at = 6:45 a.m.
Time taken by him to get ready for the school
= 1 hour
Time when he get ready for the school
= 6:45 a.m. + 1 hour = 7:45 a.m.
6. Amrita went to the market at = 10:00 a.m.
She stayed in the market = 2 hours.
Time she leave the market = 10:00 a.m. + 2 hours
= 12:00 noon

7. Movie started at = 4:15 p.m.
Duration of the movie = 2 hours 10 minutes
The movie ends at
= 4:15 p.m. + 2 hours 10 minutes = 6:25 p.m.
8. News on a channel starts at = 8:05 p.m.
News lasts for 20 minutes.
Time when the news finish
= 8:05 p.m. + 20 minutes = 8:25 p.m.

Practice Time 10E

1. (a) The number of months have exactly 30 days
is 4.
(b) The number of months have 31 days is 7.
(c) Two consecutive months having the same
number of days in a year are July and August.
(d) The total number of Fridays in the year is 52.
(e) March, August and November months having
5 Saturdays and 5 Sundays.
(f) Wednesday is the first day of the year.
(g) Wednesday is the last day of the year.
2. Leap years: 1200, 2016, 2024

Maths Connect (Page 186)

India got freedom on <u>15th August 1947</u> from the
British rule.
The constitution of India was adopted by the
constituent assembly on <u>26th November 1949</u> and
came into force on <u>26th January 1950.</u>

Think and Answer (Page 187)

1. $\frac{1}{2}$ day = $\frac{1}{2}$ × 24 hours = 12 hours
12 hours = 12 × 60 minutes = 720 minutes.

2. $\frac{1}{3}$ day = $\frac{1}{3}$ × 24 hours = 8 hours
8 hours = 8 × 60 minutes = 480 minutes.

3. $\frac{1}{4}$ day = $\frac{1}{4}$ × 24 hours = 6 hours
6 hours = 6 × 60 minutes = 360 minutes.

Practice Time 10F

1. (a) 4.1.2003; 4/1/2003
(b) 21.04.2014; 21/04/2014
(c) 16 November, 2018; November 16, 2018.
2. (a) 2 hours = 2 × 60 minutes = 120 minutes
(b) 8 hours = 8 × 60 minutes = 480 minutes

(c) 1 day = 1 × 24 hours = 24 hours
(d) 1 day = 1 × 24 hours = 24 hours
24 hours = 24 × 60 minutes = 1440 minutes
(e) 5 days = 5 × 24 hours = 120 hours
120 hours = 120 × 60 minutes = 7200 minutes
(f) 19 weeks = 19 × 7 days = 133 days
(g) 24 weeks = 24 × 7 days = 168 days
(h) 10 months = 10 × 30 days = 300 days
(i) 4 years = 4 × 365 days = 1460 days

Chapter Assessment

1. (a) – (ii)   (b) – (ii)   (c) – (i)
2. (a) – (iii)10:45 = Quarter to 11.
   (b) – (v)8:15 = Quarter past 8.
   (c) – (ii)9:20 = 20 minutes past 9.
   (d) – (ii)6:40 = 20 minutes to 7.
   (e) – (iv)5:30 = Half past 5.
3. (a) ⸢8:13⸣ is ⸢13⸣ minutes past 8.
   (b) ⸢5:52⸣ is ⸢8⸣ minutes to 6.
   (c) ⸢9:21⸣ is 21 minutes past ⸢9⸣.
   (d) ⸢11:48⸣ is ⸢12⸣ minutes to 12.
4. (a) 5 hours = 5 × 60 minutes = 300 minutes
   (b) 2 days = 2 × 24 hours = 48 hours
   (c) 4 months = 4 × 30 days = 120 days
   (d) 8 hours 10 minutes = 8 × 60 minutes + 10 minutes
       = 480 minutes + 10 minutes = 490 minutes
5. (a) 3 a.m. and 7 a.m. = 4 hours
   (b) 2 p.m. and 3:15 p.m. = 1 hour 15 minutes
   (c) 12:45 p.m. and 5 p.m. = 4 hour 15 minutes
6. Film began at 11:15 a.m.
   ended after 2 hour = 11:15 + 2 hours = 1:15 p.m.
7. (a) 15/11/2018, November 15, 2018
   (b) 16 Nov., 2019; Nov. 16, 2019
   (c) 26/1/2020; 26 Jan. 2020
9. 9 hours 55 minutes
10. 24 rounds does the minute hand of a clock complete in a day.
11. 12 a.m. to 12 p.m. = 12 hours
    12 × 60 minutes = 720 minutes

