Chapter
1 Revision

1. Write the following numbers in words.

a. 462 = Four hundred sixty two

b. 9050 = Nine thousand fifty

c. 2018 = Two thousand eighteen

d. 6890 = Six thousand eight hundred ninety

e. 8088 = Eight thousand eighty eight

f. 3006 = Three thousand six

g. 5945 = Five thousand nine hundred forty five

h. 9999 = Nine thousand nine hundred ninety nine

2. Write in numerals.

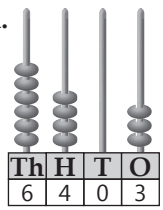
a.	Seven hundred forty-five	745
b.	Three thousand eight hundred seventy	3870
c.	Seven thousand seventy-seven	7077
d.	Five thousand five	5005
e.	Nine thousand eight hundred	9800
f.	Eight thousand eighty	8080
g.	One thousand nine hundred ninety-nine	1999

3. Understand and do.

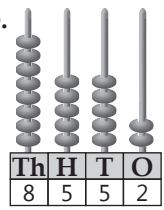
a.	723,	733,	743,	753,	763,	773,	783
b.	2545,	2560,	2575,	2590,	2605,	2620,	2635
c.	4690,	4670,	4650,	4630,	4610,	4590,	4570
d.	8150,	8200,	8250,	8300,	8350,	8400,	8450
e.	3008,	3018,	3028,	3038,	3048,	3058,	3068
f.	9000,	8000,	7000,	6000,	5000,	4000,	3000

4. Write the number shown on each abacus.

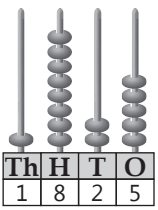
a.



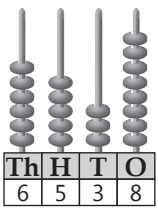
b.



c.

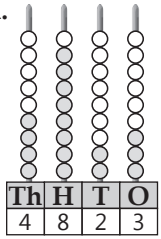


d.



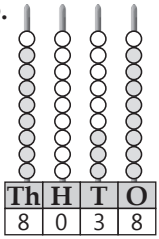
5. Colour the beads to show the given numbers on abacus.

a.



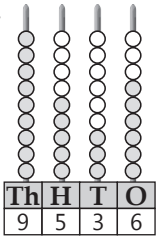
Th	H	T	O
4	8	2	3

b.



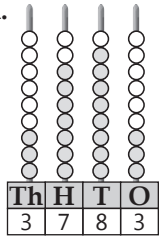
Th	H	T	O
8	0	3	8

c.



Th	H	T	O
9	5	3	6

d.



Th	H	T	O
3	7	8	3

6. Write the successor and predecessor of the given numbers.

a.	998	999	1000	**b.**	2017	2018	2019
c.	4677	4678	4679	**d.**	7908	7909	7910
e.	6999	7000	7001	**f.**	2898	2899	2900
g.	3999	4000	4001	**h.**	6628	6629	6630

7. Write the following numbers in expanded form.

a. 2134 = 2000 + 100 + 30 + 4

b. 856 = 800 + 50 + 6

c. 9160 = 9000 + 100 + 60 + 0

d. 7823 = 7000 + 800 + 20 + 3

e. 6002 = 6000 + 000 + 00 + 2

8. Write the place value of each digit.

a.

Th	H	T	O
2	8	4	3

3
40
800
2000

b.

Th	H	T	O
6	0	5	1

1
50
0
6000

c.

Th	H	T	O
4	2	0	7

7
0
200
4000

9. Fill in the blanks with (> greater, < smaller, = equal).

a.	872	<	1872	**b.**	9876	>	6789
c.	2916	<	2961	**d.**	4234	=	4234

10. Write the following numbers in ascending order.

a. 3618, 7225, 2752, 3643 2752 < 3618 < 3643 < 7225

b. 3749, 9473, 4973, 6147 3749 < 4973 < 6147 < 9473

11. Write the following numbers in descending order.

a. 7228, 8272, 8722, 8227 8722 > 8272 > 8227 > 7228

b. 6172, 7162, 6721, 7612 7612 > 7162 > 6721 > 6172

12. Write the greatest and the smallest 4-digit number by using the digits 5,7,3 and 8.

a. Greatest number = 8753

b. Smallest number = 3578

13. Write the greatest and the smallest 4-digit number by using the digits 2, 3, 0 and 9.

a. Greatest number = 9320

b. Smallest number = 2039

14. Write Roman numerals for the Hindu-Arabic numerals.

a. 9 IX **b.** 12 XII **c.** 29 XXIX

d. 35 XXXV **e.** 39 XXXIX

15. Write Hindu-Arabic Numerals for the Roman numerals.

a. VIII 8 **b.** XV 15 **c.** IX 9

d. XXIV 24 **e.** XXXVIII 38 **f.** XXXV 35

16. Write true/false.

a. Round off 29 to the nearest tens is 20. False

b. Round off 870 to the nearest hundreds is 900. True

c. Round off 56 to the nearest tens is 50. False

d. Round off 789 to the nearest tens is 780. False

e. Round off 951 to the nearest hundreds is 1000. True

17. Solve the following.

a.

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

b.

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

c.

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

d.

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

e.

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

f.

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

g.

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

h.

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

i.

	Th	H	T	O
		12		
	4	~~2~~	11	
	~~5~~	~~3~~	~~1~~	7
–	1	5	2	3
	3	7	9	4

j.

	Th	H	T	O
		6	13	
	7	~~7~~	~~3~~	8
–	1	6	5	2
	6	0	8	6

k.

	Th	H	T	O
		8	14	
	6	~~9~~	~~4~~	7
–	3	7	6	4
	3	1	8	3

l.

	Th	H	T	O
	6	10	12	
	~~7~~	~~1~~	~~2~~	3
–	2	6	4	1
	4	4	8	2

m.

	Th	H	T	O
		11		
	7	~~1~~	11	
	~~8~~	~~2~~	~~1~~	9
–		5	7	8
	7	6	4	1

n.

	Th	H	T	O
	4	9	10	12
	~~5~~	~~0~~	~~1~~	~~2~~
–	2	7	6	4
	2	2	4	8

k.

	Th	H	T	O
	7	5	6	7
–	3	2	5	4
	4	3	1	3

l.

	Th	H	T	O
	6	5	4	1
–	2	3	2	1
	4	2	2	0

18. Solve the following.

a.

	TTH	TH	H	T	O
		4	1	0	2
×					4
	1	6	4	0	8

b.

	TTH	TH	H	T	O
		5		2	
		4	8	1	3
×					7
	3	3	6	9	1

c.

	TTH	TH	H	T	O
		1			
		6	4	1	2
×					3
	1	9	2	3	6

d.

	TTH	TH	H	T	O
		1	1	1	
		7	5	5	5
×					2
	1	5	1	1	0

e.

	TH	H	T	O
		1	8	8
×			1	0
		0	**0**	0
+	1	8	8	×
	1	8	8	0

f.

	TH	H	T	O
		1		
		1	4	1
×			1	4
		5	**6**	4
+	1	4	1	×
	1	9	7	4

g.

	TTH	TH	H	T	O
			1	1	
			4	4	
			4	6	6
×				2	7
		3	2	6	2
+		9	3	2	×
	1	2	5	8	2

h.

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

i.

$$
\begin{array}{r}
1317 \\
5\overline{)6588} \\
-5 \\
\hline
15 \\
-15 \\
\hline
08 \\
-05 \\
\hline
38 \\
-35 \\
\hline
3
\end{array}
$$

j.

$$
\begin{array}{r}
304 \\
15\overline{)4560} \\
-45 \\
\hline
60 \\
-60 \\
\hline
0
\end{array}
$$

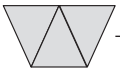
k.

$$
\begin{array}{r}
220 \\
16\overline{)3520} \\
-32 \\
\hline
32 \\
-32 \\
\hline
0
\end{array}
$$

l.

$$
\begin{array}{r}
181 \\
13\overline{)2357} \\
-13 \\
\hline
105 \\
-104 \\
\hline
17 \\
-13 \\
\hline
4
\end{array}
$$

19. Colour according to the given fraction.

a.  $\frac{2}{4}$ **b.**  $\frac{1}{2}$ **c.**  $\frac{6}{9}$ **d.**  $\frac{3}{3}$

20. Write the time shown by each clock.

a.  4:50

b.  2:45

c.  2:20

21. Write the time as a.m or p.m

a. 4 : 00 in the evening 4 :00 pm.

b. 1 o'clock night 1:00 am.

c. 10 o' clock night 10:00 pm.

d. 8 o' clock morning 8:00 am.

22. Fill in the boxes with > or <.

a. $\frac{7}{8}$ [>] $\frac{5}{8}$ **b.** $\frac{4}{9}$ [<] $\frac{7}{9}$ **c.** $\frac{6}{13}$ [<] $\frac{12}{13}$

23. Write the following fractions in descending order.

$\frac{5}{11}, \frac{8}{11}, \frac{7}{11}, \frac{10}{11}$ $\frac{10}{11} > \frac{8}{11} > \frac{7}{11} > \frac{5}{11}$

24. Add the fractions.

a. $\frac{2}{6} + \frac{3}{6} = \frac{2+3}{6} = \frac{5}{6}$ b. $\frac{4}{9} + \frac{3}{9} = \frac{4+3}{9} = \frac{7}{9}$

c. $\frac{4}{10} + \frac{5}{10} = \frac{4+5}{10} = \frac{9}{10}$

25. Subtract the fractions.

a. $\frac{7}{8} - \frac{3}{8} = \frac{7-3}{8} = \frac{4}{8}$ b. $\frac{6}{7} - \frac{3}{7} = \frac{6-3}{7} = \frac{3}{7}$

c. $\frac{5}{9} - \frac{2}{9} = \frac{5-2}{9} = \frac{3}{9}$

26. Add:

a.

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

b.

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

c.

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

27. Subtract:

a.

	m		cm	
			12	
		7	~~2~~	10
	5	~~8~~	~~3~~	~~0~~
–	5	6	7	1
	0	1	5	9

b.

	m		cm	
	8	10	0	10
	~~9~~	~~0~~	~~1~~	~~0~~
–	5	4	0	4
	3	6	0	6

c.

	m		cm	
		12		
	3	~~2~~	13	16
	~~4~~	~~3~~	~~4~~	~~6~~
–	2	5	7	5
	1	7	6	8

28. Fill in the blanks.

a. 7:50 can be written as 7 hours to 50 minutes.

b. The minute hand covers 60 minutes when it moves from 12 to 1.

c. Quarter past the hour means 15 minutes have been passed.

d. In a leap year, February has 29 days.

e. December is the last month of the year.

f. There are 30 days in the month of September.

g. The months of July and August come after one another which have 31 days each.

29. Add the money and match the correct one.

a. ₹72 → iii. ₹50 ₹10 ₹5 ₹5 ₹2 = ₹72

b. ₹60.50 → i. ₹20 ₹20 ₹20 50 p = ₹60.50

c. ₹154 → ii. ₹100 ₹50 ₹2 ₹1 ₹1 = ₹154

30. Number of cashewnuts in the box = 32
Number of Almonds in the box = 49
Number of pistas in the box = + 28
Number of total nuts in the box = 109

31. Number of books in the library = 3384
Number of books have been lent out = – 1243
Number of books left in the library = 2141
Therefore, there are 2141 books left in the library.

32. Run scored by Mandhana = 491
Run scored by Mitali raj = – 129
More run scored by Mandhana = 362
Therefore, Mandhana scored 491 runs more than Mithali raj.

33. Number of packets shopkeeper has = 625
Number of toffees in a packet = × 10
000
+ 6250×
Total toffees shopkeeper has = 6250
Therefore, 6250 toffees have a shopkeeper.

34. Diesel in a diesel tank = 250 l
Number of bires filled equally = 10
Number of litre of petrol each bike contain =
Therefore, each bike contain 25 l petrol.

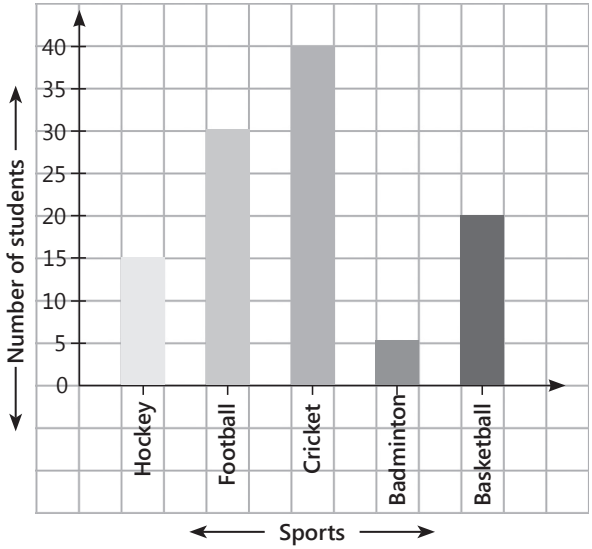
$10\overline{)250}\,25$, -20, 50, -50, 0

35. Number of students in a school = 648
Seat capacity of a school van = 18
School van required for all student to go to Picnic.
Therefore, 38 van required to take all the student to picnic.

$18\overline{)648}\,36$, -54, 108, -108, 0

36. a. Bananas **b.** Peaches **c.** four **d.** 5 + 4 = 9
e. two **f.** six

37. Make a colourful bar graph to represent the following information about favourite SPORT of class IV.



Chapter
2

Five-and Six-Digit Numbers

Exercise 2 A

1. Write the number name for the following numerals.

a. 24,683 Twenty four thousand six hundred eighty three

b. 53,106 Fifty three thousand one hundred six

c. 59,019 Fifty nine thousand nineteen

d. 3,64,616 Three lakh sixty four thousand six hundred sixteen

e. 5,09,067 Five lakh nine thousand sixty seven

2. Write the numerals for the following number names.

a. Two lakh six thousand eight hundred ninety-one 2, 06, 891

b. Fifty thousand sixty-two 50, 062

c. Thirteen thousand four hundred fifty-six 13, 456

d. Eight lakh thirty six thousand seven hundred 8, 36, 700

e. Nine lakh eighty-nine 9, 00, 089

3. Represent the following numerals in the place value chart.

	Lakh	TTH	Th	H	T	O
a.		9	9	9	9	9
b.		9	2	3	0	5
c.		1	7	5	6	2
d.	5	0	0	0	0	5
e.	2	0	4	0	7	1
f.	3	1	9	5	4	6

4. Write the following in figures as well as in words.

a. 10, 000 = Ten thousand

b. 99, 999 = Ninety nine thousand nine hundred ninety nine

c. 1, 00, 000 = One lakh

d. 9, 99, 999 = Nine lakh ninety nine thousand nine hundred ninety nine

5. Find the successor of the following numbers.

a. 48, 132 48, 133 **b.** 5, 84, 556 5, 84, 557

c. 2, 34, 561 2, 34, 562 **d.** 1, 85, 054 1, 85, 055

6. **Find the predecessor of the following numbers.**

   a. 9, 63, 214 9, 63, 213 **b.** 9, 65, 487 9, 65, 486

   c. 9, 75, 632 9, 75, 631 **d.** 2, 37, 154 2, 37, 153

7. **Check the pattern and fill in the blanks.**

   a. 23,821; 23,823 23, 825, 23, 828

   b. 1,10,400; 2,20,500 3, 30, 600, 4, 40, 700

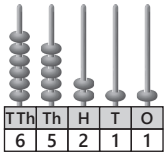
   c. 89,236 ; 89,237 89, 238, 89, 239

   d. 44,281; 54,281 64, 281, 74, 281

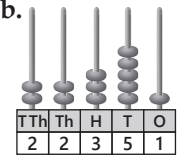
Exercise 2 B

1. **Write the number name for the following numerals.**

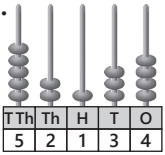
a.



