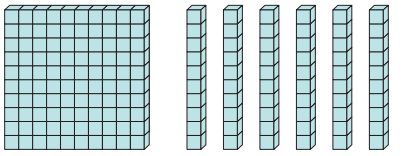
DETAILED SOLUTIONS

CHAPTER 1 : NUMBERS UP TO 9999

Let's Recall

1. 

100 + 60 + 7 = 167

H	T	O
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

So, the number that comes just before the smallest 3-digit number is 99.

Think Tank (Page 10)

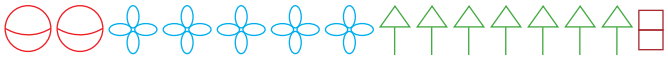
1. There are 10 hundreds in one thousand.

2. There are 100 tens in one thousand.

Fast Check (Page 11)

9999 is the greatest 4-digit number.

Think Tank (Page 11)



represents the number 2571.

Practice Time 1A

1. (*a*)

Th	H	T	O
1	4	5	5

(*b*)

Th	H	T	O
2	0	3	3

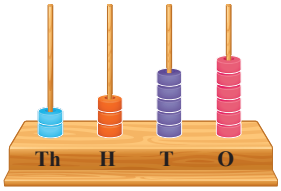
(*c*)

Th	H	T	O
3	2	1	4

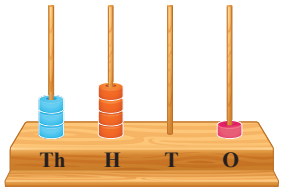
(*d*)

Th	H	T	O
6	4	8	0

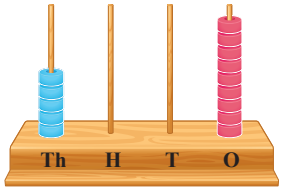
2. (*a*) 5057 (*b*) 4102 (*c*) 3676

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

9
20
300
6000

(*b*) 1 5 0 8

8
0
500
1000

(*c*) 4 9 8 0

0
80
900
4000

2. (*a*) 1234

Face value: 3

Place value: 30

(*b*) 7851

Face value: 8

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

Maths Connect (Page 15)

Year of construction of Taj Mahal is 1632.

Practice Time 1C

1. (*a*) 524 < 2,193 (*b*) 7,329 > 3,279
(*c*) 8,028 < 8,208 (*d*) 2,613 < 2,631
(*e*) 9,162 > 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*) 5146 < 5346 < 5446 < 5846
(*b*) 857 < 8275 < 8725 < 9814
(*c*) 9037 < 9073 < 9307 < 9703
(*d*) 267 < 967 < 2679 < 9672

4. (*a*) 6873 > 6738 > 6387 > 6378
(*b*) 8132 > 7093 > 3506 > 239
(*c*) 3548 > 3458 > 1320 > 1023
(*d*) 6985 > 6895 > 6598 > 6589

Think Tank (Page 19)

1. 0579 (3-digit number)
2. Riya (9750) **3.** Prakash (5079)

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

Think Tank (Page 21)

1. T **2.** T
3. F **4.** F

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

Think Tank (Page 23)

18 pages is close to 20.
So, Poonam reads 81 pages in approximately 4 days.

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

Think Tank (Page 24)

Clock faces, Book chapters and sections, Movie titles, Events (like XXVIII Olympiad), Monuments and buildings, etc.

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 numerals 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

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 digits 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 next even number after four thousand fourteen is 4016.

(*b*) The smallest 4-digit number using 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 7652.

Place value of coloured digit = 600

(*b*) The number is 8945.

Place value of coloured digit = 8000

(*c*) The number is 5076.

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

Challenge Question (Page 27)

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

Mental Maths (Page 27)

1. The four digit number = 5555

2. The odd number just before 7088 = 7087
The predecessor of 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

Maths Fun (Page 28)

$35 \xrightarrow[10]{\text{nearest}} 40\,(\text{Mother})$

$42 \xrightarrow[10]{\text{nearest}} 40\,(\text{Mother})$

$38 \xrightarrow[10]{\text{nearest}} 40\,(\text{Mother})$

$67 \xrightarrow[10]{\text{nearest}} 70\,(\text{Mother})$

$65 \xrightarrow[10]{\text{nearest}} 70\,(\text{Mother})$

$73 \xrightarrow[10]{\text{nearest}} 70\,(\text{Mother})$

$81 \xrightarrow[10]{\text{nearest}} 80\,(\text{Mother})$

$79 \xrightarrow[10]{\text{nearest}} 80\,(\text{Mother})$

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

	H	T	O
	200	10	7
+	500	60	2
	700	70	9

700 + 70 + 9 = 779

(*b*) 481 + 318

	H	T	O
	400	80	1
+	300	10	8
	700	90	9

700 + 90 + 9 = 799

(*c*) 645 + 152

	H	T	O
	600	40	5
+	100	50	2
	700	90	7

700 + 90 + 7 = 797

(*d*) 516 + 273

	H	T	O
	500	10	6
+	200	70	3
	700	80	9

700 + 80 + 9 = 789

(*e*) 424 + 263

	H	T	O
	400	20	4
+	200	60	3
	600	80	7

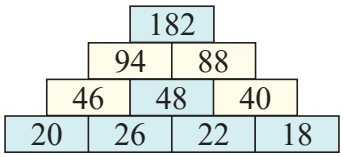
600 + 80 + 7 = 687

(*f*) 385 + 512

	H	T	O
	300	80	5
+	500	10	2
	800	90	7

800 + 90 + 7 = 897

Think Tank (Page 35)



Practice Time 2B

1. (*a*) Regrouping = 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*) 436 + 243 + 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 ones.

Step 2. Add the tens.

0 + 7 = 7 tens.

Step 3. Add the hundreds.

3 + 4 = 7 hundreds.

Step 4. Add the thousands.

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.

Step 3. Add the hundreds.

4 + 5 = 9 hundreds.

Step 4. Add the thousands.

6 + 3 = 9 thousands.

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

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 = 6 thousands.

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

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

Think Tank (Page 39)

1. 2000 + 1500 = 3500

2. 1000 + 800 + 500 + 1200 = 3500

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:

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

Step 1. Add the ones.

3 + 7 = 10 ones.

= 1 ten + 0 ones.

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, 1023 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) $+ 0 + 0 + 4 = 5$ 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 columns and add using the following steps:

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

Step 1. Add the ones.

$6 + 8 + 2 = 16$ 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 1652 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
+	1	2	7
	9	9	9

Up

∴ The answer is correct.

2. Same as 1.

3. First, add the numbers downwards.

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

Down

Now, check your answer by adding upwards.

Check:

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

Up

∴ 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 + 99 = 3139 (*f*) 9 + 1736 = 1745

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.

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

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

I	L	O	V	E
9030	5538	4448	6474	6409
(*e*)	(*i*)	(*b*)	(*j*)	(*d*)

M	A	T	H	S
2885	7647	9913	8843	9498
(*a*)	(*c*)	(*f*)	(*h*)	(*g*)

Secret message: I LOVE MATHS

Think Tank (Page 44)

Estimated sum is easier to find. But actual sum is accurate.

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.

Think Tank (Page 45)

Estimated sum of contribution = ₹60 + ₹40
= ₹30 + ₹60
= ₹190 > ₹150

So, Neha and her friends have enough money to buy the pen.

Practice Time 2H

1.

		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.

2.

	Th	H	T	O
			(1)	
Number of daffodils =		1	1	4
Number of tulips =			1	1
Number of marigolds = +	1	1	1	9
Total number of flowers =	1	2	4	4

Thus, total number of flowers they plant is 1244.

3.

	Th	H	T	O
		(1)	(1)	
Number of Hindi storybooks =	1	2	3	4
Number of English storybooks =	2	3	5	6
Number of Art and Craft books = +	2	2	2	0
	5	8	1	0

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

4.

	Th	H	T	O
	(1)			
Number of bicycles manufactured in a year =	4	6	1	7
Number of 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.

5.

	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 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.

6.

	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

Thus, total number of balloons is 420, which is more than 400.

Chapter Assessment

1. (*a*) – (*i*) $740 + 260 = 1000$.

$1000 = 100$ 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*) $1673 < 673 + 1100$

$1673 < 1773$

Hence, option (*iv*) is correct.

(*d*) – (*ii*) 4 tens = $4 \times 10 = 40$,

5 hundreds = 5×100,

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*) – (*ii*) $2000 + 100 = 2100$

(*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 in train now =	2	0	4	0

Thus, 2040 passengers are travelling in 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) = +	₹	2	8	0	0
Total price of shoes and dress =	₹	5	3	5	0

Thus, total price of dress and shoes is ₹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 will have 5745 toys in all.

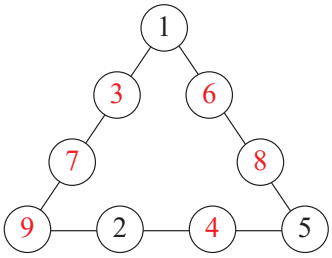
5.