Brain Sizzlers (Page 193)

1. Number of minutes = 5 × 5 + 4 minutes
                     = 25 + 4 minutes
                     = 29 minutes
2.   1 hour = 60 minutes
       480 minutes = 480 ÷ 60 hours
                   = 8 hours

Detailed Solutions

CHAPTER 11 : MONEY

Let's Recall

1. (a) ₹50 + ₹10 + ₹10 + ₹5 = ₹75
   (b) ₹100 + ₹50 + ₹20 + ₹10 = ₹180
   (c) ₹200 + ₹50 + ₹10 + ₹10 + ₹5 = ₹275
   (d) ₹500 + ₹200 = ₹700
2. (a) ₹1 = two 50-paisa coins
   (b) ₹5 = five 1-rupee coins
   (c) ₹10 = five 2-rupee coins
   (d) ₹20 = four 5-rupee coins
   (e) ₹100 = twenty 5-rupee notes
   (f) ₹200 = ten 20-rupee notes
   (g) ₹500 = ten 50-rupee notes
   (h) ₹2000 = twenty 100-rupee notes

Practice Time 11A

1. (a) ₹30.50 = Thirty rupees fifty paise
   (b) ₹20.75 = Twenty rupees seventy-five paise
   (c) ₹100.10 = One hundred rupees ten paise
   (d) ₹118.75 = One hundred eighteen rupees seventy-five paise
   (e) ₹550.20 = Five hundred fifty rupees twenty paise
   (f) ₹999.20 = Nine hundred ninety-nine rupees twenty paise
2. (a) 42 rupees 25 paise = ₹42.25
   (b) 65 rupees 50 paise = ₹65.50
   (c) One hundred rupees sixty-five paise = ₹100.65
   (d) Twenty-seven rupees seventy paise = ₹27.70
   (e) One rupee seventy-five paise = ₹1.75
   (f) Ninety-eight rupees ninety paise = ₹98.90
3. (a) ₹100 + ₹50 + ₹5 + ₹0.50 = ₹155.50
       One hundred fifty-five rupees fifty paise.
   (b) ₹50 + ₹20 + ₹10 + ₹0.50 = ₹80.50
       Eighty rupees fifty paise.
   (c) ₹500 + ₹200 + ₹2 = ₹702
       Seven hundred two rupees.
   (d) ₹500 + ₹0.50 + ₹0.25 = ₹500.75
       Five hundred rupees seventy-five paise.
4. We know that, 1 rupee = 100 paise
   or   1 paisa = $\frac{1}{100}$ rupee
   (a) ₹0.75 = 75 paise

(b) ₹20 = 20 × 100 = 2000 paise
  ₹20.50 = 2000 + 50 = 2050 paise
(c) ₹25 = 25 × 100 = 2500 paise
  ₹25.05 = 2500 + 05 = 2505 paise
(d) ₹16 = 16 × 100 = 1600 paise