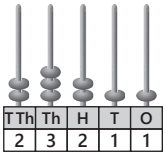
b.



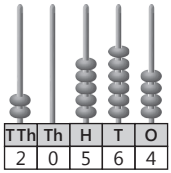
c.



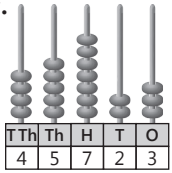
d.



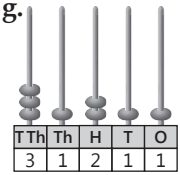
e.



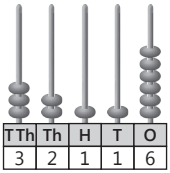
f.



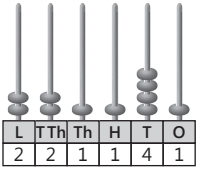
g.



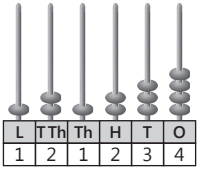
h.



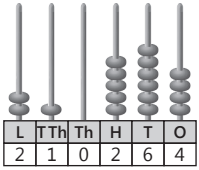
i.



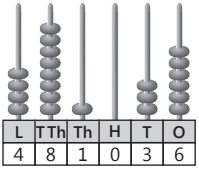
j.



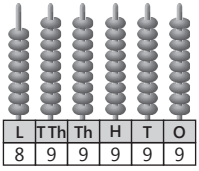
k.



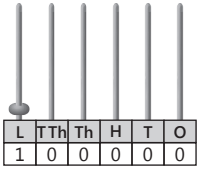
l.



m.

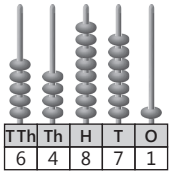


m.

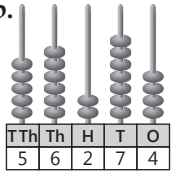


2. **Draw the beads on the spikes of the abacus to represent the given numbers.**

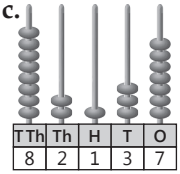
a.



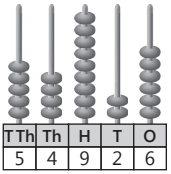
b.



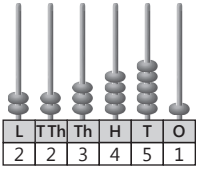
c.



d.

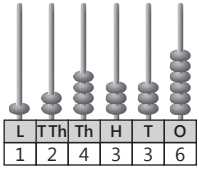


e.



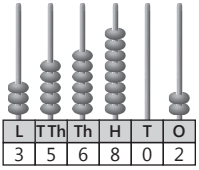
L	T Th	Th	H	T	O
2	2	3	4	5	1

f.



L	T Th	Th	H	T	O
1	2	4	3	3	6

g.



L	T Th	Th	H	T	O
3	5	6	8	0	2

Exercise 2 C

1. Rewrite the following numbers with commas according to the Indian Place Value System.

Periods	Lakhs		Thousand		One			in commas
Place values	TL	L	T TH	TH	H	T	O	
		2	4	0	3	3	0	2, 40, 330
		5	9	4	3	5	4	5, 94, 354
		6	4	4	5	2	2	6, 44, 522
		6	0	3	0	9	7	6, 03, 097
		6	7	4	8	1	4	6, 74, 814
		7	0	9	0	5	6	7, 09, 056
		8	6	6	1	3	1	8, 66, 231
		3	1	2	7	8	9	3, 12, 789

2. Rewrite the following numbers with commas according to the International Place Value System.

Periods	Lakhs	Thousand		One			in commas
Place values	L	T TH	TH	H	T	O	
	7	6	5	2	0	4	7, 65, 204
	4	9	2	0	0	5	4, 92, 005
	6	5	3	5	4	2	6, 53, 542
	5	0	3	9	5	4	5, 03, 954
	6	7	4	8	1	4	6, 74, 814
	5	2	1	7	8	1	5, 21, 781
	7	7	7	7	7	7	7, 77, 777
	8	1	0	9	2	1	8, 10, 921

3. **Look at the commas carefully and write the following numerals in words.**

   a. Nine hundred twenty five thousand four hundred thirty two.

   b. Seven hundred thirty six thousand six hundred five.

   c. Six hundred thirty two thousand six hundred thirty two.

   d. Eight hundred ninety two thousand two hundred thirty four.

   e. Seven hundred eighty seven eight hundred seventy eight.

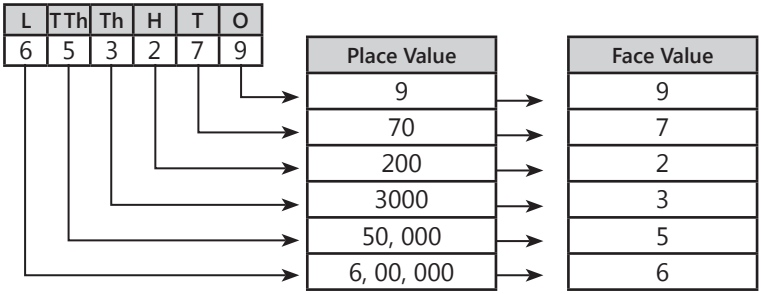
   f. One hundred forty thousand thirty one.

   g. Two hundred thirty two thousand seven hundred sixty seven.

   h. Five hundred forty five thousand six hundred eighty seven.

Exercise 2 D

1. **Write the place value of each digit in the first box and face value in the second box.**



2. **Write the face value of the underlined digits.**

	Number		Face Value
a.	**82, 540**	**=**	**5**
b.	**43, 605**	**=**	**3**
c.	**51, 792**	**=**	**9**
d.	**5, 24, 328**	**=**	**8**
e.	**8, 24, 352**	**=**	**8**
f.	**5, 79, 826**	**=**	**7**
g.	**9, 88, 620**	**=**	**0**
h.	**8, 59, 614**	**=**	**1**

3. Find the place value of each digit in the following numerals:

a.

TTh	Th	H	T	O
5	3	4	1	9

Place Value
9
10
400
3,000
50,000

b.

TTh	Th	H	T	O
5	1	4	5	0

Place Value
0
50
400
1,000
50,000

c.

TTh	Th	H	T	O
4	2	0	7	6

Place Value
6
70
0
2,000
40,000

d.

L	TTh	Th	H	T	O
2	1	3	5	0	4

Place Value
4
0
500
3,000
10,000
2,00,000

e.

L	TTh	Th	H	T	O
8	6	0	4	2	9

Place Value
9
20
400
0
60,000
8,00,000

f.

L	TTh	Th	H	T	O
7	6	3	8	2	5

Place Value
5
20
800
3,000
60,000
7,00,000

g.

L	TTh	Th	H	T	O
3	7	4	5	2	5

Place Value
5
20
500
4,000
70,000
3,00,000

h.

TTh	Th	H	T	O
5	2	9	0	0

Place Value
0
0
900
2,000
50,000

4. Find the difference and sum of the place values of the same digit in the following numbers.

a.

L	TTh	Th	H	T	O
6	3	7	2	6	1

60
6,00,000

Sum = 6,00,000 + 60

= 6,00,060

Difference =

	5	9	9	9	10	
	~~6~~	~~0~~	~~0~~	~~0~~	~~0~~	0
–					6	0
	5	9	9	9	4	0

b.

L	TTh	Th	H	T	O
7	3	8	8	1	6

800
8,000

Sum = 8,000 + 800

= 8,800

Difference =

	7	10		
	~~8~~	~~0~~	0	0
–		8	0	0
	7	2	0	0

c.

L	TTh	Th	H	T	O
9	3	7	2	9	6

90
9,00,000

Sum = 9,00,000 + 90

= 9,00,090

Difference =

	8	9	9	9	10	
	~~9~~	~~0~~	~~0~~	~~0~~	~~0~~	0
–					9	0
	8	9	9	9	1	0

d.

L	TTh	Th	H	T	O
7	4	8	6	7	5

70
7,00,000

Sum = 7,00,000 + 80

= 7,00,070

Difference =

	6	9	9	9	10	
	~~7~~	~~0~~	~~0~~	~~0~~	~~0~~	0
–					7	0
	6	9	9	9	3	0

e.

L	TTh	Th	H	T	O
6	5	2	6	3	4

600
6,00,000

Sum = 6,00,600 + 600

= 6,00,600

Difference =

	5	9	9	9	10	
	~~6~~	~~0~~	~~0~~	~~0~~	~~0~~	0
–				6	0	0
	5	9	9	4	0	0

f.

L	TTh	Th	H	T	O
7	8	5	4	2	5

5
5,000

Sum = 5,000 + 5

= 5,005

Difference =

	4	9	9	10
	~~5~~	~~0~~	~~0~~	~~0~~
–				5
	4	9	9	5

g.

L	TTh	Th	H	T	O
4	1	2	6	8	1

1
10,000

Sum = 10,000 + 1

= 10,001

Difference =

	0	9	9	9	10
	~~1~~	~~0~~	~~0~~	~~0~~	~~0~~
–					1
		9	9	9	9

h.

L	TTh	Th	H	T	O
8	9	5	6	4	4

4
40

Sum = 40 + 4

= 44

Difference =

	3	10
	~~4~~	~~0~~
–		4
	3	6

5. Write the period, place value and face value of the underlined digit in each of the given numbers. One has been done for you.

S.N.	Number	Period	Place value	Face value
a.	5,67,789	Thousands	60,000	6
b.	4,57,127	Lakh	4,00,000	4
c.	88, 888	One	8	8
d.	9,95,432	Hundred	400	4
e.	1,09,678	Lakh	1,00,000	1
f.	5,85,875	Thousand	5,000	5

Exercise 2 E

1. Fill in the blanks.

a. 759083 = 7 lakhs + 5 ten + thousands + 9 thousands + 0 hundreds + 8 tens + 3 ones

b. 530295 = 500000+ 30000 + 0 + 200 + 90 + 5

c. 698507 = 6 × 100000 + 9 × 10000 + 8 × 1000 + 5 × 100 + 0 × 10 + 7 × 1

d. 49929 = 40000 + 9000 + 900 + 20 + 9

2. Write the following numbers in expanded form.

a. 4,00,000 + 60,000 + 1,000 + 700 + 30 + 2

b. 6,00,000 + 20,000 + 200 + 90 + 5

c. 7,00,000 + 50,000 + 9,000 + 80 + 5

d. 5,00,000 + 90,000 + 9,000 + 200 + 90

e. 4,00,000 + 30,000 + 500 + 90 + 4

f. 9,00,000 + 90,000 + 9,000 + 300 + 80 + 9

g. 4,00,000 + 4

h. 5,00,000 + 5,000 + 50 + 9

3. Write 605933 in expanded form in three different ways.

6 lakhs + 0 Ten thousand + 5 thousands + 9 hundreds + 3 tens + 3 ones

$6 \times 100000 + 0 \times 10000 + 5 \times 1000 + 9 \times 100 + 3 \times 10 + 3 \times 1$

Or

$600000 + 5000 + 900 + 30 + 3$

4. Write the following numbers in short form.

a. 6,84,324 **b.** 72,107 **c.** 3,43,023

d. 4,68,724 **e.** 9,04,270 **f.** 8,43,521

5. Match the following that describe each other.

a. 3,40,548 → (iii) Standard form

b. 3,00,000 + 40,000 + 500 + 40 + 8 → (i) Expanded form

c. Three lakh forty thousand five hundred forty-eight → (ii) Word form

Exercise 2 F

1. Circle the smaller number.

a. (35030), 53030 **b.** 321056, (312056) **c.** (747047), 747074

2. Circle the bigger number.

a. (45670), 7350 **b.** 893240, (893250) **c.** 68576, (84326)

3. Find out which is smaller and greater. Fill the blanks with <, = or >.

a. 1,00,245 [<] 9,87,890 **b.** 52,881 [=] 52,881

c. 43,000 [=] 43,000 **d.** 48,925 [>] 48,923

e. 3,25,941 [<] 6,38,691 **f.** 8,23,456 [>] 3,46,788

4. Compare using the symbols >,< or =.

a. 9 thousands + 3 ones [>] 8 thousands + 5 hundreds + 2 tens + 7 ones

b. 450000 [<] 5 lakhs

5. Cost of KTM bike is ₹66,000 and cost of PVR bike is ₹2,58,000. Which one cost less?

Cost of KTM bike is ₹66,000 [<] cost of PVR bike ₹2,58,000

6. The height of mount everest is 29030 ft and kanchenjunga is 28170 ft. Which peak is the highest

Height of mount everest is 29030 ft [>] Height of kanchenjunga is 28170 ft

Exercise 2 G

1. Arrange the following groups of numbers in ascending order.

a. 98 < 454 < 5421 < 81321 < 268615

b. 51856 < 123456 < 132871 < 279863 < 498367

c. 7656 < 84125 < 145185 < 398439 < 945296

d. 3198 < 81465 < 98145 < 991791 < 994173

2. Arrange the following groups of numbers in descending order.

a. 213456 > 129654 > 30768 > 12657 > 2788

b. 791326 > 245368 > 93217 > 45370 > 6399

c. 790523 > 627905 > 79123 > 62997 > 6279

d. 798768 > 307285 > 63823 > 50437 > 27192

Exercise 2 H

1. Form the greatest and the smallest 5-digit numbers using the following digits.

		Greatest Number	Smallest Number
a.	6, 2, 0, 5, 9	96520	20569
b.	5, 1, 0, 8, 2	85210	10258
c.	8, 3, 9, 5, 7	98753	35789
d.	8, 9, 3, 4, 2	98432	23489
e.	1, 3, 2, 5, 7	75321	12357