		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, they saved ₹4023 in that month altogether.

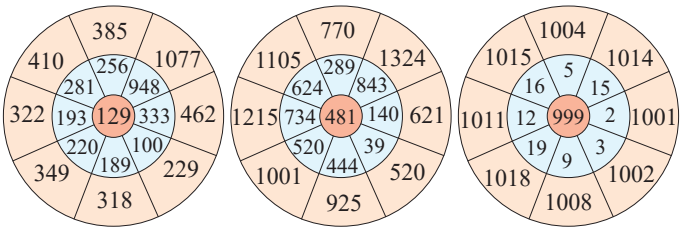
Challenge Question (Page 47)

1.



2. Sum of numbers on both dice = 10
And, both number must be odd,
So, the numbers are 5, 5 → 5 + 5 = 10
(number on dice ≤ 6)

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)
~~7~~	~~5~~
6	6
0	9

(*c*)

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

(*d*)

H	T	O
	(16)	
(0)	~~(6)~~	(13)
~~1~~	~~7~~	~~3~~
	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 = 284 (*b*) 305 – 0 = 305
(*c*) 206 – 100 = 106 (*d*) 699 – 699 = 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)	~~(2)~~	(14)
~~9~~	~~3~~	~~4~~
6	4	6
2	8	8

(*e*)

H	T	O
	(9)	
(4)	~~(10)~~	(14)
~~5~~	~~0~~	~~4~~
2	4	8
2	5	6

(*f*)

H	T	O
(7)	(14)	
~~8~~	~~4~~	6
4	8	3
3	6	3

(*g*)

H	T	O
	(9)	
(8)	~~(10)~~	(10)
~~9~~	~~0~~	~~0~~
4	8	8
4	1	2

(*h*)

H	T	O
	(11)	
(5)	~~(1)~~	(10)
~~6~~	~~2~~	~~0~~
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)	
	~~6~~	~~2~~	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)	
	~~6~~	~~2~~	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	~~4~~	~~3~~
–	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)
	~~8~~	~~4~~	~~3~~
–	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)
	~~8~~	~~4~~	~~3~~
–	2	5	7
	5	8	6

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

Think Tank (Page 57)

	Th	H	T	O
		(11)	(12)	
	(5)	~~1~~	~~2~~	(11)
	~~6~~	~~2~~	~~3~~	~~1~~
–	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)
	~~4~~	~~6~~	~~7~~	~~5~~
–	3	8	4	6
	0	8	2	9

(*e*)

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

(*f*)

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

(*g*)

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

(*h*)

	Th	H	T	O
		(9)	(14)	
	(6)	~~(10)~~	~~(4)~~	(14)
	~~7~~	~~0~~	~~5~~	4
–	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)	~~(5)~~	(16)	
	~~5~~	~~6~~	~~6~~	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, 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, 5 < 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)	~~(6)~~	(17)	
	~~8~~	~~7~~	~~7~~	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, 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, 6 < 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*)

Think Tank (Page 58)

1. Since, 1000 – 9 = 991.
Then, 9000 – 9 = 8991.

2. 723 tens = 7 thousands 23 tens.
∴ 723 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

Think Tank (Page 59)

Neha bought 24 diyas $\xrightarrow[\text{to nearest 10}]{\text{round off}}$ = 20

Her teacher gave her 38 diyas $\xrightarrow[\text{to nearest 10}]{\text{round off}}$ = 40

∴ She has 20 + 40 = 60 diyas.

∴ She has to buy 100 – 60 = 40 diyas.

Practice Time 3D

1. Actual difference Estimated difference

	T	O
	8	7
–	2	3
	6	4

round off, round off

	T	O
	9	0
–	2	0
	7	0

Actual difference < Estimated difference

2. Actual difference Estimated difference

	T	O
	(8)	(14)
	~~9~~	~~4~~
–	6	5
	2	9

round off, round off

	T	O
	9	0
–	7	0
	2	0

Actual difference > Estimated difference

3. Actual difference

	H	T	O
	⓪	⑯	
	~~X~~	~~6~~	7
–		9	4
	0	7	3

round off
round off

Estimated difference

	H	T	O
	⓪	⑰	
	~~X~~	~~7~~	0
–		9	0
	0	8	0

Actual difference < Estimated difference

4. Actual difference

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

round off
round off

Estimated difference

	H	T	O
	①	⑯	
	~~2~~	~~6~~	0
–	1	9	0
	0	7	0

Actual difference > Estimated difference

Think Tank (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

Think Tank (Page 62)

1. 1000 – 697 = 303 **2.** _____ + 4758 = 6002, so the number is 6002 – 4758 = 1244.

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	
	②	~~1~~	~~2~~	⑪
	~~3~~	~~2~~	~~3~~	~~1~~
–	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
	~~8~~	~~5~~	~~3~~	~~2~~
–	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~~	~~0~~	~~3~~	~~0~~	~~2~~
–		5	2	8	8
	0	5	0	1	4

(*c*), (*e*), (*f*) — Same as above.

2. (*a*) 574 – 283.

Subtraction

	H	T	O	
	(4)	(17)		
	~~5~~	~~7~~	4	→ Minuend
–	2	8	3	→ Subtrahend
	2	9	1	→ Difference

Checking

	H	T	O	
	(1)			
	2	9	1	→ Difference
+	2	8	3	→ Subtrahend
	5	7	4	→ Minuend

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

	Th	H	T	O	
		(12)			
	(3)	~~(2)~~	(12)		
	~~4~~	~~3~~	~~2~~	6	→ Minuend
–	1	5	6	4	→ Subtrahend
	2	7	6	2	→ Difference

Checking

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

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

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

Subtracting 6969 from 8220

	Th	H	T	O
	(7)	(11)	(11)	(10)
	~~8~~	~~2~~	~~2~~	~~0~~
–	6	9	6	9
	1	2	5	1

4. Difference of 4980 and 3895.

	Th	H	T	O
			(17)	
		(8)	~~(7)~~	(10)
	4	~~9~~	~~8~~	~~0~~
–	3	8	9	5
	1	0	8	5

Subtracting 1085 from 6910.

	Th	H	T	O
			(10)	
		(8)	~~(0)~~	(10)
	6	~~9~~	~~1~~	~~0~~
–	1	0	8	5
	5	8	2	5

5. Sum of 5334 and 4653

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

Subtracting 6998 from 9987

	Th	H	T	O
		(18)	(17)	
	(8)	~~(8)~~	~~(7)~~	(17)
	~~9~~	~~9~~	~~8~~	~~7~~
–	6	9	9	8
	2	9	8	9

Practice Time 3F

1.

	H	T	O
		(10)	
	(4)	~~(0)~~	(10)
	~~5~~	~~1~~	~~0~~
–	3	9	3
	1	1	7

Number of seats in the movie hall =
Number of persons who saw the movie = –
Number of seats remained vacant =

Thus, 117 seats remained vacant.

2.

	H	T	O
		(7)	(11)
	9	~~8~~	~~1~~
–	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)	~~(10)~~	~~(3)~~	(10)
	~~9~~	~~0~~	~~4~~	~~0~~
–	6	0	5	4
	2	9	8	6

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

4.

	H	T	O
		(13)	
	(7)	~~(3)~~	(10)
	~~8~~	~~4~~	~~0~~
–	6	8	1
	1	5	9

Number of sweets packets purchased =
Number of packets distributed = –
Number of packets left =

Thus, 159 packets are left.

5.

	Th	H	T	O	
	1	1	0	0	L
–		5	0	5	L
		5	9	5	L

Capacity of tank =
Quantity of water already in the tank = –
Water needed to fill the tank completely =

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

6.

		Th	H	T	O
	₹	8	5	1	5
–	₹	5	2	1	6
	₹	3	2	9	9

Tanya deposited money in bank account =
She withdrew money from bank account = –
Money left in her account

Thus, ₹3299 is left in her account.

7.

	Th	H	T	O
	(6)	(16)		
	~~7~~	~~6~~	2	5
–	3	9	2	1
	3	7	0	4

The sum of two numbers =
One number = –
Other number =

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 the zoo on Sunday.

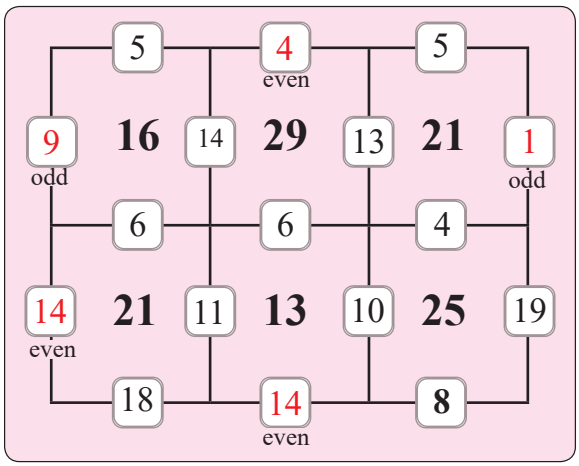
10. Divya had = ₹8765

		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 distributed =	₹	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
(*b*) – (*ii*) 268 less than 500 = 500 – 268 = 232
(*c*) – (*iv*) 740 – 0 + 225 = 740 + 225 = 965
(*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

(*b*) 876 – 495 = 381 ; 671 – 532 = 139
Since, 381 > 139
∴ 876 – 495 > 671 – 532

(*c*) 895 – 380 = 515 ; 675 – 160 = 515
515 = 515
∴ 895 – 380 = 675 – 160

(*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.