5. We know that, 1 rupee = 100 paise

or 1 paisa = $\dfrac{1}{100}$ rupee

(a) 900 p = ₹$\dfrac{1}{100}$ × 900 = ₹$\dfrac{900}{100}$ = ₹9

(b) 550 p = ₹$\dfrac{1}{100}$ × 550 = ₹$\dfrac{550}{100}$ = ₹5.50

(c) 4001 p = ₹$\dfrac{1}{100}$ × 4001 = ₹$\dfrac{4001}{100}$ = ₹40.01

(d) 1000 p = ₹$\dfrac{1}{100}$ × 1000 = ₹$\dfrac{1000}{100}$ = ₹10

6. (a) 5 rupees 69 paise = ₹5.69
  (b) 9 rupees 4 paise = ₹9.04
  (c) 83 rupees 94 paise = ₹83.94
  (d) 3 rupees 41 paise = ₹3.41

Practice Time 11B

1. (a)
```
            (1)
    ₹     8  3  .  4  0
+   ₹     4  8  .  3  0
    ₹  1  3  1  .  7  0
```

(b)
```
            (1)
    ₹     6  9  .  7  0
+   ₹     5  1  .  2  5
    ₹  1  2  0  .  9  5
```

(c)
```
               (1)
    ₹     7  4  .  7  5
+   ₹     7  1  .  6  0
    ₹  1  4  6  .  3  5
```

(d)
```
         (1)        (1)
    ₹  2  3  2  .  1  5
+   ₹  1  9  6  .  4  5
    ₹  4  2  8  .  6  0
```

2. (a)
```
                 (11)
          (3)(1)(10)   (2)(10)
    ₹     4  2  0  .  3  0
-   ₹     1  6  2  .  2  5
    ₹     2  5  8  .  0  5
```

(b)
```
    ₹     7  3  4  .  2  5
-   ₹     2  1  4  .  0  0
    ₹     5  2  0  .  2  5
```

(c)
```
    ₹     4  9  6  .  7  5
-   ₹     3  0  4  .  4  5
    ₹     1  9  2  .  3  0
```

(d)
```
    ₹     2  4  2  .  8  0
-   ₹     1  3  2  .  5  0
    ₹     1  1  0  .  3  0
```

3. (a) ₹809.35 + ₹471.50
```
                  (1)
    ₹        8  0  9  .  3  5
+   ₹        4  7  1  .  5  0
    ₹     1  2  8  0  .  8  5
```
Thus, ₹809.35 + ₹471.50 = ₹1280.85

(b) ₹909.80 + ₹742.60
```
                (1)(1)
    ₹        9  0  9  .  8  0
+   ₹        7  4  2  .  6  0
    ₹     1  6  5  2  .  4  0
```
Thus, ₹909.80 + ₹742.60 = ₹1652.40

(c) ₹841.70 + ₹688.30
```
             (1)(1)(1)
    ₹        8  4  1  .  7  0
+   ₹        6  8  8  .  3  0
    ₹     1  5  3  0  .  0  0
```
Thus, ₹841.70 + ₹688.30 = ₹1530

(d) ₹960.45 + ₹262.45
```
             (1)        (1)
    ₹        9  6  0  .  4  5
+   ₹        2  6  2  .  4  5
    ₹     1  2  2  2  .  9  0
```
Thus, ₹960.45 + ₹262.45 = ₹1222.90

(e) ₹100 + ₹20.25 + ₹215.20
```
    ₹     1  0  0  .  0  0
    ₹        2  0  .  2  5
+   ₹     2  1  5  .  2  0
    ₹     3  3  5  .  4  5
```
Thus, ₹100 + ₹20.25 + ₹215.20 = ₹335.45

(f) ₹7 + 25 p + ₹19 + 25 p + ₹106 + 25 p

		②		①		
₹			7	.	0	0
₹			0	.	2	5
₹		1	9	.	0	0
₹			0	.	2	5
₹	1	0	6	.	0	0
+ ₹			0	.	2	5
₹	1	3	2	.	7	5