2. Write the greatest 5-digit number:

a. using only one digit — 99999

b. using different digits at each place — 98765

c. using different digits with 5 at thousands place — 95876

d. using same digits with 2 at ones place — 99992

3. Write the smallest 6-digit number:

a. with no digit repeated — 123456

b. using same digits with 1 at lakhs place — 100000

c. using different digits with 9 at hundreds place — 102934

Exercise 2 F

1. Round off each of the following numbers to the nearest ten.

	Number	Ones digit	Tens digit	Rounded off number
a.	73	3 less than 5	7	70
b.	67	7 greater than 5	6 + 1 = 7	70
c.	294	4 less than 5	9	290
d.	4856	6 greater than 5	5 + 1 = 6	4860
e.	4516	6 greater than 5	1 + 1 = 2	4520
f.	861	1 less than 5	6	860
g.	3429	9 greater than 5	2 + 1 = 3	3430
h.	625	5 equal to 5	2 + 1 = 3	630

2. Round off each of the following numbers to the nearest hundred.

	Number	Tens digit	Hundred digit	Rounded off number
a.	346	4 less than 5	3	300
b.	493	9 greater than 5	4 + 1 = 5	500
c.	917	1 less than 5	9	900
d.	472	7 greater than 5	4 + 1 = 5	400
e.	6251	5 equal to 5	2 + 1 = 3	6300
f.	9804	0 less than 5	8	9800
g.	1462	6 greater than 5	4 + 1 = 5	1500
h.	7482	8 greater than 5	4 + 1 = 5	7500

3. Round off each of the following numbers to the nearest thousand.

	Number	Hundred digit	Thousand digit	Rounded off number
a.	4276	2 less than 5	4	4000
b.	7834	8 greater than 5	7 + 1 = 8	8000
c.	9567	5 equal than 5	9 + 1 = 10	10000
d.	2355	3 less than 5	2	2000
e.	16278	2 less than 5	6	16000
f.	26019	0 less than 5	6	26000
g.	20963	9 greater than 5	0 + 1 = 1	21000
h.	7152	1 greater than 5	7	7000

4. Round off according to given instruction and fill in the blanks.

a. There are 2442 passengers in a train there are about 2440 passengers in the train. (Nearest ten)

b. The total amount in my bank account is ₹ 26375. There are about 26400 rupees in my bank account. (Nearest hundred)

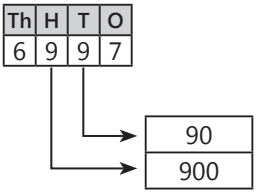
c. There are 95365 people in a stadium. There are about 95000 people in the stadium. (Nearest thousand)

HOTS

1. How many hundreds are there in 9854? 8
2. 1 lakh is the same as 100 thousand
   a. 100 thousands b. 1000 thousands c. 10 thousands
3. 2
4. Lakh placed 9 should be replaced by 0 to get a 5 digit number.

MENTAL MATHS

1. What is the sum of the place values of the two 9's in the number 6997?



Sum of two 9's = 900 + 90 = 990

2. 100 more than 999 is greater than 1999.

True ☐ **False** ☑

3. Fill in the blanks the missing terms of the following sequence.

2243, 2343, 2443, 2543, 2643

4. In which of the following numbers, the digit 2 has the greatest place value?

3527, 4312, 5279, (2000)

5. In ascending order of a given number the greatest number is written in last.

Chapter
3

Roman Numbers

Exercise 3 A

1. Write the Roman numerals for the following Hindu-Arabic numerals.

a. 16 = XVI **b.** 59 = LIX **c.** 65 = LXV

d. 99 = XCIX **e.** 87 = LXXXVII **f.** 44 = XLIV

2. Write the Hindu-Arabic numerals for the following Roman numerals.

a. XXVI = 26 **b.** XXXIII = 33 **c.** LIX = 59

d. XC = 90 **e.** LXXV = 75 **f.** LV = 55

3. Compare the numbers and write '>, <' or '=' in the given space.

a. 27 [>] XXI **b.** LXXX [=] 80

c. XXXI [<] 39 **d.** XIV [<] LXV

e. XCVII [>] XCIV **f.** LXII [=] LXII

4. Write the predecessor and successor of the following Roman numerals.

	Roman numeral	Predecessor	Successor
a.	XVII	**XVI**	**XVIII**
b.	XI	**X**	**XII**
c.	XXIX	**XXVIII**	**XXX**
d.	XCV	**XCIV**	**XCVI**
e.	LXX	**LXIX**	**LXXI**
f.	LXXXVIII	**LXXXVII**	**LXXXIX**

5. Arrange the given Roman numerals in ascending and descending order.

a. X, IX, XV, XXX

10, 9, 15, 30

Ascending order = 9 < 10 < 15 < 30

= IX < X < XV < XXX

Descending order = 30 > 15 > 10 > 9

= XXX > XV > X > IX

b. L, XC, XX, XCV

50, 90, 20, 95

Ascending order = 20 < 50 < 90 < 95

= XX < L < XC < XCV

Descending order = 95 > 90 > 50 > 20

= XCV > XC > L > XX

c. XV, XXXVI, XX, C

15, 36, 20, 100

Ascending order = 15 < 20 < 36 < 100

= XV < XX < XXXVI < C

Descending order = 100 > 36 > 20 > 15

= C > XXXVI > XX > XV

Exercise 3 B

1. Write the answer in Roman numerals.

a. XXI = 21 IV = 5

Adding, 21 + 5 = 26

Now, 26 = 10 + 10 + 6

= X + X + V + I

So, XXI + IV = XXVI

b. XCVI = 96 LXXXIX = 89

Subtracting, 96 – 89 = 7

Now, 7 = 5 + 1 + 1

= V + I + I

So, XCVI + LXXXIX = VII

c. LXXVII = 77 X = 10

Adding, 77 + 10 = 87

Now, 87 = 50 + 10 + 10 + 10 + 5 + 1 + 1

= L + X + X + X + V + I + I

So, LXXVII + X = LXXXVII

d. XLVII = 47 XVIII = 18

Subtracting, 47 – 18 = 29

Now, 29 = 10 + 10 + 9

= X + X + I + X

So, XLVII + XVIII = XXIX

e. LXXVII = 77 XX = 20

Adding, 77 + 20 = 97

Now, 97 = (100 – 10) + 5 + 1 + 1

= X + C + V + I + I

So, LXXVII + XX = XCVII

f. LXXXIV = 84 LX = 60

Subtracting, 84 – 60 = 24

Now, 24 = 10 + 10 + (5 – 1)

= X + X + I + V

So, LXXXIV + LX = XXIV

2. Ram is XII years old. His brother is XX years old. Who is older and by how much?

Age of Ram = XII (12)

Age of her brother = XX (20)

Difference between age of Ram and her brother.

= 20 – 12 = 7

8 = 5 + 1 + 1 + 1 = V + I + I + I

So, XX – XII = VIII

3. Do it yourself.

4. Fill in the blanks.

a. In Roman Number System, there is no symbol for zero.

b. The symbol V is never repeated or subtracted.

c. In XI, one is added to ten.

d. In IX, one is subtracted from 10.

HOTS

a. VII + I = VIII **b.** IX + I = X

c. VI + II = IV

Chapter
4

Addition

Exercise 4 A

1. Add the following.

a.

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

b.

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

c.

	H	T	O
	1	1	
	4	4	4
+	2	7	6
	7	2	0

d.

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

e.

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

e.

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

f.

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

g.

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

h.

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

i.

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

2. Find the sum of 6231, 1212 and 2121.

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

3. Mohit deposited ₹4,275 in his bank account on Monday and ₹3,278 on Tuesday. How much amount did he deposit in all?

Money deposited by Mohit in bank on Monday =
Money deposited by Mohit in bank on Tuesday =
Money deposited in all.

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

Exercise 4 B

1. Add the following.

a.

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

b.

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

c.

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

d.

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

e.

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

f.

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

g.

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

2. Add the following.

a.

	L	TTH	Th	H	T	O
	6	3	8	5	4	9
+	1	3	0	4	2	0
	7	6	8	9	6	9

b.

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

c.

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

3. Add the following after writing the given number names into numerals.

a. 1,05,745 + 3,02,133

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

b. 67,909 + 11,010

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

Exercise 4 C

1. Add the following.

a.

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

b.

	TTH	Th	H	T	O
	1		1	1	
	2	5	0	9	9
+	6	8	1	9	8
	9	3	2	9	7

c.

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

d.

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

e.

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

f.

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

g.

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

2. Solve the following sums in your notebook.

a.

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

b.

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

c.

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

d.

	L	TTH	Th	H	T	O
		1			1	
	2	3	7	6	7	9
+	5	4	3	2	1	9
	7	8	0	8	9	8

e.

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

f.

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

3. Add the following after writing the given number names into numerals. Also, write the sum in words in each problem.

a. 1,05,656 + 3,07,099

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

Four lakh twelve thousand seven hundred fifty five.

b. 3,02,059 + 4,99,999

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

Eight lakh two thousand fifty eight.

c. 75,280 + 11,679

	TTH	Th	H	T	O
			1		
	7	5	2	8	0
+	1	1	6	7	9
	8	6	9	5	9

Eighty six thousand fifty eight.

Exercise 4 D

1. Fill in the blanks.

a. 57,890 + 0 = 57,890

b. 56,341 + 1 = 56,342

c. 7,89,012 + 0 = 7,89,012

d. 6,79,801 + 1 = 6,79,802

e. (68,712 + 21,316) + 19,817 = 68712 + (21,316 + 19,817)

f. 34,125 + 12,345 = 34,125 + 12,345

g. 58,901 + 87,654 = 87,654 + 58,901

h. (11,991 + 23,122) + 67,890 = (67,890 + 11,991) + 23,122

Exercise 4 E

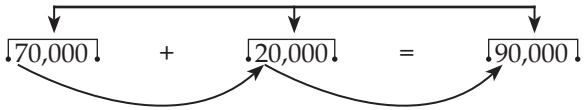
1. Find the sum.

a.	63199 + 100	=	63299	**b.**	65410 + 10	=	65420
c.	41089 + 100	=	41189	**d.**	96803 + 1000	=	97803
e.	71369 + 10	=	71379	**f.**	87138 + 100	=	87238
g.	267137 + 1000	=	268137	**h.**	929847 + 10	=	929857

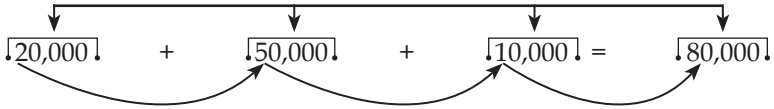
Exercise 4 F

1. Add orally.

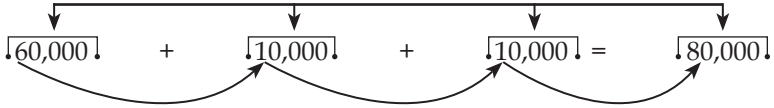
a.



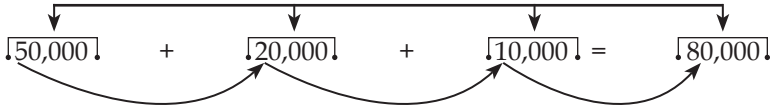
b.



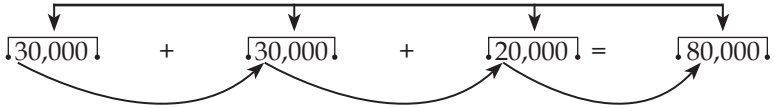
c.



d.



e.



Exercise 4 G

1. Fill in the blanks.

a.
3 + 4 = 7
30 + 40 = 40
300 + 400 = 700
3000 + 4000 = 7000
30000 + 40000 = 70000
300000 + 400000 = 700000

b.
2 + 6 = 8
20 + 60 = 80
200 + 600 = 800
2000 + 6000 = 8000
20000 + 60000 = 800000

Exercise 4 H

1. Fill the boxes with suitable digits.

a.

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

b.

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

c.

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

d.

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

e.

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

f.

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

g.

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

h.

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

i.

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

j.

	TTH	Th	H	T	O
	1	1		1	
	6	8	8	5	9
+	3	4	5	1	2
	10	3	3	7	1

k.

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

l.

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

Exercise 4 I

1. Estimate each of the following sum by rounding off to the nearest ten. Find the actual sum also.

a. Sum rounded off to nearest ten

	H	T	O
		4	0
+		5	0
		9	0

Actual Sum

	H	T	O
		1	
		3	6
+		4	6
		8	2

b. Sum rounded off to nearest ten

	H	T	O
		7	0
+		6	0
	1	3	0

Actual Sum

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

c. Sum rounded off to nearest ten

	H	T	O
		6	0
+		2	0
		8	0

Actual Sum

	H	T	O
		1	
		6	3
+		1	9
		8	2

d. Sum rounded off to nearest ten

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

Actual Sum

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

e. Sum rounded off to nearest ten

	H	T	O
	5	3	0
+	3	3	0
	8	6	0

Actual Sum

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

f. Sum rounded off to nearest ten

	H	T	O
	1		
	6	6	0
+	2	8	0
	9	4	0

Actual Sum

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

2. Estimate each of the following sum by rounding off to the nearest hundred. Find the actual sum also.

a. Sum rounded off to nearest Hundred

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

Actual Sum

	Th	H	T	O
		5	5	5
+		6	2	0
	1	1	7	5

b. Sum rounded off to nearest Hundred

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

Actual Sum

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

c. Sum rounded off to nearest Hundred

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

Actual Sum

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

d. Sum rounded off to nearest Hundred

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

Actual Sum

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

e. Sum rounded off to nearest Hundred

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

Actual Sum

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

f. Sum rounded off to nearest Hundred

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

Actual Sum

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

3. Estimate each of the following sum by rounding off to the nearest thousand.

a. Sum rounded off to nearest Thousand

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

Actual Sum

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

b. Sum rounded off to nearest Thousand

	TTH	Th	H	T	O
	1				
	3	8	0	0	0
+	3	2	0	0	0
	7	0	0	0	0

Actual Sum

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

c. Sum rounded off to nearest Thousand

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

Actual Sum

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

d. Sum rounded off to nearest Thousand

	TTH	Th	H	T	O
	1				
	4	3	0	0	0
+	7	9	0	0	0
	12	2	0	0	0

Actual Sum

	TTH	Th	H	T	O
	1	1	1	1	
	4	3	4	8	5
+	7	8	5	4	6
	12	2	0	3	1

e. Sum rounded off to nearest Thousand

	TTH	Th	H	T	O
	5	0	0	0	0
+	3	9	0	0	0
	8	9	0	0	0

Actual Sum

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

f. Sum rounded off to nearest Thousand

	TTH	Th	H	T	O
	6	4	0	0	0
+	4	0	0	0	0
	10	4	0	0	0

Actual Sum

	TTH	Th	H	T	O
	1	1	1	1	
	6	4	2	8	7
+	3	9	8	7	5
	10	4	1	6	2

Word Problems

1. Using proper statements, solve the following word problems.

a.

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

The number is 66,200.

b. Number of students Passed =

Number of students Failed =

Number of students appeared =

	TTH	Th	H	T	O
	1	1	1	1	
	7	5	9	7	4
+	2	7	7	9	7
	10	3	7	7	1

c. Money spent on purchase =
Money spent on velling =
Money spent on construction =
The cost of floor including land is ₹6,23,210.