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 are 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 are 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

Total number of people after 20 people joined = 5266 + 20 = 5286
Thus, 5286 people are there in the auditorium.

9.

		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 had in his wallet at the beginning =	₹	4	0	0	0

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

10. Greater number = Successor of number 8970
= 8970 + 1 = 8971

Smaller number = 1479 less than the greater number.

Smaller number = 8971 – 1479 = 7492

Challenge Question (Page 66)

1.

H	T	O
5	1	5
– 3	5	7
1	5	8

2. ● + ▲ + ◠ = 420

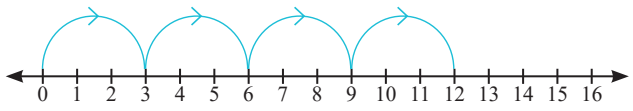
● + ▲ = 220, so ◠ = 420 – 220 = 200

● + ▲ – ◠ = 220 – 200 = 20.

CHAPTER 4 : MULTIPLICATION

Let's Recall

1.



4 × 3 = 12

4 times 3 is 12

2. (*a*) 22 + 22 + 22 + 22 + 22 = 5 × 22 = 110

(*b*) 31 + 31 + 31 + 31 + 31 = 5 × 31 = 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

Fast Check (Page 68)

1. The number to be multiplied is called multiplicand.

2. The number by which we multiply is called the multiplier.

3. The result of multiplication is called the product.

Practice Time 4A

1.

	Multiplication Fact	Multiplicand	Multiplier	Product
(*a*)	3 × 2 = 6	3	2	6
(*b*)	4 × 4 = 16	4	4	16
(*c*)	10 × 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

Fast Check (Page 71)

Do it yourself.

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:

H	T	O
	(2)	
	8	3
×		8
		4

Step 1. Multiply the ones.

3 ones × 8 = 24 ones

= 2 tens 4 ones

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

H	T	O
(6)	(2)	
	8	3
×		8
6	6	4

Step 2. Multiply the tens and regroup.

8 tens × 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.

Thus, 83 × 8 = 664.

(*b*) 77 × 6.

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

H	T	O
	(4)	
	7	7
×		6
		2

Step 1. Multiply the ones.

7 ones × 6 = 42 ones

= 4 tens 2 ones

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

H	T	O
(4)	(4)	
	7	7
×		6
4	6	2

Step 2. Multiply the tens and regroup.

7 tens × 6 = 42 tens

42 tens + 4 tens (carried over)

= 46 tens.

= 4 hundreds 6 tens.

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

Thus, 77 × 6 = 462.

(*c*) 305 × 2.

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

H	T	O
	(1)	
3	0	5
×		2
		0

Step 1. Multiply the ones.

5 ones × 2 = 10 ones

= 1 ten 0 ones

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

Step 2. Multiply the tens.

0 tens × 2 = 0 tens

0 tens + 1 ten (carried over)

= 1 ten.

H	T	O
	(1)	
3	0	5
×		2
6	1	0

Write 1 in the tens column.

Step 3. Multiply the hundreds.

3 hundreds × 2

= 6 hundreds

Write 6 in the hundreds column.

Thus, 305 × 2 = 610

H	T	O
	(1)	
3	0	5
×		2
6	1	0

(*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, follow these steps:

H	T	O
	1	4
×	2	2
	2	8

Step 1. Multiply 14 by 2 ones.

14 × 2 ones = 28 ones

Write 28 as the first line product.

Step 2. Multiply 14 by 2 tens.

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

Write 280 as the second line product.

Step 3. Add the products.

$28 + 280 = 308$

Thus, $14 \times 22 = 308$.

	H	T	O
		1	4
×		2	2
		2	8
	2	8	0

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

(*b*) 31×16.

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

Step 1. Multiply 31 by 6 ones.

$31 \times 6 \text{ ones} = 186 \text{ ones}$

Write 186 as the first line product.

Step 2. Multiply 31 by 1 ten.

$31 \times 1 \text{ ten} = 310$

Write 310 as the second line product.

Step 3. Add the products obtained in step 1 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

	H	T	O
		3	1
×		1	6
	1	8	6
	3	1	0

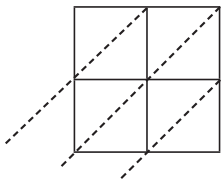
	H	T	O
		3	1
×		1	6
	1	8	6
+	3	1	0
	4	9	6

3. (*a*) 21×11.

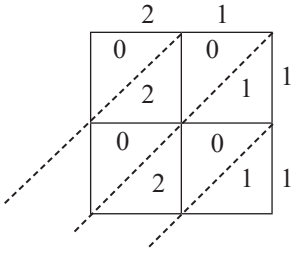
Multiply 21 by 11 using lattice multiplication step by step as shown below:

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.

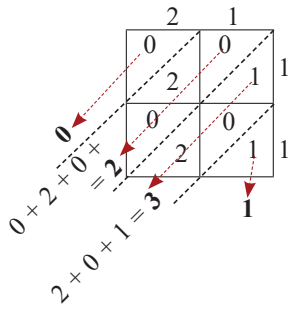


Step 2. Write the multiplicand on top and the multiplier on the right of the grid as shown.



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 number 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 Tank (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*) $\underline{8} \times 60 = 480$ (*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, $96 \times 9 = 864$

(*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.

$30 \times 4 =$	1	2	0
$6 \times 4 = +$		2	4
	1	4	4

Thus, $36 \times 4 = 144$

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

3. (*a*) $50 \times 10 = 500$ (*b*) $10 \times 16 = 160$

(*c*) $12 \times 30 = 360$ (*d*) $20 \times 60 = 1200$

(*e*) $124 \times 10 = 1240$ (*f*) $8 \times 100 = 800$

4. (*a*) $20 \times 700 = 14000$ (*b*) $500 \times 16 = 8000$
(*c*) $900 \times 9 = 8100$ (*d*) $200 \times 19 = 3800$
(*e*) $31 \times 300 = 9300$ (*f*) $17 \times 100 = 1700$

Practice Time 4F

1. (*a*) $11 \times 1 = 11$ (*b*) $28 \times 1 = 28$
(*c*) $15 \times 6 = 6 \times 15$ (*d*) $25 \times 39 = 39 \times 25$
(*e*) $0 \times 29 = 0$ (*f*) $175 \times 0 = 0$

2. (*a*) $14 \times 8 = 112 = 8 \times 14$ (*b*) $53 \times 7 = 371 = 7 \times 53$
(*c*) $42 \times 16 = 672 = 16 \times 42$
(*d*) $14 \times 20 = 280 = 20 \times 14$

3. (*a*) 55×24.

$55 \times 24 = 1320$

Thus, the actual product is 1320.

Now, 55 rounded off to the nearest 10 is 60.

24 rounded off to the nearest 10 is 20.

Now, $60 \times 20 = 1200$

Thus, the estimated product = 1200.

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

(*b*) 28×13.

$28 \times 13 = 364$

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.

Now, $30 \times 10 = 300$

Thus, the estimated product = 300.

H	T	O
	3	0
×	1	0
	0	0
+	3	0	0
	3	0	0

(*c*) 63×34.

$63 \times 34 = 2142$

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, $60 \times 30 = 1800$

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.

$44 \times 33 = 1452$

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.

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

Now, $40 \times 30 = 1200$

Thus, the estimated product = 1200.

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

Practice Time 4G

1. Number of students in a class = 46

Amount of money 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

$50 \times 73 = 3650$ 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 ₹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 = 9 (*b*) 4 × 0 = 0

(*c*) 8 × 0 = 0 (*d*) 0 × 0 = 0

(*e*) 5 × 1 = 5 (*f*) 8 × 1 = 8

(*g*) 9 × 7 = 7 × 9 (*h*) 4 × 5 = 5 × 4

(*i*) 7 × 8 = 8 × 7

3. (*a*) 1 × 8 = 8 (10 – 2 = 8)

2 × 8 = 16 (20 – 4 = 16)

3 × 8 = 24 (30 – 6 = 24)

4 × 8 = 32 (40 – 8 = 32)

5 × 8 = 40 (50 – 10 = 40)

6 × 8 = 48 (60 – 12 = 48)

7 × 8 = 56 (70 – 14 = 56)

8 × 8 = 64 (80 – 16 = 64)

9 × 8 = 72 (90 – 18 = 72)

10 × 8 = 80 (100 – 20 = 80)

(*b*) 1 × 9 = 9 (0 + 9 = 9)

2 × 9 = 18 (1 + 8 = 9)

3 × 9 = 27 (2 + 7 = 9)

4 × 9 = 36 (3 + 6 = 9)

5 × 9 = 45 (4 + 5 = 9)

6 × 9 = 54 (5 + 4 = 9)

7 × 9 = 63 (6 + 3 = 9)

8 × 9 = 72 (7 + 2 = 9)

9 × 9 = 81 (8 + 1 = 9)

10 × 9 = 90 (9 + 0 = 9)

4. (*a*) 72 × 1 = 72

(*b*) 67 × 23 = 1541

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

(*c*) 73 × 36 = 2628

	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 an aeroplane can carry = 485

Number of aeroplanes = 17

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

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

Therefore, 17 aeroplanes can carry 8245 passengers.