Thus, ₹7 + 25 p + ₹19 + 25 p + ₹106 + 25 p
= ₹132.75

4. (a) ₹13.50 from ₹20

		⑨			
	① ⑩	⑩			
₹	2̶ 0̶	.	0̶	0	
− ₹	1 3	.	5	0	
₹	0 6	.	5	0	

Thus, ₹20 − ₹13.50 = ₹6.50

(b) ₹29.20 from ₹80.20

	⑦ ⑩			
₹	8̶ 0̶	.	2	0
− ₹	2 9	.	2	0
₹	5 1	.	0	0

Thus, ₹80.20 − ₹29.20 = ₹51

(c) ₹187.50 from ₹200.50

	⑨		
① ⑩ ⑩			
₹	2̶ 0̶ 0̶	.	5 0
− ₹	1 8 7	.	5 0
₹	0 1 3	.	0 0

Thus, ₹200.50 − ₹187.50 = ₹13

(d) ₹65 paise from ₹50

		⑨	⑨		
	④ ⑩	⑩ ⑩			
₹	5̶ 0̶	.	0̶	0̶
− ₹	0 0	.	6	5
₹	4 9	.	3	5

Thus, ₹50 − ₹0.65 = ₹49.35

5. Sum of ₹22.50 and ₹89.50

		① ①		
₹		2 2	.	5 0
+ ₹		8 9	.	5 0
₹	1	1 2	.	0 0

Thus, ₹22.50 + ₹89.50 = ₹112.00

₹	4 4	.	5 0
+ ₹	8 0	.	0 0
₹	1 2 4	.	5 0

Sum of ₹44.50 and ₹80.00 = ₹124.50

Now, subtracting ₹112.50 from ₹124.50

₹	1 2 4	.	5 0
− ₹	1 1 2	.	0 0
₹	0 1 2	.	5 0

Thus, ₹124.50 − ₹112.00 = ₹12.50

6. (a)

Mohan got from his father =	₹	1	6	0
Mohan got from his mother = +	₹	1	2	0
Total amount =	₹	2	8	0

Thus, Mohan has ₹280.

(b)

Cost of a milk packet =	₹		2	8	.	5	0
Cost of a biscuit packet =	₹		3	5	.	0	0
Cost of a butter packet = +	₹		5	2	.	7	5
Total cost of items =	₹	1	1	6	.	2	5

Thus, Anu spent ₹116.25 in total.

(c)

Cost of chocolate flavour waffle =	₹	1	5	0	.	7	5
Cost of strawberry flavour waffle =	₹	1	1	0	.	2	5
Cost of vanilla flavour waffle = +	₹	1	1	3	.	0	0
Cost of total item =	₹	3	7	4	.	0	0

Thus, Joe spent ₹374 in total on buying the waffles.

(d)

			9	9		
			10	10	10	

Amount of money Shilpi has in her purse = ₹ 1 0 0̸ . 0̸ 0
Amount of money she spent on brunch = − ₹   7 5 . 5 0
Money left with Shilpi = ₹ 0 2 4 . 5 0

Thus, ₹24.50 is left with Shilpi.

(e)

			9		
		7	10	10	

Amount of money Rishi has in digital wallet = ₹ 4 8̸ 0̸ . 0̸ 0
Amount of money he spent from his wallet = − ₹ 4 3 2 . 5 0
Balance left in his wallet = ₹ 0 4 7 . 5 0

Thus, ₹47.50 balance was left in his wallet.

Practice Time 11C

1. (a)

			5		
₹	1	1	0 .	7	0
×					8
₹	8	8	5 .	6	0

(b)

	3	2	1		
₹	1	6	5 .	2	0
×					5
₹	8	2	6 .	0	0

(c)

₹		9	0 .	4	5
×				1	0
		0 0		0 0	
	9	0 4		5 0	
₹	9	0 4 .		5 0	

(d)