	L	T	TH	Th	H	T	O
	1		2	2	2		
	4		6	5	7	8	0
			1	9	8	7	0
+	1		3	7	5	6	0
	6		2	3	2	1	0

d. 6-Digit Number =
Increase by =
The new 6-Digit number =
The new six digit number is 8,37,078.

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

e. Number of red chairs =
Number of blue chairs =
43,820 chairs have bee arranged in all.

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

f.

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

g. Number of bags of sugar =
Number of bags of rice =
Number of bags of wheat =
There are 9,86,436 bags in the granary.

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

h. Number of employees in Delhi office =
Number of employees in Mumbai office =
Total number of employees =
There are 62,077 employees in the company.

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

i. Number of Maths book printed =
Number of English book printed =
83,098 books did publisher print in all.

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

Framing Word Problem

1. Frame word problems for the following addition facts.

a. A man Purchase a land for ₹ 45,689 and a Bike for ₹12,342 for his family. How much money did he spend in all?

b. In an election, a party got votes and am opponent party got 14,560 votes. How many votes in all were voted in election?

c. There are 3,41,256 kg of sugar, 3,21,781 kg of wheat and 2,34,512 kg of wheat in a granary. Find the total weight of all grains.

d. A number exceeds 67,890 by 56,123, wheat is that number?

HOTS

1. Find the missing addend in each of the following.

a.

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

b.

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

c.

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

2. Find the sum of the successor of 42819 and the predecessor of 321,010.

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

Mental Maths

1. Fill in the blanks.

a. 1000 more than 28,176 is 29,176 .

b. 900 more than 3287 is 4187 .

c. 2,500 more than 12600 is 15,100 .

d. The sum is always greater than each of the addends provided the addends are not 0 or 1.

e. Addition of 1 to any number gives its successor .

f. When 10,000 is added to 2,37,614 the digit at the ten thousand place will change.

2. Find the sum of all the even numbers between 2 and 19.

Even numbers between 2 and 19 = 4, 6, 8; 10, 12, 14, 16, 18

Sum of all even number between 2 and 19

= 4 + 6 + 8 + 10 + 12 + 14 + 16 + 18 = 88

3. Look at these number cards.

a.

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

b.

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

c.

	TH	Th	H	T	O
				1	
	7	0	1	0	6
+		6	7	0	8
	7	6	8	1	4

d.

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

e.

	L	T	TH	Th	H	T	O
		1		1	1	2	
	3	0		3	2	9	6
		7		0	1	0	6
+				6	7	0	8
	3	8		0	1	1	0

f.

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

g.

	L	T	TH	Th	H	T	O
	1			1	1	1	
	4	3		3	8	9	3
	3	0		3	2	9	6
+		7		0	1	0	6
	8	0		7	2	9	5

Chapter
5

Subtraction

Exercise 5.1

1. Subtract the following.

a.

	H	T	O
	9	5	5
–	4	3	2
	5	2	3

b.

	H	T	O
	4	3	6
–	1	2	5
	3	1	1

c.

	H	T	O
	8	8	7
–	4	5	6
	4	3	1

d.

	H	T	O
		11	
	8	~~1~~	14
	~~9~~	~~2~~	~~4~~
–	5	4	7
	3	7	7

e.

	H	T	O
		4	16
	2	~~5~~	~~6~~
–	1	2	7
	1	2	9

f.

	H	T	O
		7	17
	3	~~8~~	~~7~~
–	2	5	8
	1	2	9

g.

	H	T	O
		4	16
	2	~~5~~	~~6~~
–	1	3	8
	1	1	8

h.

	H	T	O
		7	17
	1	~~8~~	~~7~~
–	1	6	8
	0	1	9

i.

	H	T	O
		5	15
	3	~~6~~	~~5~~
–	2	4	6
	1	1	9

j.

	H	T	O
	8	7	5
–	5	3	4
	3	4	1

k.

	Th	H	T	O
	6	12		
	~~7~~	~~2~~	3	8
–	4	9	2	4
	2	3	1	4

l.

	Th	H	T	O
	4	3	5	8
–	3	2	1	7
	1	1	4	1

m.

	Th	H	T	O
		9	9	
	8	~~10~~	~~10~~	10
	~~9~~	~~0~~	~~0~~	~~0~~
–	6	2	3	5
	2	7	6	5

n.

	Th	H	T	O
			3	18
	8	6	~~4~~	~~8~~
–	4	3	2	9
	4	3	1	9

o.

	Th	H	T	O
			6	18
	9	6	~~7~~	~~8~~
–	2	5	6	9
	7	1	0	9

p.

	Th	H	T	O
			4	14
	8	6	~~5~~	~~4~~
–	2	4	3	5
	6	2	1	9

q.

	Th	H	T	O
	6	16	7	18
	~~7~~	~~6~~	~~8~~	~~8~~
–	3	7	6	9
	3	9	1	9

r.

	Th	H	T	O
			7	17
	5	6	~~8~~	~~7~~
–	4	5	2	8
	1	1	5	9

2. What should be added to 6372 to get 8729?

	Th	H	T	O
		6	12	
	8	~~7~~	~~2~~	9
–	6	3	7	2
	2	3	5	7

2357 should be added to 6372 to get 8729.

3. Rahul's car service is due on 500 km. He has already travelled 279 km. How much more he needs to travel?

Due car service = 500 km

Already travelled = 279 km

Need to travel = 500 km – 279 km

	H	T	O
		9	
	4	~~10~~	10
	~~5~~	~~0~~	~~0~~
–	2	7	9
	2	2	1

Exercise 5 B

1. Subtract the following.

a.

	TTH	Th	H	T	O
	4	5	6	7	9
–	2	3	1	5	4
	2	2	5	2	5

b.

	TTH	Th	H	T	O
	9	6	3	2	4
–	6	3	1	1	4
	3	3	2	1	0

c.

	TTH	Th	H	T	O
	5	6	7	5	4
–	4	5	6	4	3
	1	1	1	1	1

d.

	TTH	Th	H	T	O
	7	2	8	5	2
–	4	1	5	3	1
	3	1	3	2	1

e.

	L	TTH	Th	H	T	O
	9	8	7	6	5	4
–	8	7	6	5	4	3
	1	1	1	1	1	1

f.

	L	TTH	Th	H	T	O
	7	9	5	5	4	3
–	6	5	2	2	1	2
	1	4	3	3	3	1

g.

	L	TTH	Th	H	T	O
	8	6	4	5	2	4
–	5	1	2	3	1	3
	3	5	2	2	1	1

h.

	L	TTH	Th	H	T	O
	9	6	9	3	5	6
–	8	5	7	2	3	3
	1	1	2	1	2	3

2. Arrange the following sum in column and find the difference. Also, write the answer in word.

a.

	L	TTH	Th	H	T	O
	6	6	6	6	8	4
–	5	4	4	4	7	3
	1	2	2	2	1	1

One lakh twenty two thousand two hundred eleven.

b.

	TTH	Th	H	T	O
	4	5	6	7	8
–	1	2	3	4	5
	3	3	3	3	3

Thirty three thousand three hundred thirty three.

c.

	L	T	TH	Th	H	T	O
	6	7		6	7	6	7
–	5	6		5	6	5	6
	1	1		1	1	1	1

One lakh eleven thousand one hundred eleven.

d.

	L	T	TH	Th	H	T	O
	9	8		7	6	5	4
–	7	4		2	3	1	3
	2	4		5	3	4	1

Two lakh fourty five thousand three hundred fourty one.

e.

	T	TH	Th	H	T	O
		8	6	5	4	3
–		5	4	3	1	2
		3	2	2	3	1

Thirty two thousand two hundred thirty one.

f.

	L	T	TH	Th	H	T	O
	5	8		1	6	2	4
–	2	3		1	4	1	2
	3	5		0	2	1	2

Three lakh fifty thousand two hundred twelve.

Exercise 5 C

1. Fill in the blanks using the properties of subtraction.

a. 45,522 – 0 = 45,522
b. 31,600 – 31,600 = 0
c. 2,15,211 – 1 = 2,15,210
d. 7,77,444 – 0 = 7,77,444
e. 1,23,875 – 1,23,875 = 0
f. 66,501 – 1 = 66,500
g. 88,867 – 88,867 = 0
h. 2,46,132 – 1 = 2,46,131

2. Tick (✓) the correct order of subtraction.

a. 7256 – 4928 ✓
b. 80,000 – 60,000 ✓
c. 4928 – 7256
d. 60,000 – 80,000

Exercise 5 D

1. Fill in the blanks.

a. 6,29,617 – 10 = 6,29,607
b. 8,65,293 – 100 = 8,65193
c. 7,43,265 – 1000 = 7,42,265
d. 7,62,565 – 10,000 = 7,52,565
e. 12,345 – 100 = 12,245
f. 98,523 – 100 = 98,423
g. 24,645 – 100 = 24,545
h. 45,867 – 100 = 45,767

2. For each of the following addition facts write two subtraction facts.

a. 69,541 – 43,409 = 26,132

69,541 – 26,132 = 43,409

b. 36,990 – 145 = 36,845

36,990 – 36,845 = 145

c. 84,067 – 31,151 = 52,916

84,067 – 52,916 = 31,151

d. 4,26,563 – 49,974 = 3,74,589

4,26,563 – 3,74,589 = 49,974

There is some printing error in the textbook. Which is rectified here.

e. 52,385 – 19,564 = 32,821

52,385 – 32,821 = 19,564

f. 7,74,077 – 2,32,065 = 5,42,012

7,74,077 – 5,42,012 = 2,32,065

Exercise 5 E

1. Subtract the following and check your answer.

a.

	TTH	Th	H	T	O
		4	13	11	12
	6	~~5~~	~~4~~	~~2~~	~~2~~
–	6	1	7	9	8
	0	3	6	2	4

Check.

		TTH	Th	H	T	O
			1	1	1	
Difference →			3	6	2	4
Subtrahend →	+	6	1	7	9	8
Minuend →		6	5	4	2	2

b.

	TTH	Th	H	T	O
		5	11	15	17
	7	~~6~~	~~2~~	~~6~~	~~7~~
–	6	1	4	9	8
	1	4	4	6	9

Check.

		TTH	Th	H	T	O
			1	1	1	
Difference →		1	4	4	6	9
Subtrahend →	+	6	1	7	9	8
Minuend →		7	6	2	6	7

2. Subtract and check your answer.

a.

	L	TTH	Th	H	T	O
					11	
	6	15		7	~~1~~	14
	~~7~~	~~5~~	6	~~8~~	~~2~~	~~4~~
–	2	8	4	7	5	6
	4	7	2	0	6	8

Check.

		L	TTH	Th	H	T	O
		1			1	1	
Difference →		4	7	2	0	6	8
Subtrahend →	+	2	8	4	7	5	6
Minuend →		7	5	6	8	2	4

b.

	TTH	Th	H	T	O
		14	5	12	
	9	~~4~~	~~6~~	~~2~~	8
–	7	5	2	8	6
	2	9	3	4	2

Check.

		TTH	Th	H	T	O
			1	1	1	
Difference →		2	9	3	4	2
Subtrahend →	+	7	5	2	8	6
Minuend →		9	4	6	2	8

c.

	L	T TH	Th	H	T	O
		11	12	11	9	
	7	~~1~~	~~2~~	~~1~~	~~10~~	11
	~~8~~	~~2~~	~~3~~	~~2~~	~~0~~	~~1~~
–		5	9	6	8	7
	7	6	3	5	1	4

Check.

		L	T TH	Th	H	T	O
			1	1	1	1	1	
Difference →		7	6	3	5	1	4
Subtrahend →	+		5	9	6	8	7
Minuend →		8	2	3	2	0	1

d.

	L	T TH	Th	H	T	O
			11	12	11	
		8	~~1~~	~~2~~	~~1~~	15
	9	~~9~~	~~2~~	~~3~~	~~2~~	~~5~~
–	6	8	9	6	8	7
	3	0	2	6	3	8

Check.

		L	T TH	Th	H	T	O
			1	1	1	1	
Difference →		3	0	2	6	3	8
Subtrahend →	+	6	8	9	6	8	7
Minuend →		9	9	2	3	2	5

e.

	T TH	Th	H	T	O
	7	17			
	~~8~~	~~7~~	5	6	4
–	3	9	5	6	0
	4	8	0	0	4

Check.

		T TH	Th	H	T	O
		1				
Difference →		4	8	0	0	4
Subtrahend →	+	3	9	5	6	0
Minuend →		8	7	5	6	4

f.

	L	T TH	Th	H	T	O
		17				
	8	~~7~~	17		7	15
	~~9~~	~~8~~	~~7~~	6	~~8~~	~~5~~
–	7	9	8	5	6	9
	1	8	9	1	1	6

Check.

		L	T TH	Th	H	T	O
		1	1			1	
Difference →		1	8	9	1	1	6
Subtrahend →	+	7	9	8	5	6	9
Minuend →		9	8	7	6	8	5

g.

	T TH	Th	H	T	O
			13	13	
		7	3	3	15
	8	~~8~~	~~4~~	~~4~~	5
–	4	4	5	5	6
	4	3	8	8	9

Check.

		T TH	Th	H	T	O
			1	1	1	
Difference →		4	3	8	8	9
Subtrahend →	+	4	4	5	5	6
Minuend →		8	8	4	4	5

h.

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

Check.

		T TH	Th	H	T	O
		1	6	0	7	1
Difference →						
Subtrahend →	+	7	3	5	0	3
Minuend →		8	9	5	7	4

Exercise 5 F

Solve each of the following.

a.

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

	TTH	Th	H	T	O
		8	13		
	7	~~9~~	~~3~~	8	3
–	3	8	9	3	2
	4	0	4	5	1

b.

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

	L	TTH	Th	H	T	O
		18			12	
	8	~~8~~	13	8	~~2~~	10
	~~9~~	~~9~~	~~3~~	~~9~~	~~3~~	~~0~~
–	3	9	5	2	6	4
	5	9	8	6	6	6

c.

	L	TTH	Th	H	T	O
	1	1	1			
	7	6	5	8	3	2
+	1	3	5	4	1	2
	9	0	1	2	4	4

	L	TTH	Th	H	T	O
		9			13	
	8	~~10~~	11	1	~~3~~	14
	~~9~~	~~0~~	~~1~~	~~2~~	~~4~~	~~4~~
–	4	7	2	1	4	5
	4	2	9	0	9	9

d.

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

	L	TTH	Th	H	T	O
	6	10	14			
	~~7~~	~~1~~	~~4~~	4	8	8
–	6	7	5	3	2	1
	0	3	9	1	6	7

e.

	TTH	Th	H	T	O
	9	5	4	6	8
–	4	5	3	2	1
	5	0	1	4	7

	TTH	Th	H	T	O
				13	
	4	10	0	~~3~~	17
	~~5~~	~~0~~	~~1~~	~~4~~	~~7~~
–	2	1	0	5	8
	2	9	0	8	9

f.