(*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

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

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

Therefore, 252 chairs are there in all.

Challenge Question (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*) $16 \div 4 = 4$; Each child gets 4 ice-creams.
(*b*) $9 \div 3 = 3$; Each child gets 3 lollipops.

2. (*a*) $10 \div 5 = 2$ (*b*) $18 \div 3 = 6$
(*c*) $20 \div 4 = 5$

3. (*a*) $25 \div 5 = 5$ (*b*) $21 \div 3 = 7$

Think Tank (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.

Fast Check (Page 87)

1. $93 \div 31 = 3$

$$\begin{array}{r} 93 \\ -\ 31 \\ \hline 62 \\ -\ 31 \\ \hline 31 \\ -\ 31 \\ \hline 0 \end{array} \quad \begin{array}{l} \leftarrow 1 \\ \leftarrow 2 \\ \leftarrow 3 \end{array}$$

2. $32 \div 8 = 4$

$$\begin{array}{r} 32 \\ -\ 8 \\ \hline 24 \\ -\ 8 \\ \hline 16 \\ -\ 8 \\ \hline 8 \\ -\ 8 \\ \hline 0 \end{array} \quad \begin{array}{l} \leftarrow 1 \\ \leftarrow 2 \\ \leftarrow 3 \\ \leftarrow 4 \end{array}$$

3. $420 \div 105 = 4$

$$\begin{array}{r} 420 \\ -\ 105 \\ \hline 315 \\ -\ 105 \\ \hline 210 \\ -\ 105 \\ \hline 105 \\ -\ 105 \\ \hline 0 \end{array} \quad \begin{array}{l} \leftarrow 1 \\ \leftarrow 2 \\ \leftarrow 3 \\ \leftarrow 4 \end{array}$$

Practice Time 5A

1. (*a*) $12 \div 2 = 6$ (*b*) $18 \div 6 = 3$

2. (*a*) $15 \div 3 = 5$ (*b*) $20 \div 5 = 4$
(*c*) $36 \div 6 = 6$

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.*, nine 2s in 18.

(*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.*, nine 3s in 27.

(*c*) $28 - 4 = 24$, $24 - 4 = 20$, $20 - 4 = 16$, $16 - 4 = 12$, $12 - 4 = 8$, $8 - 4 = 4$, $4 - 4 = 0$, *i.e.*, seven 4s in 28.

(*d*) $40 - 8 = 32$, $32 - 8 = 24$, $24 - 8 = 16$, $16 - 8 = 8$, $8 - 8 = 0$, *i.e.*, five 8s in 40.

4. (*a*) $48 - 6 = 42$, $42 - 6 = 36$, $36 - 6 = 30$, $30 - 6 = 24$, $24 - 6 = 18$, $18 - 6 = 12$, $12 - 6 = 6$, $6 - 6 = 0$
$\therefore 48 \div 6 = 8$

(*b*) $65 - 13 = 52$, $52 - 13 = 39$, $39 - 13 = 26$, $26 - 13 = 13$, $13 - 13 = 0$
$\therefore 65 \div 13 = 5$

(*c*) $60 - 15 = 45$, $45 - 15 = 30$, $30 - 15 = 15$, $15 - 15 = 0$
$\therefore 60 \div 15 = 4$

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

(*g*) $318 - 106 = 212$, $212 - 106 = 106$, $106 - 106 = 0$
$\therefore 318 \div 106 = 3$

(*h*) $500 - 100 = 400$, $400 - 100 = 300$, $300 - 100 = 200$, $200 - 100 = 100$, $100 - 100 = 0$
$\therefore 500 \div 100 = 5$

Fast Check (Page 89)

One ($49 \div 7 = 7$)

Think Tank (Page 89)

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

Practice Time 5B

1. (*a*) $4 \times 8 = 32$ $32 \div 4 = 8$ $32 \div 8 = 4$
(*b*) $9 \times 6 = 54$ $54 \div 6 = 9$ $54 \div 9 = 6$
(*c*) $7 \times 8 = 56$ $56 \div 8 = 7$ $56 \div 7 = 8$

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*) $32 \div 8 =$ [4] (*b*) $48 \div 12 =$ [4]

(*c*) $49 \div 7 =$ [7] (*d*) $54 \div 9 =$ [6]

(*e*) $15 \div 5 =$ [3] (*f*) $27 \div 9 =$ [3]

(*g*) $18 \div 2 =$ [9] (*h*) $30 \div 3 =$ [10]

6. (*a*)

Dividend

$8\overline{)67}\,(8$ ← Quotient

Divisor -64

3 ← Remainder

$Q = 8, R = 3$

Checking:

Quotient × Divisor + Remainder $= 8 \times 8 + 3$

$= 64 + 3$

$= 67 =$ Dividend

Thus, the answer is correct.

(*b*)

$9\overline{)50}\,(5$

-45

5

$Q = 5, R = 5$

Checking:

Quotient × Divisor + Remainder $= 5 \times 9 + 5$

$= 45 + 5$

$= 50 =$ Dividend

Thus, the answer is correct.

(*c*)

$3\overline{)25}\,(8$

-24

1

$Q = 8, R = 1$

Checking:

Quotient × Divisor + Remainder $= 8 \times 3 + 1$

$= 24 + 1$

$= 25 =$ Dividend

Thus, the answer is correct.

(*d*)

$6\overline{)38}\,(6$

-36

2

$Q = 6, R = 2$

Checking:

Quotient × Divisor + Remainder $= 6 \times 6 + 2$

$= 36 + 2$

$= 38 =$ Dividend

Thus, the answer is correct.

Think Tank (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 $R = 2$

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.

Step 2. Then devide 6 tens by 6.

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

So, 6 tens ÷ 6 = 1 ten

$6\overline{)67}\,(11 \rightarrow Q$

$-6\downarrow$

07

$-\ 6$

$1 \rightarrow R$

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 = Dividend
Thus, the answer is correct.

2. to **8.** — Same as question 1.

Think Tank (Page 95)

1. 3) 7 6 (②⑤
– 6 ↓
① 6
– ①⑤
①

2. 4) 9 8 4 (②④⑥
– ⑧ ↓
① 8
– ①⑥ ↓
②④
– ②④
⓪

3. 7) 5 7 4 9 (⑧②①
– 5 6 ↓
① 4
– ①④ ↓
⓪ 9
– ⓪⑦
②

Practice Time 5D

1. 63 ÷ 4

4) 63 (15 → Q
– 4↓
23
– 20
03 → R

Checking:
Quotient × Divisor + Remainder = 15 × 4 + 3
= 60 + 3
= 63 = Dividend
Thus, the answer is correct.

2. 89 ÷ 5

5) 89 (17 → Q
– 5↓
39
– 35
4 → R

Checking:
Quotient × Divisor + Remainder = 17 × 5 + 4
= 85 + 4
= 89 = Dividend
Thus, the answer is correct.

3. to **6.** — Same as above.

7. 803 ÷ 6

6) 803 (133 → Q
– 6↓
20
– 18↓
023
– 18
05 → R

Checking:
Quotient × Divisor + Remainder = 133 × 6 + 5
= 798 + 5
= 803 = Dividend
Thus, the answer is correct.

8. to **16.** — Same as above.

17. 4002 ÷ 6

6) 4002 (667 → Q
– 36↓
040
– 36↓
042
– 42
0 → R

Checking:
Quotient × Divisor + Remainder = 667 × 6 + 0
= 4002 + 0
= 4002 = Dividend
Thus, the answer is correct.

18. to **20.** — Same as above.

Think Tank (Page 96)

412 ÷ 10

10) 412 (41 → Q
– 40↓
012
– 10
02 → R

41 packets of 10 pencils are made 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

Think Tank (Page 97)

Neha and each of her three cousins got = 1000 ÷ 4 = ₹250 each.
Neha also received ₹500 from her father.
So, total money Neha has = 250 + 500 = ₹750
Now, expenses done by Neha = 22 × 5 + 75 × 6 = ₹560
So, the money left with Neha = 750 – 560 = ₹190.

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
= ₹275
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
= 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
= 636 km
Distance covered by the car in a day
= 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
= ₹735 ÷ 5 = 147
Thus, each child contributed ₹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 gets
= 146 ÷ 9
Thus, each boy gets 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
= ₹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
= 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.