			1	1	
₹		1	4 .	9	5
×				1	2
		2	9	9	0
	1	4	9	5	0
₹	1	7	9 .	4	0

2. (a) 120 paise ÷ 4

```
4) 120 (30
  − 12↓
    00
  −  00
     0
```

Thus, 120 paise ÷ 4 = 30 p

(b) ₹77 ÷ 7

```
7) 77 (11
  − 7↓
    07
  −  7
     0
```

Thus, ₹77 ÷ 7 = ₹11

(c) ₹103.65 ÷ 5

```
5) 103.65 (20.73
  − 10↓↓|
     036|
  −   35↓
      015
  −    15
       0
```

Thus, ₹103.65 ÷ 5 = ₹20.73

3. (a) Cost of 1 balloon   = ₹5
Cost of 15 balloons = ₹5 × 15
                   = ₹75

Thus, the cost of 15 such balloons is ₹75.

(b) Cost of one notebook = ₹25.75

				3	4	3	

Cost of six notebooks =

	₹	2	5 .	7	5
×					6
₹	1	5	4 .	5	0

Thus, the cost of six notebooks is ₹154.50

(c) Total amount Alia had = ₹120.50
Number of children = 5

Amount of money each child will get
= ₹120.50 ÷ 5

$$5\overline{)120.50}(24.10$$
$$-\ 10↓$$
$$\overline{20}$$
$$-\ 20↓$$
$$\overline{05}$$
$$-\ 5$$
$$\overline{0}$$

Thus, each child gets ₹24.10.

(d) Total cost of 3 calculators = ₹540

Cost of 1 calculator = ₹540 ÷ 3

$$3\overline{)540}(180$$
$$-\ 3↓$$
$$\overline{24}$$
$$-\ 24↓$$
$$\overline{00}$$
$$\overline{00}$$
$$\overline{0}$$

Thus, the cost of one calculator is ₹180.

(e) Cost of 9 packets noodles = ₹227.16

Cost of 1 packet noodles = ₹227.16 ÷ 9

$$9\overline{)227.16}(25.24$$
$$-\ 18↓$$
$$\overline{47}$$
$$-\ 45↓$$
$$\overline{021}$$
$$-\ 18↓$$
$$\overline{36}$$
$$-\ 36$$
$$\overline{00}$$

Thus, the cost of 1 packet noodles is ₹25.24.

Practice Time 11D

Fashion Bazaar			Date: 10/12/20xx	
Customer name: HARSHA			Bill No. 100	
S. No.	Items	Quantity	Cost per item	Total cost
1.	Shirt	2	₹300	₹300 × 2 = ₹600
2.	Trouser	3	₹450	₹450 × 3 = ₹1350
3.	Skirt	1	₹250	₹250 × 1 = ₹250
			Total	₹2200

Maths Fun (Page 206)

1. (a) ₹1022; One thousand twenty-two rupees

   (b) ₹710; Seven hundred ten rupees

   (c) ₹996; Nine hundred ninety-six rupees

2. Maya

Chapter Assessment

1. (a) – (iii) ₹925.50 = Nine hundred twenty-five rupees fifty paise

   (b) – (ii) There are no rupees.

   (c) – (i) 1500 paise = $₹\dfrac{1500}{100}$ = ₹15

   (d) – (iv) 1 rupees = 100 paise

   or 1 paisa = $\dfrac{1}{100}$ rupees = ₹0.01

2. (a) One rupee coin = Two coins of [50] paise together.

   (b) Four coins of fifty paise together = One [2] rupee coin.

   (c) Five coins of one rupee together = One [5] rupee coin.

3. (a) ₹89.62 = Eighty-nine rupees sixty-two paise.

   (b) ₹19.79 = Nineteen rupees seventy-nine paise.

   (c) ₹0.54 = fifty-four paise

   (d) ₹10.01 = Ten rupees one paise.