	TTH	Th	H	T	O
	6	10			
	~~7~~	~~0~~	5	4	3
–	2	1	4	1	0
	4	9	1	3	3

	TTH	Th	H	T	O
		8	10	13	
	4	~~9~~	~~1~~	~~3~~	3
–	3	2	8	4	1
	1	6	2	9	2

g.

	TTH	Th	H	T	O
	1	1	1		
	2	5	9	3	0
+	4	6	1	8	3
	7	2	1	1	3

	TTH	Th	H	T	O
		1	10	11	
	7	~~2~~	~~1~~	~~1~~	3
–	4	0	5	9	2
	3	1	5	2	1

h.

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

	TTH	Th	H	T	O
				5	10
	6	8	9	~~6~~	~~0~~
–	6	2	5	0	2
	0	6	4	5	8

i.

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

	TTH	Th	H	T	O
		13			
	4	~~3~~	12	7	11
	~~5~~	~~4~~	~~2~~	~~8~~	~~1~~
–	3	8	7	6	5
	1	5	5	1	6

j.

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

	TTH	Th	H	T	O
				14	
	7	14	7	~~4~~	17
	~~8~~	~~4~~	~~8~~	~~5~~	~~7~~
–	4	8	7	5	9
	3	6	0	9	8

k.

	TTH	Th	H	T	O
			9		
		1	~~10~~	10	
	4	~~2~~	~~0~~	~~0~~	5
–	1	0	5	3	1
	3	1	4	7	4

	TTH	Th	H	T	O
	2	10	14		
	3	~~1~~	~~4~~	7	4
–	2	4	6	7	0
	0	6	8	0	4

l.

	TTH	Th	H	T	O
				8	13
	8	5	6	~~9~~	~~3~~
–	2	4	6	3	9
	6	1	0	5	4

	TTH	Th	H	T	O
			9	14	
	2	0	~~10~~	~~4~~	14
	6	~~1~~	~~0~~	~~5~~	~~4~~
–	4	0	0	5	7
	2	0	9	9	7

Exercise 5 G

1. Find the missing minuend.

a.

	TTH	Th	H	T	O
–	2	5	7	0	8
	4	0	2	3	6

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

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

b.

	TTH	Th	H	T	O
–	3	4	0	0	2
	4	6	9	7	4

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

	TTH	Th	H	T	O
	8	0	9	7	6
–	3	4	0	0	2
	4	6	9	7	4

c.

	TTH	Th	H	T	O
–	4	1	6	5	2
	3	5	6	4	4

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

	TTH	Th	H	T	O
	7	7	2	9	6
–	4	1	6	5	2
	3	5	6	4	4

d.

	TTH	Th	H	T	O
–	5	2	4	5	3
	3	9	6	0	0

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

	TTH	Th	H	T	O
	9	2	0	5	3
–	5	2	4	5	3
	3	9	6	0	0

e.

	TTH	Th	H	T	O
–	2	5	6	3	0
	3	2	5	5	6

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

	TTH	Th	H	T	O
	5	8	1	8	6
–	2	5	6	3	0
	3	2	5	5	6

f.

	TTH	Th	H	T	O
–	5	4	1	1	5
	4	5	4	2	6

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

	TTH	Th	H	T	O
	9	8	6	4	1
–	5	4	1	1	5
	4	5	4	2	6

g.

	TTH	Th	H	T	O
–	5	6	3	4	6
	3	4	2	3	8

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

	TTH	Th	H	T	O
	9	0	5	8	4
–	5	6	3	4	6
	3	4	2	3	8

h.

	TTH	Th	H	T	O
–	8	7	8	6	4
		3	2	3	5

	TTH	Th	H	T	O
	8	7	8	6	4
+		3	2	3	5
	9	1	0	9	9

	TTH	Th	H	T	O
	9	1	0	9	9
–	8	7	8	6	4
		3	2	3	5

2. Find the missing subtrahend.

a.

	TTH	Th	H	T	O
	5	5	6	7	5
–					
	3	2	4	2	3

	TTH	Th	H	T	O
	5	5	6	7	5
–	3	2	4	2	3
	2	3	2	5	2

	TTH	Th	H	T	O
	5	5	6	7	5
–	2	3	2	5	2
	3	2	4	2	3

b.

	TTH	Th	H	T	O
	8	5	6	8	6
–					
	2	6	3	0	5

	TTH	Th	H	T	O
	8	5	6	8	6
–	2	6	3	0	5
	5	9	3	8	1

	TTH	Th	H	T	O
	8	5	6	8	6
–	5	9	3	8	1
	2	6	3	0	5

c.

	TTH	Th	H	T	O
	5	6	4	5	6
–					
	3	4	6	5	4

	TTH	Th	H	T	O
	5	6	4	5	6
–	3	4	6	5	4
	2	1	8	0	2

	TTH	Th	H	T	O
	5	6	4	5	6
–	2	1	8	0	2
	3	4	6	5	4

d.

	TTH	Th	H	T	O
	6	5	4	3	8
–					
	3	2	3	5	5

	TTH	Th	H	T	O
	6	5	4	3	8
–	3	2	3	5	5
	3	3	0	8	3

	TTH	Th	H	T	O
	6	5	4	3	8
–	3	3	0	8	3
	3	2	3	5	5

e.

	TTH	Th	H	T	O
	6	4	0	7	7
–					
	1	6	8	3	4

	TTH	Th	H	T	O
	6	4	0	7	7
–	1	6	8	3	4
	4	7	2	4	3

	TTH	Th	H	T	O
	6	4	0	7	7
–	4	7	2	4	3
	1	6	8	3	4

f.

	TTH	Th	H	T	O
	7	5	6	7	8
–					
	3	1	5	4	0

	TTH	Th	H	T	O
	7	5	6	7	8
–	3	1	5	4	0
	4	4	1	3	8

	TTH	Th	H	T	O
	7	5	6	7	8
–	4	4	1	3	8
	3	1	5	4	0

g.

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

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

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

h.

	TTH	Th	H	T	O
	6	2	5	6	8
–					
	2	2	6	3	4

	TTH	Th	H	T	O
	6	2	5	6	8
–	2	2	6	3	4
	3	9	9	3	4

	TTH	Th	H	T	O
	6	2	5	6	8
–	3	9	9	3	4
	2	2	6	3	4

3. Find the missing subtrahend.

a.

	TTH	Th	H	T	O
	7		7		4
–		4		5	
	5	3	2	7	6

	TTH	Th	H	T	O
	7	7	7	3	4
–	2	4	4	5	8
	5	3	2	7	6

b.

	TTH	Th	H	T	O
		2	1		6
–	2		4	3	
	3	0	7	4	4

	TTH	Th	H	T	O
	5	2	1	7	6
–	2	1	4	3	2
	3	0	7	4	4

c.

	TTH	Th	H	T	O
		5		3	9
–	3		7	5	
	4	8	7	8	5

	TTH	Th	H	T	O
	8	5	5	3	9
–	3	6	7	5	4
	4	8	7	8	5

d.

	TTH	Th	H	T	O
	4	6	7	8	5
–	2			7	
		5	6		0

	TTH	Th	H	T	O
	4	6	7	8	5
–	2	1	1	7	5
	2	5	6	1	0

Exercise 5 H

1. Complete the following.

a. Rounded off to the nearest tens

	Th	H	T	O
	7	0	6	0
–	3	4	7	0
	3	5	9	0

Actual difference

	Th	H	T	O
	7	0	5	9
–	3	4	6	7
	3	5	9	2

b. Rounded off to the nearest hundreds

	Th	H	T	O
	5	0	0	0
–	2	4	0	0
	2	6	0	0

Actual difference

	Th	H	T	O
	4	9	9	9
–	2	3	8	4
	2	6	1	5

2. Estimate each of the following by rounding off to the nearest tens. Find the actual difference too. Also, find the difference of actual difference and estimated difference.

a. Rounded off to the nearest tens

	H	T	O
	6	7	0
–	3	7	0
	3	0	0

← *Estimated difference*

Actual difference

	H	T	O
	5	16	
	~~6~~	~~6~~	8
–	3	7	2
	2	9	6

The estimated difference and the actual difference differ by 4.

b. Rounded off to the nearest tens

	Th	H	T	O
		9		
	7	10	16	
	~~8~~	~~0~~	~~6~~	0
–	2	9	9	0
	5	0	7	0

← *Estimated difference*

Actual difference

	Th	H	T	O
		9		
	7	10	16	
	~~8~~	~~0~~	~~6~~	4
–	2	9	8	4
	5	0	7	0

The estimated difference and the actual difference differ by 10.

c. Rounded off to the nearest tens

	H	T	O
	3	11	
	~~4~~	~~1~~	0
–	1	9	0
	2	2	0

← *Estimated difference*

Actual difference

	H	T	O
	3	11	
	~~4~~	~~1~~	2
–	1	8	2
	2	3	0

The estimated difference and the actual difference differ by 10.

3. Estimate each of the following by rounding off to the nearest hundreds. Find the actual difference too.

a. Rounded off to the nearest hundreds

	H	T	O
	3	11	
	~~4~~	~~0~~	0
–	2	0	0
	2	0	0

← *Estimated difference*

Actual difference

	H	T	O
	3	11	
	~~3~~	~~8~~	5
–	2	1	2
	1	7	3

The estimated difference and the actual difference differ by 27.

b. Rounded off to the nearest hundreds

	H	T	O
	~~6~~	~~0~~	0
–	5	0	0
	1	0	0

← *Estimated difference*

Actual difference

	H	T	O
	5	14	
	~~6~~	~~4~~	9
–	4	8	8
	1	6	1

The estimated difference and the actual difference differ by 61.

c. Rounded off to the nearest hundreds

	Th	H	T	O
	7	2	0	0
–	5	1	0	0
	2	1	0	0

← *Estimated difference*

Actual difference

	Th	H	T	O
		0	15	
	7	~~1~~	~~5~~	5
–	5	0	7	5
	2	0	8	0

The estimated difference and the actual difference by 20.

4. Estimate each of the following by rounding off to the nearest thousand. Find the actual difference too. Also, find the difference of actual difference and estimated difference.

a. Rounded off to the nearest thousand

	Th	H	T	O
	4	0	0	0
–	2	0	0	0
	2	0	0	0

Actual difference

	Th	H	T	O
		16	16	
	2	~~6~~	~~6~~	12
	~~3~~	~~7~~	~~7~~	~~2~~
–	1	9	9	9
	1	7	7	3

The estimated difference and the actual difference differ by 227.

b. Rounded off to the nearest thousand

	Th	H	T	O
	7	0	0	0
–	5	0	0	0
	2	0	0	0

Actual difference

	Th	H	T	O
	6	10		
	~~7~~	~~0~~	1	2
–	5	1	0	2
	1	9	1	0

The estimated difference and the actual difference differ by 90.

c. Rounded off to the nearest thousand

	Th	H	T	O
	3	0	0	0
–	1	0	0	0
	2	0	0	0

Actual difference

	Th	H	T	O
	2	8	8	8
–	1	2	4	0
	1	6	4	8

The estimated difference and the actual difference differ by 352.

Word Problems

1. Using the proper statements solve the following word problems.

a. Total candidates appeared in exam =
Candidates passes =
1,89,865 candidates passed the examination.

	L	TTH	Th	H	T	O
		16	16	12	9	
	1	~~6~~	~~6~~	~~2~~	~~10~~	10
	2	~~8~~	~~7~~	~~3~~	~~0~~	~~0~~
–		9	7	4	3	5
	1	8	9	8	6	5

b. Total population =
Number of Male =
Number of Female =
There are 1,33,319 females in the city.

	L	TTH	Th	H	T	O
		12	11	10	9	
	~~3~~	~~2~~	~~1~~	~~0~~	~~10~~	15
	~~4~~	~~3~~	~~2~~	~~1~~	~~0~~	~~5~~
–	2	9	8	7	8	6
	1	3	3	3	1	9

c. Buying price of Car =
Selling price of Car =
There is loss of ₹ 2,57,210.

	L	TTH	Th	H	T	O
		14				
	7	~~4~~	10			
	~~8~~	~~5~~	~~0~~	7	9	5
–	5	9	3	5	8	5
	2	5	7	2	1	0

d. Sum of three number = 100010.
Two numbers of them = 37675 and 28948
Sum of two numbers = 66623
The third number is 33,387.

	L	TTH	Th	H	T	O
		9	9	9	10	
	0	~~10~~	~~10~~	~~10~~	~~0~~	10
	~~1~~	~~0~~	~~0~~	~~0~~	~~1~~	~~0~~
–		6	6	6	2	3
	0	3	3	3	8	7

e. Veeru scored = 6980 runs
He wishes to complete = 10,000 runs
Veeru needs 93,020 more runs
to complete 10,000 runs.

	L	TTH	Th	H	T	O
		9	9	9		
	0	~~10~~	~~10~~	~~10~~	10	
	~~1~~	~~0~~	~~0~~	~~0~~	~~0~~	0
–			6	9	8	0
	0	9	3	0	2	0

f. The sum of two number = 70350
First number = 29672
Second number = 70350 – 29672
The second number is 40,678.

	TTH	Th	H	T	O
		9	12	14	
	6	~~10~~	~~2~~	~~4~~	10
	~~7~~	~~0~~	~~3~~	~~5~~	~~0~~
–	2	9	6	7	2
	4	0	6	7	8

g. Given number = 236532
Smaller than = 678911
The another number = 678911 – 236532
The number is 4,42,379.

	L	TTH	Th	H	T	O
					10	
				8	~~0~~	11
	6	7	8	~~9~~	~~1~~	~~1~~
–	2	3	6	5	3	2
	4	4	2	3	7	9

h. Given number = 67891
To make = 100000
Another number = 100000 – 67891
The another number is 32,109.

	L	TTH	Th	H	T	O
		9	9	9	9	
	0	~~10~~	~~10~~	~~10~~	~~10~~	10
	~~1~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
–		6	7	8	9	1
	0	3	2	1	0	9

i. The sum of 26214 and 42986.

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

	TTH	Th	H	T	O
			11	9	
		8	~~1~~	~~10~~	10
	6	~~9~~	~~2~~	~~0~~	~~0~~
–	3	7	2	9	1
	3	1	9	0	9

We subtract 37291 from 69200.

j. The successful candidate registered vote = 5,77,500
The nearest rival Secured votes = 3,48,700

The successful candidate win by the margin of 2,28,800

	L	TTH	Th	H	T	O
			16			
		~~6~~	~~6~~	15		
	5	~~7~~	~~7~~	~~5~~	0	0
–	3	4	8	7	0	0
	2	2	8	8	0	0

Framing Word Problems

1. Frame word problems for the following subtraction facts.

a. What should be subtracted from 45689 to get 33347.

b. A man purchased a Car for ₹ 38956 and sold it for ₹ 14560 after Two years. How much 1055 did he bear?

c. What should be added to 341256 to make it 19475.

d. The sum of two number is 67890. If one of them is 14560. Find the other.