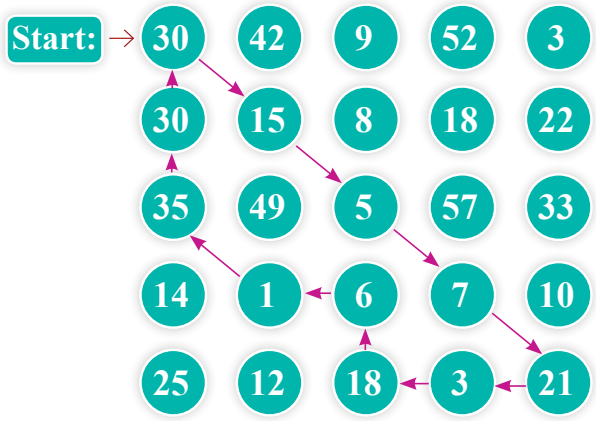
2. Keyword used is 'in all'. So, choose the operation +.
$16 + 13 = 29$
Therefore, she buys 29 carrots in all.

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.

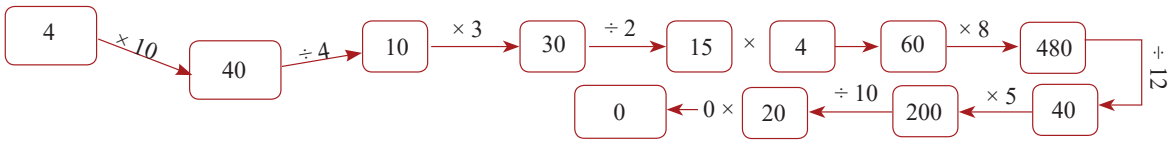
Mental Maths (Page 99)



You will reach the number 30.

Challenge Question (Page 100)

1.



2. The number is 39 as $39 = 9 \times 4 + 3 = 7 \times 5 + 4$.

Chapter Assessment

1. (*a*) – (*iii*) $84 \div 7 = 12$

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

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

$$\begin{array}{r} 4\overline{)4424}(1106 \\ -4\downarrow\downarrow\downarrow\downarrow \\ \hline 04\downarrow\downarrow\downarrow \\ -\ 4\downarrow\downarrow \\ \hline 024 \\ -\ 024 \\ \hline 0 \end{array}$$

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*) $492 \div 7$

$$\begin{array}{r} 7\overline{)492}(70 \rightarrow \text{Q} \\ -49\downarrow \\ \hline 02 \\ -\ 00 \\ \hline 2 \rightarrow \text{R} \end{array}$$

$\therefore$ Q = 70, R = 2

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

(*b*) $747 \div 8$

$$\begin{array}{r} 8\overline{)747}(93 \rightarrow \text{Q} \\ -72\downarrow \\ \hline 027 \\ -\ 24 \\ \hline 03 \rightarrow \text{R} \end{array}$$

$\therefore$ Q = 93, R = 3

Checking:
Quotient × Divisor + Remainder = 93 × 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

Thus, the cost of 1 toy car is ₹20.

```
5)100(20
 -10
  00
 - 00
   0
```

(*b*) The product of two numbers = 725

One number = 5

Other number = 725 ÷ 5 = 145

Thus, the other number is 145.

```
5)725(145
 -5
  22
 -20
  025
 - 25
   0
```

(*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)891(99
 -81
  081
 - 81
   0
```

(*d*) Cost of 6 tickets = ₹540

Cost of 1 ticket = ₹540 ÷ 6

= ₹90

Thus, the cost of 1 ticket is ₹90.

```
6)540(90
 -54
  0
 - 0
  0
```

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

Distance covered in 1 hour = 968 ÷ 2

= 484 km

Thus the aeroplane flies 484 km in 1 hour.

```
2)968(484
 -8
  16
 -16
  08
 - 8
  0
```

(*f*) Total no. of notebooks = 865

Number of notebooks given to each child = 8

Number of children who got the notebooks = 865 ÷ 8

Thus, 108 children got the notebooks and 1 notebook was left undistributed.