4. (a) 750 p = ₹7.50   (b) 4080 p = ₹40.80

   (c) 1985 p = ₹19.85   (d) 3007 p = ₹30.07

5. (a) ₹12.40 = 12.40 × 100 paise = 1240 paise

   (b) ₹99.75 = 99.75 × 100 paise = 9975 paise

   (c) 8999 paise = $₹\dfrac{8999}{100}$ = ₹89.99

   (d) 990 paise = $₹\dfrac{990}{100}$ = ₹9.90

6. (a) ₹322.50 + ₹269.50

		①	①		
₹	3	2	2	. 5	0
+ ₹	2	6	9	. 5	0
₹	5	9	2	. 0	0

Thus, ₹322.50 + ₹269.50 = ₹592

(b) ₹640.05 + ₹490.35

		①			①
₹		6	4	0 . 0	5
+ ₹		4	9	0 . 3	5
₹	1	1	3	0 . 4	0

Thus, ₹640.05 + ₹490.35 = ₹1130.40

(c) ₹598.63 – ₹418.59

			⑤	⑬
₹	5	9	8 . 6̶	3̶
– ₹	4	1	8 . 5	9
₹	1	8	0 . 0	4

Thus, ₹598.63 – ₹418.59 = ₹180.04

Detailed Solutions

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(d) Same as part (c)

(e) ₹1236.75 × 5

	①	①	③	③	②		
₹	1	2	3	6	.	7	5
×							5
₹	6	1	8	3	.	7	5

Thus, ₹1236.75 × 5 = ₹6183.75

(f) Same as part (e)

(g) ₹56 ÷ 7

```
   7) 56 (8
    − 56
      0
```

Thus, ₹56 ÷ 7 = ₹8

(h) ₹90.09 ÷ 9

```
   9) 90.09 (10.01
    − 9↓
      00
    − 00↓↓
        09
      −  09
          0
```

Thus, ₹90.09 ÷ 9 = ₹10.01

(i) ₹672 ÷ 6

```
   6) 672 (112
    − 6↓
      07
    −  6↓
        12
      − 12
         0
```

Thus, ₹672 ÷ 6 = ₹112

7.

		①	①			
Mayank bought sparklers for his son =	₹	4	3	.	8	0
Mayank bought sparklers for his daughter = +	₹	3	9	.	6	0
Total money he spent on buying sparklers =	₹	8	3	.	4	0

8. Total money Arpan has = ₹65.70

According to question, Sonali has three times as much money as Arpan.

Therefore, ₹65.70 × 3 = ₹197.10

Hence, Sonali has ₹197.10

9. ₹60.75 × 4 = ₹243

10. Ahana spend = ₹57.25

According to question,

Samir spend = ₹57.25 + ₹16.45 = ₹73.70

11. Cost of one pencil = ₹5

Cost of six pencils = ₹(5 × 6) = ₹30

Cost of one poster = ₹12

Cost of 5 posters = ₹(12 × 5) = ₹60

Total cost of pencils and posters = ₹(30 + 60)

= ₹90

Therefore, Manjeet pay ₹90 for pencils and posters.

Mental Maths (Page 208)

1. 8 rupees 35 paise = (8 × 100) paise + 35 paise

= 800 paise + 35 paise

= 835 paise

2. 10 rupee coin = 50 paise × 20 coins

= 10 rupee coin.

3. Total money Ankit had = ₹1500

The number of both types of notes is the same.

Therefore, 200 rupee notes = five = ₹(200 × 5)

= ₹1000

100 rupee notes = five

= ₹(100 × 5)

= ₹500

Thus, the number of notes of each type is 5.

Brain Sizzlers (Page 208)

1.

₹	1	6	5	0
− ₹		5	0	5
₹	0	1	0	5

→

			④	⑩
₹	1	6	.	5̶	0̶
− ₹		5	.	0	5
₹	1	1	.	4	5

2.