Mental Maths

1. Put >, < or = in the space provided.

a. 76000 – 35000 [>] 84000 – 64000

b. 67893 + 10000 [=] 10000 + 67893

c. 68925 – 600 [<] 70000 – 300

d. 56789 + 45000 [<] 980000

e. 65431 + 87560 – 12345 [<] 290678 – 88670

2. Fill in the blanks.

a. Minuend is always greater them the subtrahend.

b. Difference is always smaller than the minuend.

c. Difference is equal to the minuend if the subtrahend equal to 0.

d. If the minuend is equal to the subtrahend then the difference is equal to 0.

HOTS

1. Find the difference between the greatest and the least number that can be formed using the digits 6, 2, 7, 4 , 3.

6, 2, 7, 4, 3

Greatest number formed = 76432

Smallest number formed = 23467

	TTH	Th	H	T	O
			13	12	
		5	~~3~~	~~2~~	12
	7	~~6~~	~~4~~	~~3~~	~~2~~
–	2	3	4	6	7
	5	2	9	6	5

2. In one state, the number of bicycles sold in the year 2017-2018 was 7,43,000. In the year 2018-2019, the number of bicycles sold was 8,00,100. In which year were more bicycles sold and how many more?

Sale of cycle in year 2017-18 = 7,43,000

Sales of cycle in year 2018-19 = 8,00,100

In year 2018-19 have 57,100 more sales than year 2017-18.

	L	TTH	Th	H	T	O
		9				
	7	~~10~~	10			
	~~8~~	~~0~~	~~0~~	1	0	0
–	7	4	3	0	0	0
	0	5	7	1	0	0

Chapter
6 Multiplication

Exercise 6 A

1. Fill in the missing numbers.

a. 5 × 8 = 40 **b.** 9 × 6 = 54 **c.** 12 × 3 = 36

d. 10 × 6 = 60 **e.** 8 × 8 = 64 **f.** 11 × 5 = 55

g. 8 × 6 = 48 **h.** 9 × 7 = 63

2. Multiply the following numbers.

a.

	H	T	O
		6	4
×			4
	2	4	6

b.

	H	T	O
		5	7
×			9
	5	1	3

c.

	H	T	O
		9	8
×			3
	2	9	4

d.

	H	T	O
		7	6
×			9
	6	8	4

e.

	H	T	O
		3	4
×			3
	1	0	2

f.

	H	T	O
		4	7
×			7
	3	2	9

g.

	Th	H	T	O
		3	4	3
×				4
	1	3	7	2

h.

	Th	H	T	O
		6	8	3
×				8
	5	4	6	4

i.

	Th	H	T	O
		7	7	7
×				6
	4	6	6	2

j.

	Th	H	T	O
		4	8	6
×				5
	2	4	3	0

k.

	Th	H	T	O
		5	3	4
×				5
	2	6	7	0

3. Solve these sums in your notebook.

a.

	H	T	O
		4	
		5	6
×			8
	4	4	8

b.

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

c.

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

d.

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

e.

	Th	H	T	O
		8	1	1
×				9
	7	2	9	9

f.

	Th	H	T	O
	1	1		
	1	2	3	1
×				6
	7	3	8	6

g.

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

h.

	Th	H	T	O
		2	2	2
×				4
		8	8	8

Exercise 6 B

1. Multiply the following numbers.

a. 2 × 10 = 30 **b.** 5 × 10 = 50

c. 55 × 100 = 5500 **d.** 78 × 100 = 7800

e. 123 × 1000 = 123000 **f.** 246 × 1000 = 246000

2. Find the product.

a. 75 × 30 = 2190 **b.** 168 × 40 = 6720

c. 66 × 300 = 19800 **d.** 719 × 200 = 143800

3. Find the missing number.

a. 7 × 100 = 700 **b.** 11 × 500 = 5500 **c.** 140 × 10 = 1400

d. 44 × 10 = 440 **e.** 2 × 100 = 200 **f.** 25 × 40 = 1000

g. 45 × 4 = 180 **h.** 5 × 100 = 500 **i.** 30 × 100 = 3000

Exercise 6 C

1. Fill in the blanks using the properties of multiplication.

a. 155 × 1 = 155 b. 6666 × 0 = 0

c. 274 × 0 = 0 d. 1820 × 1 = 1820

e. 3151 × 555 = 5555 × 3151

f. (252 × 542) × 128 = 252 × (542 × 128)

g. (6 + 10) × 20 = 6 × 20 + 10 × 20 = 320

2. Use suitable regrouping and find the product. One has been done for you.

a. 2 × 21 × 5 = 2 × 5 × 21 = 10 × 21 = 210

b. 4 × 18 × 25 = 4 × 25 × 18 = 100 × 18 = 1800

c. 75 × 20 × 5 = 5 × 20 × 75 = 100 × 75 = 7500

d. 4 × 12 × 125 = 4 × 125 × 12 = 500 × 12 = 6000

e. 125 × 55 × 8 = 125 × 8 × 55 = 1000 × 55 = 55000

f. 8 × 71 × 25 = 25 × 8 × 71 = 200 × 71 = 14200

Exercise 6 D

1. Multiply the following by expanding the bigger number.

a.

	H	T	O
		3	4
×			2
		6	8

b.

	H	T	O
		3	
		2	6
×			5
	1	3	0

c.

	H	T	O
		2	
	1	1	8
×			3
	3	5	4

d.

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

e.

	Th	H	T	O
	1	1	1	
	7	8	5	6
×				2
	15	7	1	2

f.

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

g.

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

h.

	Th	H	T	O
	1	3	4	
	2	1	5	6
×				7
	15	0	9	2

i.

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

j.

	Th	H	T	O
	1	3	3	
	2	1	4	5
×				7
	15	0	1	5

k.

	T	O
	4	0
×		2
	8	0

i.

	H	T	O
		4	
		4	8
×			6
	2	8	8

m.

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

n.

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

o.

	Th	H	T	O
		6	3	0
×				5
	3	1	5	0

Exercise 6 E

1. Multiply the following.

a.

	T	Th	Th	H	T	O
			2		4	
			4	5	0	9
×					2	5
		2	2	5	4	5
+		9	0	1	8	×
		11	2	7	2	5

b.

	T	Th	Th	H	T	O
			2		4	
			4	3	9	5
×					2	7
		3	0	7	6	5
+		8	7	9	0	×
		11	8	6	6	5

c.

	T	Th	Th	H	T	O
			6	5	2	
			1	8	7	3
×					5	8
		1	4	9	8	4
+		9	3	6	5	×
		10	8	6	3	4

d.

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

e.

	T	Th	Th	H	T	O
			1	2	0	5
×					8	1
			1	2	0	5
+		9	6	4	0	×
		9	7	6	0	5

f.

	T	Th	Th	H	T	O
			6	5	2	
			7	7	7	7
×					7	5
		3	8	8	8	5
+		54	4	3	9	×
		58	3	2	7	5

g.

	T	Th	Th	H	T	O
					1	
			5	3	2	5
×					4	2
		1	0	6	5	0
+		21	3	0	0	×
		22	3	6	5	0

h.

	T	Th	Th	H	T	O
			1	2	1	
			6	3	4	2
×					6	5
		3	6	7	1	0
+		38	0	5	2	×
		41	2	2	3	0

i.

	T	Th	Th	H	T	O
				1	1	
			4	3	6	5
×					3	2
			8	7	3	0
+		13	0	9	5	×
		13	9	6	8	0

j.

	T	Th	Th	H	T	O
			3	2		
			9	8	7	2
×					2	4
		3	9	4	8	8
+		19	7	4	4	×
		23	6	9	2	8

k.

	T	Th	Th	H	T	O
			6	2	1	
			4	7	3	2
×					3	9
		4	2	5	8	8
+		14	1	9	6	×
		18	4	5	4	8

l.

	T	Th	Th	H	T	O
			3	4	1	
			4	5	6	2
×					4	7
		3	1	9	3	4
+		18	2	4	8	×
		21	4	4	1	4

2. Find the product of the following numbers. Solve these sums in your notebook.

a.

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

b.

	T	Th	Th	H	T	O
			2	3	0	5
×					6	1
			2	3	0	5
+		13	8	3	0	×
		14	0	6	0	5

c.

	T	Th	Th	H	T	O
					2	
			4	0	0	7
×					3	3
		1	2	0	2	1
+		12	0	2	1	×
		13	2	2	3	1

d.

	T	Th	Th	H	T	O
			1	1	1	
			3	3	3	3
×					6	5
		1	6	6	6	5
+		19	9	9	8	×
		21	6	6	4	5

e.

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

f.

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

d.

	T	Th	H	T	O
		1	1	1	
		3	3	3	3
×				6	5
	1	6	6	6	5
+	19	9	9	8	×
	21	6	6	4	5

e.

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

f.

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

g.

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

h.

	T	Th	H	T	O
		1	1	1	
		8	2	3	3
×				1	5
	4	1	1	6	5
+	8	2	3	3	×
	12	3	4	9	5

Exercise 6 F

1. Multiply the following.

a.

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

b.

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

c.

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

d.

	T	Th	H	T	O
			3	5	
			5	4	7
×			1	4	8
		4	3	7	6
	2	1	8	8	×
+	5	4	7	×	×
	8	0	9	5	6

e.

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

f.

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

g.

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

h.

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

i.

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

j.

	L	T Th	Th	H	T	O
				1	1	
				8	6	5
×				2	9	3
			2	5	9	5
		7	7	8	5	×
+	1	7	3	0	×	×
	2	5	3	4	4	5

k.

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

l.

	L	T Th	Th	H	T	O
				1		
				8	9	1
×				1	8	2
			1	7	8	2
		7	1	2	8	×
+	8	9	1		×	×
	1	6	2	1	6	2

m.

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

n.

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

o.

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

p.

	T Th	Th	H	T	O
			2		
			7	4	1
×			1	2	5
		3	7	0	5
	1	4	8	2	×
+	7	4	1	×	×
	9	2	6	2	5

q.

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

r.

	L	T Th	Th	H	T	O
				7	7	
				7	8	9
×				2	0	8
			6	3	1	2
			0	0	0	×
+	1	5	7	8	×	×
	1	6	4	1	1	2

s.

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

t.

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

2. Find the product of the following numbers in your notebook.

a.

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

b.

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

c.

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

d.

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

e.

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

f.

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

g.

	T	Th	Th	H	T	O
				4	2	3
×				1	2	9
			3	8	0	7
			8	4	6	×
+		4	2	3	×	×
		5	4	5	6	7

h.

	T	Th	Th	H	T	O
					1	
				3	4	1
×				1	1	1
				3	4	1
			3	4	1	×
+		3	4	1	×	×
		3	7	8	4	1

Exercise 6 G

1. Multiply the following.

a.

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

b.

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

c.

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

d.

	L	T Th	Th	H	T	O
			3	3	3	
			3	1	4	2
×				1	7	2
			6	2	8	4
	2	1	9	9	4	×
+	3	1	4	2	×	×
	5	4	0	4	2	4

2. Find the product of the following numbers. Solve these sums in your notebook.

a.

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

b.

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

c.

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

d.

	L	T Th	Th	H	T	O
			2		4	
			7	3	0	5
×				1	1	8
		5	8	4	4	0
		7	3	0	5	×
+	7	3	0	5	×	×
	8	6	1	9	9	0

e.

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

f.

	L	T Th	Th	H	T	O
			1		1	
			3	4	1	4
×				2	1	4
		1	3	6	5	6
		3	4	1	4	×
+	6	8	2	8	×	×
	7	3	0	5	9	6

g.

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

h.

	L	T Th	Th	H	T	O
			7	3	1	4
×				1	1	1
			7	3	1	4
		7	3	1	4	×
+	7	3	1	4	×	×
	8	1	1	8	5	4

Exercise 6 H

1. Estimate each of the following by rounding off to the nearest tens and hundreds. Find the actual product too.

a. Round off nearest tens

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

Actual Product

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

Estimated Product is 99 more than the actual product.

b. Round off nearest tens and hundreds

	T Th	Th	H	T	O
			6	5	0
×				6	0
			0	0	0
+	3	9	0	0	×
	3	9	0	0	0

Actual Product

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

Estimated Product is 804 less than the actual product.

c. Round off nearest tens and hundreds

	T Th	Th	H	T	O
		1	1	0	0
×				5	0
		0	0	0	0
+	5	5	0	0	×
	5	5	0	0	0

Actual Product

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

Estimated Product is 3035 less than the actual product.

d. Round off nearest tens and hundreds

	L	T Th	Th	H	T	O
			4	9	0	0
×				2	0	0
			0	0	0	0
			0	0	0	×
+	9	8	0	0	×	×
	9	8	0	0	0	0

Actual Product

	L	T Th	Th	H	T	O
			5	3	3	
			4	8	5	6
×				1	5	6
		2	9	1	3	6
	2	4	2	8	0	×
+	4	8	5	6	×	×
	7	5	7	5	3	6

Estimated Product is 226464 more than the actual product.

e. Round off nearest tens and hundreds

	L	T	Th	H	T	O
				5	0	0
×				2	0	0
				0	0	0
			0	0	0	×
+	1	0	0	0	×	×
	1	0	0	0	0	0

Actual Product

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

Estimated Product is 7484 less than the actual product.

f. Round off nearest tens and hundreds

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

Actual Product

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

Estimated Product is 25800 less than the actual product.

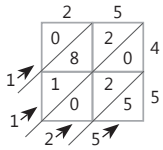
2. Tick (✓) the best estimate from the possible answers given.

a.	5 x 86	(i) 400		(ii) 450	✓	(iii) 500		
b.	15 x 78	(i) 700		(ii) 1600	✓	(iii) 1400		
c.	343 x 272	(i) 90000	✓	(ii) 60000		(iii) 70000		
d.	861 x 418	(i) 450000		(ii) 320000		(iii) 360000	✓	

Exercise 6 H

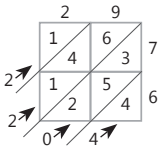
1. Solve by using the lattice multiplication.

a.



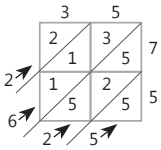
Answer = 1125

b.



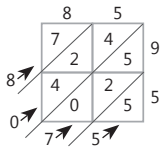
Answer = 2204

c.



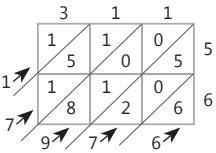
Answer = 2625

d.



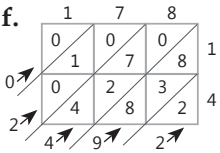
Answer = 8075

e.



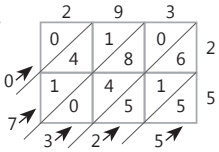
Answer = 17976

f.



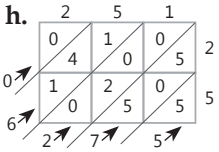
Answer = 2492

g.



Answer = 7325

h.



Answer = 6275

Word Problems

1. Using proper statements, solve the following word problems.

a. Number of apple in a box =
Number of boxes =
There are 13,888 apple in 124 boxes.