```
8)865(108
 -8
  065
 - 64
  01
```

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

(Since, 1 dozen =12 items)

Number of monkeys = 4

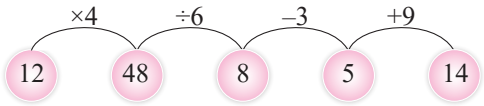
Number of bananas each monkey got = 24 ÷ 4 = 6

Thus, each monkey got 6 bananas.

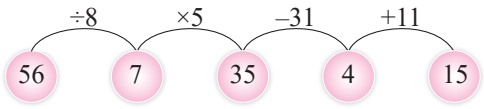
```
4)24(6
 -24
  0
```

Maths Fun (Page 102)

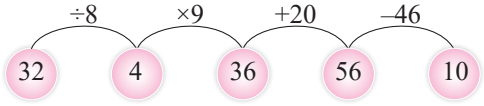
1. 



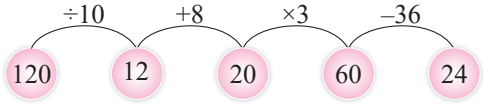
2. 



3. 



4. 



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 Tank (Page 107)

MATHEMATICS; Total letters = 11

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

Fast Check (Page 107)

1. Total triangles = 25

Shaded triangles = 10

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

2. Total triangles = 25

Unshaded triangles = 15

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

Practice Time 6A

1.

2.

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

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 = $\frac{2}{10}$ (*b*) Five-eighths = $\frac{5}{8}$
(*c*) Four-fifths = $\frac{4}{5}$ (*d*) Three-sevenths = $\frac{3}{7}$

5. Total number of equal parts of a chocolate = 6
Number of parts eaten = 1
Fraction of the chocolate Ritu ate = $\frac{1}{6}$

6. (*a*) Numerator = 4, denominator = 8
Fraction = $\frac{4}{8} = \frac{1}{2}$
(*b*) Numerator = 3, denominator = 14
Fraction = $\frac{3}{14}$
(*c*) Numerator = 8, denominator = 12
Fraction = $\frac{8}{12} = \frac{2}{3}$
(*d*) Numerator = 10, denominator = 17
Fraction = $\frac{10}{17}$

Fast Check (Page 109)

1. Total parts = 4
Coloured parts = 2
Fraction = $\frac{2}{4}$

2. Total parts = 5
Coloured parts = 2
Fraction = $\frac{2}{5}$

3. Total parts = 9
Coloured parts = 6
Fraction = $\frac{6}{9}$

Life Skills (Page 109)

1. $\frac{1}{2}$ of 12 = 6, 6 biscuits are left.

2. 6 biscuits are taken away.

Think Tank (Page 110)

One fourth of 8 = $\frac{1}{4} \times 8 = 2$ parts;
$\frac{8}{8}$ parts = 1 whole

Practice Time 6B

2. (*b*) $12 \div 2 = 6$
So, $\frac{1}{2}$ of 12 = 6
(*c*) $6 \div 2 = 3$
So, $\frac{1}{2}$ of 6 = 3
(*d*) $14 \div 2 = 7$
So, $\frac{1}{2}$ of 14 = 7

3. (*b*) $12 \div 3 = 4$
So, $\frac{1}{3}$ of 12 = 4
(*c*) $15 \div 3 = 5$
So, $\frac{1}{3}$ of 15 = 5
(*d*) $6 \div 3 = 2$
So, $\frac{1}{3}$ of 6 = 2

4. (*b*) $12 \div 4 = 3$
So, $\frac{1}{4}$ of 12 = 3
(*c*) $16 \div 4 = 4$
So, $\frac{1}{4}$ of 16 = 4
(*d*) $8 \div 4 = 2$
So, $\frac{1}{4}$ of 8 = 2

5. (*a*) $\frac{1}{2}$ of $36 = \frac{1}{2} \times 36 = 36 \div 2 = 18$
(*b*) $\frac{1}{3}$ of $63 = \frac{1}{3} \times 63 = 63 \div 3 = 21$
(*c*) $\frac{1}{4}$ of $52 = \frac{1}{4} \times 52 = 52 \div 4 = 13$
(*d*) $\frac{1}{2}$ of $40 = \frac{1}{2} \times 40 = 40 \div 2 = 20$
(*e*) $\frac{1}{3}$ of $51 = \frac{1}{3} \times 51 = 51 \div 3 = 17$

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

6. Apples = ₹96 per kg, Orange = ₹120 per kg, Grapes = ₹60 per kg

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

Oranges = $\frac{1}{3}$ of 120 = ₹40,

Grapes = $\frac{1}{4}$ × 60 = ₹15.

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

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

Oranges = $\frac{1}{2}$ × 120 = ₹60 ,

Grapes = $\frac{1}{3}$ × 60 = ₹20

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

Think Tank (Page 113)

Total number of marbles = 30

Number of marbles he gave to Kareem

= $\frac{1}{5}$ × 30 = 6 marbles

Number of marbles he gave to Kavita

= $\frac{1}{3}$ × 30 = 10 marbles

Therefore, number of marbles Anuj have

= 30 – (6 + 10) = 30 – 16 = 14 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 = $\frac{9}{16}$

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 = $\frac{1}{2}$ × 18 = 18 ÷ 2 = 9

(*b*) I gave to my sister = $\frac{1}{3}$ × 18 = 18 ÷ 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 spent on stationery and toys taken together = 30 + 30 = ₹60

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

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

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

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 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 dozen $= \frac{1}{3} \times 12 = 4$ items.

(*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 $24 = 24 \div 3 = 8$

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

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

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

4. (*a*) 4 quarters make a whole.

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

(*c*) 2 halves 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 Atul ate $= \frac{1}{3}$

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

Number of pages Riya completed $= \frac{1}{4} \times 36 = 36 \div 4 = 9$

Number of pages Joe completed $= \frac{1}{3} \times 36 = 36 \div 3 = 12$

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 $= \frac{8}{10}$

Challenge Question (Page 116)

Brand	Input	Drained water	Fresh water
A	20 L	10 L	10 L
B	24 L	8 L	16 L
C	36 L	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*) We 5 beads put in hundreds rods of an abacus for the number 8531.

7. (*b*) 9 times 9 can 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 addition when we put together two or more things.

(*b*) The smallest 4-digit number minus 1 is 999.

(*c*) The number to be divided is called dividend.

(*d*) 5225 + 448 + 0 = 448 + 5225 + 0.

(*e*) The difference between the greatest 4-digit number and smallest 3-digit number is 9899.
(∵ 9999 – 100) = 9899)

(*f*) Divisor × quotient + remainder = Dividend.

12. (*a*) Ascending order = 2397 < 3267 < 6501 < 8709
Descending order = 8709 > 6501 > 3267 > 2397

(*b*) Ascending order = 3076 < 4093 < 7804 < 9712
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 = $\frac{3}{7}$

(*b*) Total number of buttons = 7
Number of blue buttons = 4
Required fraction = $\frac{4}{7}$

17. Number of caps made in 6 days of a week = 756
Number of caps made in 1 day = $\frac{756}{6}$ = 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 to one shop = 2340.
Number of bottles delivered to 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.

2. (*a*) Cone: Birthday Caps

(*b*) Cube: Gift boxes

(*c*) Cylinder: Cake

(*d*) Sphere: Balloons

Fast Check (Page 121)

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. (*b*) Line AB, $\overleftrightarrow{AB}$
   (*c*) Line MN, $\overleftrightarrow{MN}$ (*d*) Ray PQ, $\overrightarrow{PQ}$
2. (*a*) 4 line segments, $\overline{AB}$, $\overline{BC}$, $\overline{CD}$, $\overline{DA}$
   (*b*) 3 line segments, $\overline{PQ}$, $\overline{QR}$, $\overline{PR}$
   (*c*) 5 line segments, $\overline{GH}$, $\overline{HI}$, $\overline{IJ}$, $\overline{KJ}$, $\overline{KG}$
   (*d*) 6 line segments, $\overline{EF}$, $\overline{FG}$, $\overline{GH}$, $\overline{HI}$, $\overline{IJ}$, $\overline{JE}$
3. (*a*) 4 lines, $\overleftrightarrow{AE}$, $\overleftrightarrow{BF}$, $\overleftrightarrow{CG}$, $\overleftrightarrow{DH}$
4. (*a*) The sunlight is an example of ray.
   (*b*) Number of line segments = 6.
   (*c*) 1 point

Think Tank (Page 123)

Yes, the horizon can be considered as an example of line, however it is not an actual line.

Practice Time 7B

1. Do it yourself.
2. Do it yourself.

Fast Check (Page 125)

Do it yourself.

Think Tank (Page 126)

Do it yourself.

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 rectangle.
   (*b*) It has three sides and three corners. It is a triangle.
   (*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

Maths Fun (Page 127)

1. 14 sticks
2. 15 squares

Fast 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
   The cost of 1 toy car = ₹100 ÷ 5
   = ₹20
   Thus, the cost of 1 toy car ₹20.

$$5\overline{)100}\,(20$$
$$-10\downarrow$$
$$00$$
$$-\ 00$$
$$0$$

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

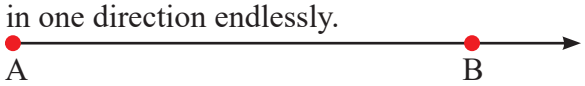
1. (*a*) West (*b*) North
   (*c*) East (*d*) West

Challenge Question (Page 132)

1. Number of Squares = 18

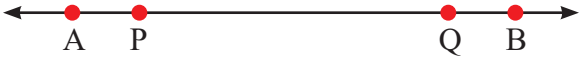
Mental Maths (Page 133)

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



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

Line segment: A line segment is a part of a line. It has a fixed length.



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*) 18 triangles, 3 Squares, 1 Rectangle.

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

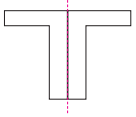
Practice Time 8A

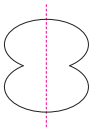
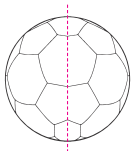
1. (*d*), (*e*), (*g*), (*h*)

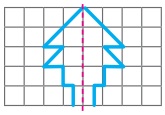
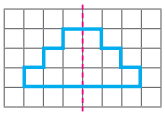
2. (*a*)  (*b*)  (*c*) 

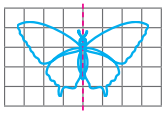
(*d*)  (*e*)  (*f*) 

(*g*)  (*h*) 

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

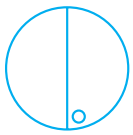
(*c*)  (*d*) 

4. (*a*)  (*b*) 

(*c*) 

Think Tank (Page 140)