₹	1	2	0	9	0
− ₹	1	0	0	1	0
₹	0	8	0	8	0

→

₹	1	2	0	.	9	0
− ₹	1	0	0	.	1	0
₹	0	2	0	.	8	0

CHAPTER 12 : DATA HANDLING

Let's Recall

1. (*a*) Marigold   (*b*) Jasmine

(*c*) Total number of flowers
= 30 + 40 + 10 + 15 + 18 + 29 = 142

(*d*) Yellow colour flower's = 40 + 15 + 29 = 84

2. (*a*) Number of children like action movies = 7

(*b*) Number of children like cartoon movies = 11

(*c*) Most popular movies = Cartoon

(*d*) Least popular movies = Musical

(*e*) Action and comedy

Maths Fun (Page 214)

Anuj ate Banana.

Ali ate Cherry.

Kartik ate Watermelon.

Veena ate Apple.

Practice Time 12A

1.

Animal	Tally marks	Number of animals
Lion	ⅢⅠ	6
Tiger	Ⅲ Ⅲ	8
Elephant	Ⅲ	5
Monkey	ⅢⅠ	6
Bear	ⅢⅠ	4
Zebra	ⅢⅠ	3

4. (*a*) Value of each symbol = 2 students.

(*b*) Ice cream is liked by most of the students.

(*c*) Kheer is liked by least of the students.

(*d*) Total number of students in class 3
= 14 + 10 + 6 + 4 + 8 + 10 = 52 .

5. (*a*) Number of students in Hurdle Race = 6

(*b*) Number of students in High Jump = 4

(*c*) Relay Race

(*d*) Long Jump

(*e*) Number of students participated in all = 7 + 4 + 6 + 2 + 4 = 23

(*f*) 7 – 4 = 3 students

Practice Time 12B

1. (*a*) Number of students belong to Maths club = 14

(*b*) Maths club

(*c*) Number of students belongs to Maths club = 14

Number of students belongs to Social club = 6
Therefore, 14 – 6 = 8 students

(*d*) Total number of students in class 3 = Number of students in all the clubs.
= 12 + 8 + 14 + 6 = 40

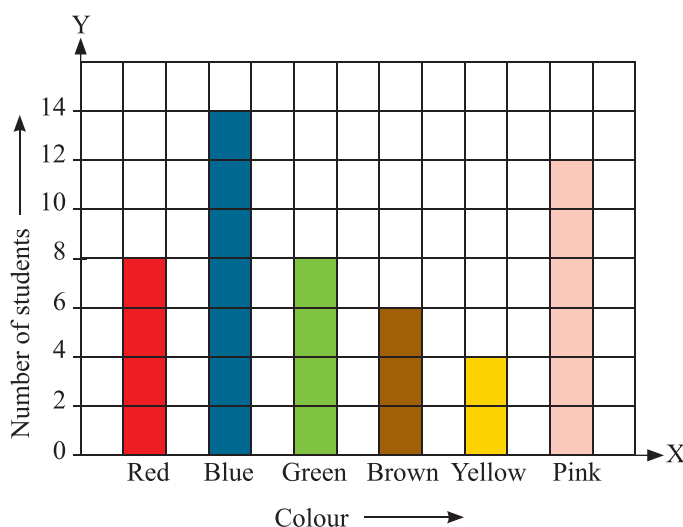**2.** (*a*) 30   (*b*) 35 – 20 = 15

(*c*) 10   (*d*) 20 + 35 = 55

(*e*) By walk

3. (*a*) Maths   (*b*) Art

(*c*) Number of students like Maths = 10

(*d*) Number of students like English = 8

(*e*) 10 – 8 = 2

Hence, 2 more students like Maths than English.

Mental Maths (Page 218)
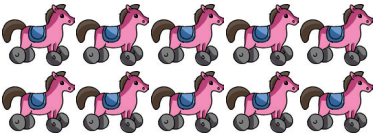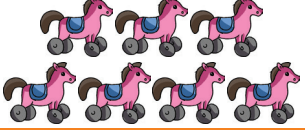

Brain Sizzlers (Page 219)

In Riya's pictograph: Each '——' stands for __2__ cards.