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

b. Number of oranges in a basket =
Number of basket =
There are 36,432 oranges in 207 baskets.

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

c. Cost of a toy car =
Cost of 105 toy car =
Cost of 105 such toy cars is ₹ 3,84,825.

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

d. Cost of a almirah =
Cost of 17 almirah =
Cost of 17 such almirahs is ₹2,59,959.

	T	Th	Th	H	T	O
			3	1	4	
			1	5	2	7
×					1	7
		1	0	6	8	9
+		1	5	2	7	×
		2	5	9	5	9

e. People travel by air everyday =

People travel by air in month of December =

23,250 people travelled in the month of December.

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

f. Seconds in one hours = 60 × 60

= 3600

Seconds in 5 hours = 60 × 60 × 5

= 3600 × 5

= 18000 seconds.

g. Bananas in a dozen = 12

Total bananas in 125 dozen = 125 × 12

There are 1500 bananas in 125 dozen.

	Th	H	T	O
		1	2	5
×			1	2
		2	5	0
+	1	2	5	×
	1	5	0	0

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

h. Total students in class = 25

Money paid by each child = ₹ 975

Total money class paid = ₹ 975 × 25

Class pay ₹ 24,375 all.

Framing Word Problems

1. Frame word problems for the following multiplication facts.

a. A man purchased a Container for ₹ 70. If he bough 15 such container, how much did he pay in all?

b. A box contains 272 Mangoes. How many mangoes are there in 12 such boxes?

c. The cost of a Jug is ₹ 1250. Find the cost of 11 such Jugs.

d. The cost of a Machine is ₹ 9560. Find the cost of 2 such Machines.

HOTS

1. By what number should 75 be multiplied to get 7500?

75 should be multiplied by 100 to get 7500.

2.

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

Thirty two thousand Eight hundred.

3.

	TTh	Th	H	T	O
				1	
			9	2	5
×				2	0
			0	0	0
+	1	8	5	0	×
	1	8	5	0	0

Eighteen thousand five hundred.

4. Smallest 4-digit number = 1000

Smallest 2-digit number = 10

1000 × 10 = 10000

5. Largest 3-digit number = 999

Largest 2-digit number = 99

	TTh	Th	H	T	O
				1	
			9	9	9
×				9	9
		8	8	8	1
+	8	8	8	1	×
	9	7	6	9	1

6. **b.** (500 × 20) + (40 × 20) + (5 × 20)

= 1000 + 800 + 100

= 10900

Mental Maths

1. 500 × 30 × 60 = 900000

2. 2,23,013

Product of two'3s = 3 × 3

= 9

3. Product of place value

L	TTh	Th	H	T	O
3	7	8	0	8	4

Face values = 8

Product of face value and place value of first 8 = 80 × 8 = 640

Product of face value and place value of second 8 = 8000 × 8 = 64000

4. **Fill in the blanks.**

a. Multiplicand × Multiplier = Product

b. 1 ten multiplied by 1 hundred is equal to 1 thousand.

c. The product will be equal to if both of multiplier and the multiplicand is 1.

d. When the multiplier is 1, the product is same as the multiplicand.

Chapter
7

Division

Exercise 7 A

1. Divide the following.

a.
$$\begin{array}{r|l} 2 & 88 \\ -8 & \\ \hline 08 & \\ -8 & \\ \hline 0 & \end{array} \quad 44$$

b.
$$\begin{array}{r|l} 3 & 35 \\ -3 & \\ \hline 05 & \\ -3 & \\ \hline 2 & \end{array} \quad 11$$

c.
$$\begin{array}{r|l} 7 & 96 \\ -7 & \\ \hline 26 & \\ -21 & \\ \hline 5 & \end{array} \quad 13$$

d.
$$\begin{array}{r|l} 4 & 86 \\ -8 & \\ \hline 06 & \\ -6 & \\ \hline 2 & \end{array} \quad 21$$

e.
$$\begin{array}{r|l} 6 & 445 \\ -42 & \\ \hline 25 & \\ -24 & \\ \hline 1 & \end{array} \quad 74$$

f.
$$\begin{array}{r|l} 2 & 284 \\ -2 & \\ \hline 08 & \\ -8 & \\ \hline 04 & \\ -4 & \\ \hline 0 & \end{array} \quad 142$$

g.
$$\begin{array}{r|l} 5 & 660 \\ -5 & \\ \hline 16 & \\ -15 & \\ \hline 10 & \\ -10 & \\ \hline 0 & \end{array} \quad 132$$

h.
$$\begin{array}{r|l} 3 & 651 \\ -6 & \\ \hline 05 & \\ -3 & \\ \hline 21 & \\ -21 & \\ \hline 0 & \end{array} \quad 217$$

2. Divide and find quotient and remainder:

a.
$$\begin{array}{r|l} 6 & 548 \\ -54 & \\ \hline 8 & \\ -6 & \\ \hline 2 & \end{array} \quad 91$$

b.
$$\begin{array}{r|l} 5 & 875 \\ -5 & \\ \hline 37 & \\ -35 & \\ \hline 25 & \\ -25 & \\ \hline 0 & \end{array} \quad 175$$

c.
$$\begin{array}{r|l} 4 & 456 \\ -4 & \\ \hline 05 & \\ -4 & \\ \hline 16 & \\ -16 & \\ \hline 0 & \end{array} \quad 114$$

d.
$$\begin{array}{r|l} 3 & 248 \\ -24 & \\ \hline 8 & \\ -6 & \\ \hline 2 & \end{array} \quad 82$$

e.
$$\begin{array}{r|l} 7 & 765 \\ -7 & \\ \hline 65 & \\ -63 & \\ \hline 2 & \end{array} \quad 109$$

f.
$$\begin{array}{r|l} 7 & 625 \\ -65 & \\ \hline 65 & \\ -63 & \\ \hline 2 & \end{array} \quad 89$$

g.
$$\begin{array}{r|l} 6 & 740 \\ -6 & \\ \hline 14 & \\ -12 & \\ \hline 20 & \\ -18 & \\ \hline 2 & \end{array} \quad 123$$

h.
$$\begin{array}{r|l} 5 & 860 \\ -5 & \\ \hline 36 & \\ -35 & \\ \hline 10 & \\ -10 & \\ \hline 0 & \end{array} \quad 172$$

i.
$$\begin{array}{r|l} 8 & 3451 \\ -32 & \\ \hline 25 & \\ -24 & \\ \hline 11 & \\ -8 & \\ \hline 3 & \end{array} \quad 431$$

j.

```
5)7776(1555
 -5
 ---
 27
-25
 ---
  27
 -25
 ---
  26
 -25
 ---
   1
```

k.

```
7)9018(128
 -7
 ---
 20
-14
 ---
  61
 -56
 ---
   58
  -56
  ---
    2
```

l.

```
8)4054(506
 -40
 ---
   54
  -48
  ---
    6
```

Exercise 7 B

1. Using the rules of division by 10, 100, 1000 and find the quotient and the remainder.

		Quotient	Remainder			Quotient	Remainder
a.	68 ÷ 10	6	8	**m.**	33 ÷ 10	3	3
b.	324 ÷ 100	3	24	**n.**	683 ÷ 100	6	83
c.	6,947 ÷ 1,000	6	947	**o.**	1,684 ÷ 1,000	1	684
d.	8,856 ÷ 100	88	56	**p.**	6,781 ÷ 1,000	6	781
e.	8,765 ÷ 10	876	5	**q.**	8,542 ÷ 100	85	42
f.	763 ÷ 10	76	3	**r.**	2,875 ÷ 10	287	5
g.	432 ÷ 10	43	2	**s.**	700 ÷ 100	7	0
h.	2,700 ÷ 100	27	0	**t.**	832 ÷ 100	8	32
i.	4,000 ÷1,000	4	0	**u.**	3,200 ÷ 100	32	0
j.	4,289 ÷ 1,000	4	289	**v.**	1,427 ÷ 1,000	1	427
k.	3,333 ÷ 1,000	3	333	**w.**	7,938 ÷ 1,000	7	938
l.	6,375 ÷ 100	63	75	**x.**	9,286 ÷ 100	92	86

Exercise 7 C

1. Using the properties of division, fill in the blanks.

a. 1244 ÷ 1 = 1244 **b.** 615 ÷ 615 = 0 **c.** 0 ÷ 4850 = 0

d. 666 ÷ 0 = impossible or undefined **e.** 8402 ÷ 1 = 8402

2. Divide and check the division by division algorithm.

a.

```
2)244(122
 -2
 --
 04
 -4
 --
 04
 -4
 --
  0
```

Verification:

Dividend = 244, Remainder = 0, Quotient = 122
Divisor = 2

244 = 2 × 122 + 0

244 = 244

b.

$$\begin{array}{r|l} 4 & 345 \\ -32 & 86 \\ \hline 25 & \\ -24 & \\ \hline 1 & \end{array}$$

Verification:

Dividend = 345, Remainder = 1, Quotient = 86
Divisor = 4

$345 = 4 \times 86 + 1$

$345 = 344 + 1$

$345 = 345$

c.

$$\begin{array}{r|l} 5 & 285 \\ -25 & 57 \\ \hline 35 & \\ -35 & \\ \hline 0 & \end{array}$$

Verification:

Dividend = 285, Remainder = 0, Quotient = 57
Divisor = 5

$285 = 5 \times 57 + 0$

$285 = 285$

d.

$$\begin{array}{r|l} 8 & 426 \\ -40 & 53 \\ \hline 26 & \\ -24 & \\ \hline 2 & \end{array}$$

Verification:

Dividend = 426, Remainder = 2, Quotient = 53
Divisor = 8

$426 = 8 \times 53 + 2$

$426 = 424 + 2$

$426 = 426$

e.

$$\begin{array}{r|l} 6 & 288 \\ -24 & 44 \\ \hline 28 & \\ -24 & \\ \hline 4 & \end{array}$$

Verification:

Dividend = 288, Remainder = 4, Quotient = 44
Divisor = 6

$288 = 6 \times 44 + 4$

$288 = 284 + 4$

$288 = 288$

Exercise 7 D

1. Divide the following and verify your answer.

a.

$$\begin{array}{r|l} 15 & 75 \\ -75 & 5 \\ \hline 0 & \end{array}$$

Verification:

Dividend = 75, Remainder = 0, Quotient = 5
Divisor = 15

$75 = 15 \times 5 + 0$

$75 = 75$

b.

$$\begin{array}{r|l} 16 & 96 \\ -96 & 6 \\ \hline 0 & \end{array}$$

Verification:

Dividend = 96, Remainder = 0, Quotient = 6
Divisor = 16

$96 = 16 \times 6 + 0$

$96 = 96$

c.

$$\begin{array}{r|l} 12 & 84 \\ -\ 84 & \\ \hline 0 & \end{array}\ 7$$

Verification:

Dividend = 84, Remainder = 0, Quotient = 7
Divisor = 12

$84 = 12 \times 7 + 0$

$84 = 84$

d.

$$\begin{array}{r|l} 14 & 70 \\ -\ 70 & \\ \hline 0 & \end{array}\ 5$$

Verification:

Dividend = 70, Remainder = 0, Quotient = 5
Divisor = 14

$70 = 14 \times 5 + 0$

$70 = 70$

e.

$$\begin{array}{r|l} 25 & 75 \\ -\ 75 & \\ \hline 0 & \end{array}\ 3$$

Verification:

Dividend = 75, Remainder = 0, Quotient = 3
Divisor = 25

$75 = 25 \times 3 + 0$

$75 = 75$

f.

$$\begin{array}{r|l} 18 & 72 \\ -\ 72 & \\ \hline 0 & \end{array}\ 4$$

Verification:

Dividend = 72, Remainder = 0, Quotient = 4
Divisor = 18

$72 = 18 \times 4 + 0$

$72 = 72$

2. Find the quotient and remainder when you divide the following numbers.
Also, check your answer in each question.

a.

$$\begin{array}{r|l} 13 & 76 \\ -\ 65 & \\ \hline 11 & \end{array}\ 5$$

Quotient = 5
Remainder = 11

Verification:

Dividend = 76, Remainder = 11, Quotient = 5
Divisor = 13

$76 = 13 \times 5 + 11$

$76 = 65 + 11$

$76 = 76$

b.

$$\begin{array}{r|l} 16 & 86 \\ -\ 80 & \\ \hline 06 & \end{array}\ 5$$

Quotient = 5
Remainder = 6

Verification:

Dividend = 86, Remainder = 6, Quotient = 5
Divisor = 16

$86 = 16 \times 5 + 6$

$86 = 80 + 6$

$86 = 86$

c.

$$\begin{array}{r|l} 14 & 54 \\ -\,42 & \hline 12 & 3 \end{array}$$

Quotient = 3
Remainder = 12

Verification:

Dividend = 54, Remainder = 12, Quotient = 3
Divisor = 14

$54 = 14 \times 3 + 12$

$54 = 42 + 12$

$54 = 54$

d.

$$\begin{array}{r|l} 12 & 80 \\ -\,72 & \hline 8 & 6 \end{array}$$

Quotient = 6
Remainder = 8

Verification:

Dividend = 80, Remainder = 8, Quotient = 6
Divisor = 12

$80 = 12 \times 6 + 8$

$80 = 72 + 8$

$80 = 80$

e.

$$\begin{array}{r|l} 8 & 88 \\ -\,8 & \hline 08 & 11 \\ -\,8 & \hline 0 & \end{array}$$

Quotient = 11
Remainder = 0

Verification:

Dividend = 88, Remainder = 0, Quotient = 11
Divisor = 8

$88 = 8 \times 11 + 0$

$88 = 88$

f.

$$\begin{array}{r|l} 22 & 98 \\ -\,88 & \hline 10 & 4 \end{array}$$

Quotient = 6
Remainder = 8

Verification:

Dividend = 98, Remainder = 10, Quotient = 4
Divisor = 22

$98 = 22 \times 4 + 10$

$98 = 88 + 10$

$98 = 98$

Exercise 7 E

1. Divide the following.

a.

$$\begin{array}{r|l} 12 & 432 \\ -\,36 & \hline 72 & 36 \\ -\,72 & \hline 0 & \end{array}$$

b.

$$\begin{array}{r|l} 14 & 196 \\ -\,14 & \hline 56 & 14 \\ -\,56 & \hline 0 & \end{array}$$

c.

$$\begin{array}{r|l} 25 & 800 \\ -\,75 & \hline 50 & 32 \\ -\,50 & \hline 0 & \end{array}$$

d.

$$\begin{array}{r|l} 6 & 198 \\ -\,18 & \hline 18 & 33 \\ -\,18 & \hline 0 & \end{array}$$

2. Find the quotient and the remainder.

a.

$$\begin{array}{r|l} 24 & 600 \\ -48 & \hline 120 & 25 \\ -120 & \hline 0 & \end{array}$$

Quotient = 25
Remainder = 0

b.

$$\begin{array}{r|l} 43 & 817 \\ -43 & \hline 387 & 19 \\ -387 & \hline 0 & \end{array}$$