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, 220, 270, 320.
(*b*) 101, 111, 121, 131, 141, 151, 161.
(*c*) Abc, Bcd, Cde, Def, Efg, Fgh.
(*d*) 1045, 1055, 1065, 1075, 1085, 1095.

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*)

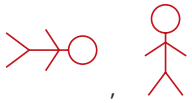
4. TEACHER → R is not symmetrical

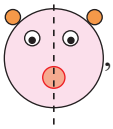
5. 

Chapter Assessment

1. (*a*) – (*iii*) Infinite
(*b*) – (*i*) 2 4 8 16 32 64

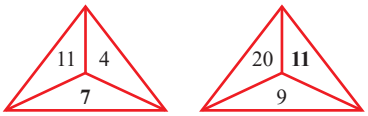
3. Rectangle, Square, Circle

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

5. 8,  , 6

Challenge Question (Page 145)

1. 

2. 

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 metre tall.
(*b*) My weight is about 30 kilograms.
(*c*) My water bottle holds 1 litre water.
(*d*) My foot size is about 20 centimetres long.

Maths Fun (Page 149)

Do it yourself.

Think Tank (Page 150)

1 m → 90 cm
So, 10 m → 10 × 90 = 900 cm = 9 m

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 Connect (Page 151)

Odometer: An odometer measures the total distance traveled by the vehicle.

Speedometer: A speedometer measures the instantaneous speed of a vehicle.

Real life applications: Vehicle maintenance (odometer), speed monitoring (speedometer), Resale value estimate (odometer), fuel management (odometer), etc.

Life Skills (Page 154)

Do it yourself.

Think Tank (Page 154)

To get the desired weight, the vendor needs to place weights on both sides of the scale.

On left pan: Place the 1 kg weight.

On right pan: Place the 250 g weight.

Add tomatoes to the right pan (next to the 250 g weight) until the scale is perfectly balanced. Tomatoes on the right pan is equal to 1000 g – 250 g = 750 g.

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 $1\text{ g} = \frac{1}{1000}\text{ kg}$

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

(*d*) 4128 g = 4 kg 128 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 $1\text{ mL} = \frac{1}{1000}\text{ L}$

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

Think Tank (Page 160)

1. Weight of a space suit without an oxygen cylinder is
10 kg 100 g + 16 kg 400 g + 11 kg 300 g + 2 kg 600 g = 40 kg 400 g.

2. Weight of a space suit with oxygen cylinder is 40 kg 400 g + 25 kg 900 g = 66 kg 300 g.

Think Tank (Page 161)

Yes, Kritika is correct. For example, if we subtract 500 m from 1 km, we have to change the unit of length to the same unit m.

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)	
	5	0	6	0	4	5
+	4	5	6	3	7	9
	9	6	2	4	2	4

(*g*)

	km			m		
	(2)	(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	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

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.

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

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)	(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*) **on Saturday**

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

(*b*) **on Sunday**

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

So, total amount of milk Neha drank last weekend = 995 mL + 1170 mL
= 2165 mL = 2 L 165 mL

Think Tank (Page 164)

1. Distance covered in route of home to shopping mall via the temple = 4 km + 3 km = 7 km
Distance covered in route of home to shopping mall via the bank = 6 km + 5 km = 11 km
As, 7 < 11, so they take the route of home to shopping mall via the temple.

2. 11 km – 7 km = 4 km more they have to cover, if they take the longer route.

Practice Time 9E

1. (*a*)

	km		m		
				⑨	
			②	⑩	⑩
	2	8	~~3~~	~~0~~	~~0~~
–	1	4	2	1	6
	1	4	0	8	4

(*b*)

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

(*c*)

	kg		g		
				⑤	⑫
	9	6	4	~~6~~	~~2~~
–	4	6	2	0	8
	5	0	2	5	4

(*d*)

	kg			g		
				⑨		
	①	⑪	⑤	⑩	⑯	
	~~2~~	~~1~~	~~6~~	~~0~~	~~6~~	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	~~1~~	⑪		④	⑩
	~~3~~	~~2~~	~~1~~	4	~~5~~	~~0~~
–		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 subtracted 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	~~9~~	~~0~~	6
–	1	2	8	7	6
	8	2	0	3	0

(*b*) 78 cm from 4 m
Arrange the given measures in the columns of m and cm and then subtract.
Step 1. Subtract centimetres.
78 cm cannot be subtracted from 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.

	m	cm	
		⑨	
	③	~~10~~	⑩
	~~4~~	~~0~~	~~0~~
–	0	7	8
	3	2	2

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

Practice Time 9F

1. Length of cloth used by the tailor to make a shirt = 2 m 25 cm
Length of cloth used by the tailor to make trousers = 1 m 20 cm

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

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

Thus, total length of cloth used by the tailor to make a shirt and trousers is 3 m 45 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)	~~(1)~~	(15)	
	~~5~~	~~2~~	~~5~~	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 than family B.

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

5. Baggage allowed to 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	~~5~~	~~0~~	~~0~~	~~0~~
–	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
Thus, 11 L 450 mL of petrol was used when the indicator first warned me.

	L		mL		
	1	4	4	5	0
–		3	0	0	0
	1	1	4	5	0

Mental Maths (Page 169)

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

2. A tailor uses a measuring tape to measure the length of cloth.

3. Weighing machine is used to measure the weight of a rice bag.

4. The capacity of a cough syrup bottle is measured in mL.

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

	km		m		
				(11)	
			(4)	~~(1)~~	(15)
	4	8	~~5~~	~~2~~	~~5~~
–	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)	
	(2)	(10)		(6)	(4)	(10)
	~~X~~	~~3~~	~~0~~	~~7~~	~~5~~	~~0~~
–		6	6	9	7	5
		6	3	7	7	5

2. (*a*) 100 cm = 1 m (*b*) 1 km = 1000 m
(*c*) 200 cm = 2 m (*d*) 3000 m = 3 km
(*e*) 1 kg = 1000 g (*f*) 1 g = $\frac{1}{1000}$ kg
(*g*) 1 L = 1000 mL (*h*) 6000 mL = 6 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	~~4~~	~~6~~	~~2~~	~~7~~	8
–	3	3	8	1	8	8
	2	0	8	0	9	0

= 208 km 090 m.

5. Length of silk cloth = 20 m 45 cm
Length of velvet cloth = 42 m 85 cm
Total length of cloth =

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

Thus, total length of cloth 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)	(~~3~~)	(~~10~~)	(~~10~~)	(10)
	~~8~~	~~4~~	~~0~~	~~0~~	~~0~~
–	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 man =
Thus, the weight carried by the man 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)	(~~6~~)	(16)		
	~~7~~	~~7~~	~~6~~	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)	~~(2)~~	~~(10)~~	(10)	
	~~9~~	~~3~~	~~0~~	~~0~~	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 =

Thus, Digvijay gave 17 L 630 mL milk to two poor families.

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

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)~~	~~(3)~~	(10)	
	9	~~8~~	~~0~~	~~4~~	~~0~~	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

	(7)	(14)		
	~~8~~	~~4~~	0	mL
−	7	5	0	mL
	0	9	0	mL

Rani's Juice

	(3)	(14)		
	~~4~~	~~4~~	5	mL
−	3	7	5	mL
	0	7	0	mL

Rani drank less amount of juice from the bottle.

Challenge Question (Page 171)

1. (*a*) New Delhi to Vadodara = 458 km + 267 km + 260 km = 985 km.
(*b*) Ratlam to Surat = 260 km + 129 km = 389 km
(*c*) New Delhi to Mumbai = 458 km + 267 km + 260 km + 129 km + 233 km = 1347 km.

CHAPTER 10 : TIME

Let's Recall

1. (*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*)

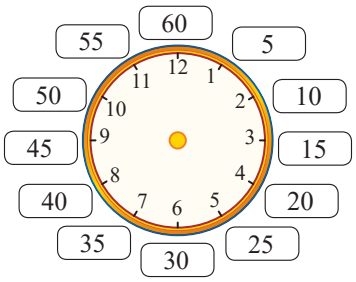
Practice Time 10A

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 Tank (Page 178)



Fast Check (Page 179)

1. 30 minutes past 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*) 40 minutes past 4
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 Tank (Page 180)

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 second to blink your eyes.
   (*b*) It takes about 15 minutes to eat breakfast.
   (*c*) It takes about 1 hour to do homework.
   (*d*) It takes about a minute to tie your shoelaces.
   (*e*) It takes about 5 minutes to cook noodles.
   (*f*) You should sleep 8 hours a day.

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 left the school
   = 8:00 a.m. + 6 hours = 2 p.m.
   Therefore, he left 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 is 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 at which she left 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 ended at
   4:15 p.m. + 2 hours 10 minutes = 6:25 p.m.
8. TV show starts at 8:05 p.m.
   and lasts for 20 minutes.
   Time when the show finishes
   = 8:05 p.m. + 20 minutes = 8:25 p.m.

Think Tank (Page 184)

No, a year ending in '00' is not a leap year unless it is divisible by 400. For example, 1700 is not a leap year as it is not divisible by 400.

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 have 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
Not leap years: 1800, 2018, 2023, 1750

Maths Connect (Page 186)