In Priya's pictograph: Each '——' stands for __3__ cards.

Chapter Assessment

1. (*a*) Shikha, 7   (*b*) 6

(*c*) Saket and Navneet   (*d*) Saransh

2.

Days	Number of toys
Monday	
Tuesday	

Detailed Solutions

Wednesday	
Thursday	
Friday	
Saturday	

Key: 1 = 2 toys

3. (*a*) Bulldog
   (*b*) Total number of students Mamta ask in all
      = 13 + 11 + 7 + 12 + 10 = 53 students.
   (*c*) Number of students like Bulldog = 13 students.
   (*d*) Pug
4. (*a*) On Tuesday and Wednesday, there were 1400 viewers in all.
   (*b*) On Saturday and Sunday, there were 1600 viewers in all.
   (*c*) On both days Wednesday and Thursday, there were 800 viewers.
   (*d*) On Friday, there were 600 fewer viewers than on Saturday.
   (*e*) The total number of viewers in all six days is 4200.
   (*f*) 11.

MODEL TEST PAPER – 2

1. (*c*) cylinder   2. (*b*) metre
3. (*b*) 3   4. (*b*) 2 rounds
5. (*b*) 1 m 50 cm = 100 cm + 50 cm = 150 cm
6. (*b*) Since 2 kg = 2000 g
   $\therefore \dfrac{2000}{8}$ g = 250 g
7. (*b*) 150 L – 54 L = 96 L
8. (*a*) ₹870.75 – ₹500 = ₹370.75
9. (*a*) 6 faces
10. (*b*) 2 L 500 mL = 2000 mL + 500 mL = 2500 mL.
11. (*a*) The top view of the Lotus Temple is circular in shape.

(*b*) One leap year = 366 days
(*c*) A rectangle is a 2-D shape.
(*d*) The opposite sides of each face are equal, in a cuboid.
(*e*) We eat dinner at night.
(*f*) We go to school in the morning.
(*g*) Asymmetrical figures have no line of symmetry.
13. Name of the shape = cube, Number of face = 6
14. Number of buttons in a shirt = 7
   Total number of buttons in 11 shirts = 11 × 7
                                       = 77 buttons.
15. Time taken by Malini to get ready for school
   = 30 minutes
   Time taken by her in eating breakfast = 15 minutes
   Therefore, total time taken by Malini = 30 minutes
   + 15 minutes = 45 minutes
16. Distance from Jaipur to Delhi = 268 km 400 m
   Distance from Agra to Delhi = 217 km 670 m
   Required distance = 268 km 400 m – 217 km 670 m
         = 50 km 730 m

	km			m		
			⑬			
		⑦	②⑩			
	2	6	8̸	4̸	0̸	0
–	2	1	7	6	7	0
	0	5	0	7	3	0

17.

ABC Supermarket			Date: 10/10/20xx	
Customer name: Shreya			Bill No. 0514	
S. No.	Items	Quantity	Rate	Total Price
1.	Bread	3 Packets	₹15.00	₹45.00
2.	Baked beans	2 bottles	₹45.50	₹91.00
3.	Oranges	5 kg	₹47.00	₹235.00
4.	Potatoes	4 kg	₹12.25	₹49.00
			Total	₹420.00

18. (*a*) Jolly collected the most number of pebbles.
   (*b*) Preeti will collect 49 more pebbles to be equal to Chavi.
   (*c*) If Neha will collect 87 more pebbles, she will have 322 pebbles.
   (*d*) Nidhi needs 92 more pebbles to have 400.
19. (*a*) Maximum number of vehicles, *i.e.*, Car = 40
      Minimum number of vehicles, *i.e.*, Scooty = 15
      Therefore, required difference = (40 – 15) vehicles = 25 vehicles.
   (*b*) Total number of vehicles = (25 + 30 + 40 + 15) vehicles = 110 vehicles.