India got freedom on 15th August 1947 from British rule.
The constitution of India was adopted by the constituent assembly on 26th November 1949 and came into force on 26th January 1950.

Think Tank (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.

Challenge Question (Page 187)

- From 8th March 2017 to 8th March 2025 = 8 years
- From 8th March 2025 to 8 July 2025 = 4 months
- From 8 July 2025 to 31st July 2025 = 31 – 8 = 23 days

Neha's exact age on 31st July 2025 was 8 years, 4 months and 23 days.

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*) – (*i*)6:40 = 20 minutes to 7.
(*e*) – (*iv*)5:30 = Half past 5.
3. (*a*) 8:10 is 10 minutes past 8.
(*b*) 5:50 is 10 minutes to 6.
(*c*) 9:20 is 20 minutes past 9.
(*d*) 11:45 is 15 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 hours 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. The minute hand of a clock completes 24 rounds in a day.
11. 12 a.m. to 12 p.m. = 12 hours
12 × 60 minutes = 720 minutes

Challenge Question (Page 193)

1. Number of minutes = 5 × 5 + 4 minutes
= 25 + 4 minutes
= 29 minutes
2. Neha's granny has celebrated her birthday on 29th February 1964, 1968, 1972, 1976, 1980, 1984, 1988, 1992, 1996, 2000, 2004, 2008, 2012, 2016, 2020 and 2024. *i.e.*, she has celebrated 16 birthdays so far.

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 = $\frac{1}{100}$ rupee

(*a*) 900 p = ₹ $\frac{1}{100}$ × 900 = ₹ $\frac{900}{100}$ = ₹9

(*b*) 550 p = ₹ $\frac{1}{100}$ × 550 = ₹ $\frac{550}{100}$ = ₹5.50

(*c*) 4001 p = ₹ $\frac{1}{100}$ × 4001 = ₹ $\frac{4001}{100}$ = ₹40.01

(*d*) 1000 p = ₹ $\frac{1}{100}$ ×1000 = ₹ $\frac{1000}{100}$ = ₹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

Think Tank (Page 201)

Friend	Amount of money	Amount spent	Amount Left
Dhruv	₹500	₹175.50	500 – 175.50 = ₹324.50
Ravi	₹750	₹145.75	750 – 145.75 = ₹604.25
Virat	₹560.50	₹95.05	560.50 – 95.05 = ₹465.45

Thus, the greatest amount of money is left with Ravi.

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)	
	₹	~~2~~	~~0~~	.	~~0~~	0
−	₹	1	3	.	5	0
	₹	0	6	.	5	0

Thus, ₹20 – ₹13.50 = ₹6.50

(*b*) ₹29.20 from ₹80.20

		(7)	(10)			
	₹	~~8~~	~~0~~	.	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)			
	₹	2	0	0	. 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)
	₹	5	0	. 0	0
–	₹	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 ₹112.00 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	0	. 0	0	
Amount of money she spent on lunch = –	₹		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 =	₹	4	8	0	. 0	0
Amount of money he spent = −	₹	4	3	2	. 5	0
Balance left =	₹	0	4	7	. 5	0

Thus, ₹47.50 balance was left in his wallet.

Think Tank (Page 203)

1. ₹500 Note. Its logo is "Swachh Bharat Abhiyan" and on it reverse side there is images of Red Fort.

2. ₹2000.

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

$$\begin{array}{r} 4\overline{)120}(30 \\ -12\downarrow \\ \hline 00 \\ -\ 00 \\ \hline 0 \end{array}$$

Thus, 120 paise ÷ 4 = 30 p

(*b*) ₹77 ÷ 7

$$\begin{array}{r} 7\overline{)77}(11 \\ -7\downarrow \\ \hline 07 \\ -\ 7 \\ \hline 0 \end{array}$$

Thus, ₹77 ÷ 7 = ₹11

(*c*) ₹103.65 ÷ 5

$$\begin{array}{r} 5\overline{)103.65}(20.73 \\ -10\downarrow\downarrow \\ \hline 036 \\ -\ 35\downarrow \\ \hline 015 \\ -\ 15 \\ \hline 0 \end{array}$$

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

Cost of six notebooks =

			③	④		③
	₹		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

$$
\begin{array}{r|l}
5 & 120.50 \\
-10\downarrow & 24.10 \\
\hline
20 & \\
-20\downarrow & \\
\hline
05 & \\
-5 & \\
\hline
0 &
\end{array}
$$

Thus, each child gets ₹24.10.

(*d*) Total cost of 3 calculators = ₹540

Cost of 1 calculator = ₹540 ÷ 3

$$
\begin{array}{r|l}
3 & 540 \\
-3\downarrow & 180 \\
\hline
24 & \\
-24\downarrow & \\
\hline
00 & \\
00 & \\
\hline
0 &
\end{array}
$$

Thus, the cost of one calculator is ₹180.

(*e*) Cost of 9 packets noodles = ₹227.16

Cost of 1 packet noodles = ₹227.16 ÷ 9

$$
\begin{array}{r|l}
9 & 227.16 \\
-18\downarrow & 25.24 \\
\hline
47 & \\
-45\downarrow & \\
\hline
021 & \\
-18\downarrow & \\
\hline
36 & \\
-36 & \\
\hline
00 &
\end{array}
$$

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)

Do it yourself.

Chapter Assessment

1. (*a*) – (*iii*) ₹925.50 = Nine hundred twenty-five rupees fifty paise

(*b*) – (*ii*) There are no rupees.

(*c*) – (*i*) 1500 paise = $₹\frac{1500}{100}$ = ₹15

(*d*) – (*iv*) 1 rupees = 100 paise

or 1 paisa = $\frac{1}{100}$ 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 = $₹\frac{8999}{100}$ = ₹89.99

(*d*) 990 paise = $₹\frac{990}{100}$ = ₹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 .	~~6~~	~~3~~	
–	₹	4	1	8 .	5	9	
	₹	1	8	0 .	0	4	

Thus, ₹598.63 – ₹418.59 = ₹180.04

(*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

$$\begin{array}{r} 8 \\ 7\overline{)56} \\ -56 \\ \hline 0 \end{array}$$

Thus, ₹56 ÷ 7 = ₹8

(*h*) ₹90.09 ÷ 9

$$\begin{array}{r} 10.01 \\ 9\overline{)90.09} \\ -9\downarrow \\ \hline 00\downarrow\downarrow \\ -00\downarrow\downarrow \\ \hline 09 \\ -\ 09 \\ \hline 0 \end{array}$$

Thus, ₹90.09 ÷ 9 = ₹10.01

(*i*) ₹672 ÷ 6

$$\begin{array}{r} 112 \\ 6\overline{)672} \\ -6\downarrow \\ \hline 07 \\ -\ 6\downarrow \\ \hline 12 \\ -\ 12 \\ \hline 0 \end{array}$$

Thus, ₹672 ÷ 6 = ₹112

7. Price of sparklers bought by Mayank = ₹43.80 + ₹39.60

		①	①			
	₹	4	3	.	8	0
+	₹	3	9	.	6	0
	₹	8	3	·	4	0

Total money he spent on buying sparklers = ₹83.40

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 spent = ₹57.25

According to question,

Samir spent = ₹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.

Challenge Question (Page 208)

Items	Quantity	Price (in ₹)	Total (in ₹)
Burger	3	50	3 × 50 = 150
Pizza	2	100	2 × 100 = 200
Fries	2	25	2 × 25 = 50
Chips	5	14	5 × 14 = 70

Total price of burger, pizza and fries = ₹150 + ₹200 + ₹50 = ₹400

Raveena paid a ₹500 note and received ₹30 as change, it mean total cost of 4 items = ₹500 – ₹30 = ₹470

So, the cost of chips packets = ₹470 – ₹400 = ₹70
As, number of packs of chips Raveena bought is greater than 2 and 3 but less than 7.
Thus, number of chips packet must be 5. And, price of one pack of chips = 70 ÷ 5 = ₹14

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 flowers = 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)

Name of students				
Anuj				**Y** by second clue and third clue.
Ali	**Y** by all the three clues.			**N** by second clue.
Kartik	**N** By first clue.	**Y** by first clue.	**N** By first clue.	**N** by second clue.
Veena	**N** by third clue.	**N** by first clue.	**Y** by third clue	**N** by third clue.

Practice Time 12A

1.

Animal	Tally marks	Number of animals
Lion	𝍸 |	6
Tiger	𝍸 |||	8
Elephant	𝍸	5
Monkey	𝍸 |	6
Bear	||||	4
Zebra	|||	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 belong to Maths club = 14
Number of students belong 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)

Number of student interested for Badminton: 2
Number of remaining students = 30 – 2 = 28,
Number of students who like Football: Between one-third of 30 = 10 and one-half = 15, *i.e.*, lies between 10 and 15.
And, the number of students opting for basketball, cricket and hockey are the same, *i.e.*, the total number of students opting for basketball, cricket and hockey is divisible by 3.

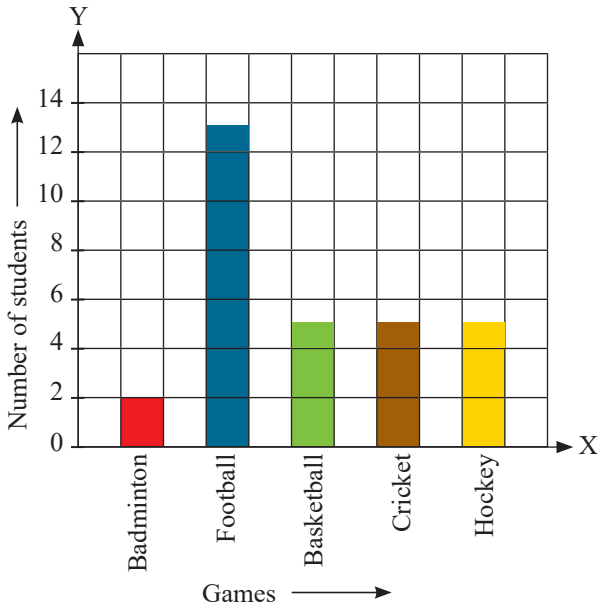
Now, we check one by one:

If number of students who like football is 11, then number of remaining students = 28 – 11 = 17 not divisible by 3.

If number of students who like football is 12, then number of remaining students = 28 – 12 = 16 not divisible by 3.

If number of students who like football is 13, then number of remaining students = 28 – 13 = 15 divisible by 3.

So, the number of students opting for Badminton = 2, Football = 13, Basketball = 5, Cricket = 5, Hockey = 5 respectively.



Challenge Question (Page 219)

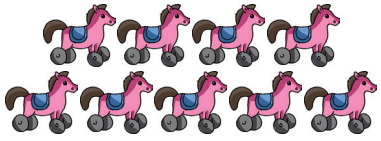
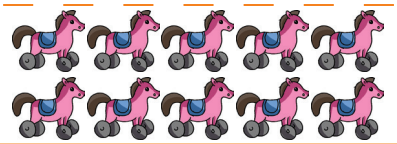
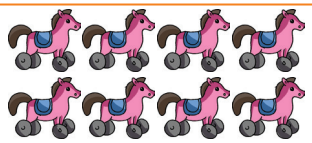
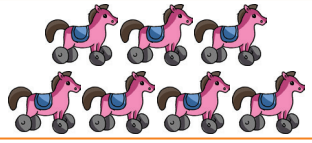
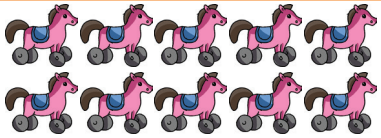
In Riya's pictograph: Each '——' stands for 2 cards.

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	
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 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 was 4200.
(*f*) 11.

MODEL TEST PAPER – 2

1. (*c*) cylinder **2.** (*b*) metre
3. (*b*) 3 **4.** (*b*) 2
5. (*b*) 1 m 50 cm = 100 cm + 50 cm = 150 cm
6. (*b*) Since 2 kg = 2000 g

$\therefore \frac{2000}{8}$ 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 a circular 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 faces = 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 to eat 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)	(3)	(10)	
	2	6	~~8~~	~~4~~	~~0~~	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 have to collect 49 more pebbles to be equal to Chavi.

(*c*) If Neha collects 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.