Quotient = 19
Remainder = 0

c.

$$\begin{array}{r|l} 14 & 224 \\ -14 & \hline 84 & 16 \\ -84 & \hline 0 & \end{array}$$

Quotient = 16
Remainder = 0

d.

$$\begin{array}{r|l} 28 & 868 \\ -84 & \hline 28 & 31 \\ -28 & \hline 0 & \end{array}$$

Quotient = 31
Remainder = 0

e.

$$\begin{array}{r|l} 56 & 392 \\ -392 & \hline 0 & 7 \end{array}$$

Quotient = 7
Remainder = 0

f.

$$\begin{array}{r|l} 64 & 128 \\ -128 & \hline 0 & 2 \end{array}$$

Quotient = 2
Remainder = 0

g.

$$\begin{array}{r|l} 31 & 555 \\ -31 & \hline 245 & 17 \\ -217 & \hline 28 & \end{array}$$

Quotient = 17
Remainder = 28

h.

$$\begin{array}{r|l} 37 & 777 \\ -74 & \hline 37 & 21 \\ -37 & \hline 0 & \end{array}$$

Quotient = 21
Remainder = 0

i.

$$\begin{array}{r|l} 27 & 297 \\ -27 & \hline 27 & 11 \\ -27 & \hline 0 & \end{array}$$

Quotient = 11
Remainder = 0

j.

$$\begin{array}{r|l} 37 & 444 \\ -37 & \hline 74 & 12 \\ -74 & \hline 0 & \end{array}$$

Quotient = 12
Remainder = 0

k.

$$\begin{array}{r|l} 55 & 330 \\ -330 & \hline 0 & 6 \end{array}$$

Quotient = 6
Remainder = 0

l.

$$\begin{array}{r|l} 34 & 612 \\ -34 & \hline 272 & 18 \\ -272 & \hline 0 & \end{array}$$

Quotient = 18
Remainder = 0

3. Find the quotient and the remainder and verify your answer.

a.

$$\begin{array}{r|l} 11 & 366 \\ -33 & \hline 36 & 33 \\ -33 & \hline 3 & \end{array}$$

Quotient = 33
Remainder = 3

Verification:

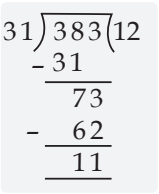
Dividend = 366, Remainder = 3, Quotient = 33
Divisor = 11

$366 = 11 \times 33 + 3$

$366 = 363 + 3$

$366 = 366$

b.



Verification:

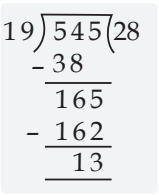
Dividend = 383, Remainder = 11, Quotient = 12
Divisor = 31

383 = 31 × 12 + 11

383 = 372 + 11 Quotient = 12

383 = 383 Remainder = 11

c.



Verification:

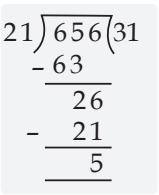
Dividend = 545, Remainder = 13, Quotient = 28
Divisor = 19

545 = 19 × 28 + 13

545 = 532 + 13 Quotient = 28

545 = 545 Remainder = 13

d.



Verification:

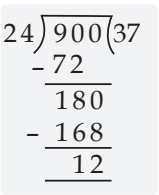
Dividend = 656, Remainder = 5, Quotient = 31
Divisor = 21

656 = 21 × 31 + 5

656 = 651 + 5 Quotient = 31

656 = 656 Remainder = 5

e.



Verification:

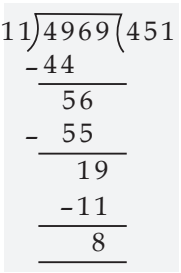
Dividend = 900, Remainder = 12, Quotient = 37
Divisor = 24

900 = 24 × 37 + 12

900 = 888 + 12 Quotient = 31

900 = 900 Remainder = 5

f.



Verification:

Dividend = 4969, Remainder = 8, Quotient = 451
Divisor = 11

4969 = 11 × 451 + 8

4969 = 4961 + 8

4969 = 4969 Quotient = 451

Remainder = 8

g.

```
13)7180(552
  -65
   68
  - 65
    30
   -26
    4
```

Verification:

Dividend = 7180, Remainder = 4, Quotient = 552
Divisor = 13

7180 = 13 × 552 + 4

7180 = 7176 + 4

7180 = 7180

Quotient = 552
Remainder = 4

h.

```
13)5632(433
  -52
   43
  - 39
    42
   -39
    3
```

Verification:

Dividend = 5632, Remainder = 3, Quotient = 433
Divisor = 13

5632 = 13 × 433 + 3

5632 = 5629 + 3

5632 = 5632

Quotient = 433
Remainder = 3

i.

```
20)873(43
  -80
   73
  - 60
    13
```

Verification:

Dividend = 873, Remainder = 13, Quotient = 43
Divisor = 20

873 = 20 × 43 + 13

873 = 860 + 13

873 = 873

Quotient = 43
Remainder = 13

j.

```
11)7320(665
  -66
   72
  - 66
    60
   -55
    5
```

Verification:

Dividend = 7320, Remainder = 5, Quotient = 665
Divisor = 11

7320 = 11 × 665 + 5

7320 = 7315 + 5

7320 = 7320

Quotient = 665
Remainder = 5

k.

```
14)9565(683
  -84
   116
  -112
    45
   -42
    3
```

Verification:

Dividend = 9565, Remainder = 3, Quotient = 683
Divisor = 14

9565 = 14 × 683 + 3

9565 = 9562 + 3

9565 = 9565

Quotient = 683
Remainder = 3

l.

```
56)3070(54
  -280
   270
  -224
    46
```

Verification:

Dividend = 3070, Remainder = 46, Quotient = 54
Divisor = 56

3070 = 56 × 54 + 46

3070 = 3024 + 46

3070 = 3070

Quotient = 54
Remainder = 46

Exercise 7 F

1. Divide the following.

a.

```
17)8296(488
  -68
   149
  -136
    136
   -136
      0
```

b.

```
34)4590(135
  -34
   119
  -102
    170
   -170
      0
```

c.

```
26)4550(175
  -26
   195
  -182
    130
   -130
      0
```

d.

```
38)8132(214
  -76
   53
  - 38
    152
   -152
      0
```

2. Divide the following and find the quotient and remainder:

a.

```
36)9297(258
  -72
   209
  -180
    297
   -288
      9
```

Quotient = 258
Remainder = 9

b.

```
41)9327(227
  -82
   112
  - 82
    307
   -287
     20
```

Quotient = 227
Remainder = 20

c.

```
14)4205(300
  -42
   005
```

Quotient = 300
Remainder = 5

d.

```
22)9230(419
  -88
   43
  - 22
    210
   -198
     12
```

Quotient = 419
Remainder = 12

e.

```
54)3426(63
  -324
   186
  -162
    24
```

Quotient = 63
Remainder = 24

f.

```
96)1085(11
  -96
   125
   -96
    29
```

Quotient = 11
Remainder = 29

g.

```
24)6388(266
  -48
   158
  -144
    148
   -144
      4
```

Quotient = 266
Remainder = 4

h.

```
25)9724(388
  -75
   222
  -200
    24
```

Quotient = 388
Remainder = 24

i.

```
12)8678(723
  -84
   27
  - 24
    38
   -36
     2
```

Quotient = 723
Remainder = 2

j.

```
38)9287(244
  -76
   168
  -152
    167
   -152
     15
```

Quotient = 244
Remainder = 15

k.

```
45)8000(177
  -45
   350
  -315
    35
```

Quotient = 177
Remainder = 35

l.

```
54)3426(61
  -324
    86
   -54
    32
```

Quotient = 61
Remainder = 32

m.

```
26)1085(41
  -104
    45
   -26
    19
```

Quotient = 41
Remainder = 19

n.

```
42)9327(222
  -84
   92
  - 84
    87
   -84
     3
```

Quotient = 222
Remainder = 3

o.

```
21)3230(153
  -21
   113
  -105
    80
   -63
    17
```

Quotient = 153
Remainder = 17

p.

```
14)5426(387
  -42
   112
  -112
    106
   -98
     8
```

Quotient = 387
Remainder = 8

Exercise 7 G

1. Divide the following:

a.
$$\begin{array}{r} 531\overline{)7599}\,(14 \\ -531 \\ \hline 2289 \\ -2124 \\ \hline 165 \end{array}$$

b.
$$\begin{array}{r} 561\overline{)7153}\,(12 \\ -561 \\ \hline 1543 \\ -1122 \\ \hline 421 \end{array}$$

c.
$$\begin{array}{r} 366\overline{)7984}\,(21 \\ -732 \\ \hline 664 \\ -366 \\ \hline 298 \end{array}$$

d.
$$\begin{array}{r} 281\overline{)8487}\,(30 \\ -843 \\ \hline 57 \end{array}$$

e.
$$\begin{array}{r} 214\overline{)2614}\,(12 \\ -214 \\ \hline 474 \\ -428 \\ \hline 46 \end{array}$$

f.
$$\begin{array}{r} 335\overline{)6502}\,(19 \\ -335 \\ \hline 3152 \\ -3015 \\ \hline 137 \end{array}$$

g.
$$\begin{array}{r} 667\overline{)8979}\,(13 \\ -667 \\ \hline 2309 \\ -2001 \\ \hline 308 \end{array}$$

h.
$$\begin{array}{r} 234\overline{)6904}\,(29 \\ -468 \\ \hline 2224 \\ -2106 \\ \hline 118 \end{array}$$

i.
$$\begin{array}{r} 753\overline{)8949}\,(11 \\ -753 \\ \hline 1419 \\ -753 \\ \hline 666 \end{array}$$

j.
$$\begin{array}{r} 572\overline{)8434}\,(14 \\ -572 \\ \hline 2714 \\ -2288 \\ \hline 426 \end{array}$$

k.
$$\begin{array}{r} 267\overline{)7264}\,(27 \\ -534 \\ \hline 1924 \\ -1869 \\ \hline 55 \end{array}$$

l.
$$\begin{array}{r} 251\overline{)7627}\,(30 \\ -753 \\ \hline 97 \end{array}$$

2. Find the quotient and the remainder and verify your answer.

a.
$$\begin{array}{r} 111\overline{)4633}\,(40 \\ -460 \\ \hline 33 \end{array}$$

Verification:

Dividend = 4633, Remainder = 33, Quotient = 40
Divisor = 111

4633 = 115 × 40 + 33

4633 = 4600 + 33

4633 = 4633

Quotient = 40
Remainder = 33

b.
$$\begin{array}{r} 313\overline{)6383}\,(20 \\ -626 \\ \hline 123 \end{array}$$

Verification:

Dividend = 6383, Remainder = 123, Quotient = 20
Divisor = 313

6383 = 313 × 20 + 123

6383 = 6360 + 123

6383 = 6383

Quotient = 20
Remainder = 123

c.

```
195)7545(38
   -585
    1695
   -1560
     135
```

Verification:

Dividend = 7545, Remainder = 135, Quotient = 38
Divisor = 195

7545 = 195 × 38 + 135

7545 = 7410 + 135 Quotient = 38

7545 = 7545 Remainder = 135

d.

```
212)8656(40
   -848
    176
```

Verification:

Dividend = 8656, Remainder = 176, Quotient = 40
Divisor = 212

8656 = 212 × 40 + 176

8656 = 8480 + 176 Quotient = 40

8656 = 8656 Remainder = 176

e.

```
242)9002(37
   -726
    1742
   -1694
      48
```

Verification:

Dividend = 9002, Remainder = 48, Quotient = 37
Divisor = 242

9002 = 242 × 37 + 48

9002 = 8954 + 48 Quotient = 37

9002 = 9002 Remainder = 48

f.

```
116)4959(42
   -464
     319
   -  232
      87
```

Verification:

Dividend = 4959, Remainder = 87, Quotient = 42
Divisor = 116

4959 = 116 × 42 + 87

4959 = 4872 + 87 Quotient = 42

4959 = 4959 Remainder = 87

g.

```
133)7150(53
   -665
     500
   -  399
      101
```

Verification:

Dividend = 7150, Remainder = 101, Quotient = 53
Divisor = 133

7150 = 133 × 53 + 101

7150 = 7049 + 101 Quotient = 53

7150 = 7150 Remainder = 101

h.

```
135)5632(41
   -540
     232
   -  135
      197
```

Verification:

Dividend = 5632, Remainder = 197, Quotient = 41
Divisor = 135

5632 = 135 × 41 + 197

5632 = 5435 + 197 Quotient = 41

5632 = 5632 Remainder = 197

i.

```
204)8732(42
  -816
   572
  - 408
   164
```

Verification:

Dividend = 8732, Remainder = 164, Quotient = 42
Divisor = 204

8732 = 204 × 42 + 164

8732 = 8568 + 164 Quotient = 42

8732 = 8732 Remainder = 164

j.

```
111)7320(65
  -666
   660
  - 555
   105
```

Verification:

Dividend = 7320, Remainder = 105, Quotient = 65
Divisor = 111

7320 = 111 × 65 + 105

7320 = 7215 + 105 Quotient = 65

7320 = 7320 Remainder = 105

k.

```
144)9564(66
  -864
   924
  - 864
    60
```

Verification:

Dividend = 9564, Remainder = 60, Quotient = 66
Divisor = 144

9564 = 144 × 66 + 60

9564 = 9504 + 60 Quotient = 66

9564 = 9564 Remainder = 60

l.

```
562)3070(5
  -2810
   260
```

Verification:

Dividend = 3070, Remainder = 260, Quotient = 5
Divisor = 562

3070 = 562 × 5 + 260

3070 = 2810 + 260 Quotient = 5

3070 = 3070 Remainder = 260

Exercise 7 H

1. Divide by the short division method.

a.

```
3)67(22
 -66
   1
```

Quotient = 22
Remainder = 1

b.

```
6)92(15
 -90
   2
```

Quotient = 15
Remainder = 2

c.

```
7)84(12
 -84
   0
```

Quotient = 12
Remainder = 0

d.

```
12)74(6
 -72
   2
```

Quotient = 6
Remainder = 2

e.

```
2)29(14
 -78
   1
```

Quotient = 14
Remainder = 1

f.

```
4)53(13
 -52
   1
```

Quotient = 13
Remainder = 1

g.

```
8)64(8
 -64
   0
```

Quotient = 8
Remainder = 0

h.

```
9)72(8
 -72
   0
```

Quotient = 8
Remainder = 0

Exercise 7 I

1. Estimate each of the following by rounding off the dividend to the nearest hundreds and divisor to the nearest tens. Find the actual quotient too.

a. Estimated quotient

$$\begin{array}{r} 30\overline{)700}\,(23 \\ -60 \\ \hline 100 \\ -\ 90 \\ \hline 10 \end{array}$$

Actual quotient

$$\begin{array}{r} 25\overline{)650}\,(26 \\ -50 \\ \hline 150 \\ -150 \\ \hline 0 \end{array}$$

The estimated quotient 23 is 3 less than actual quotient 26.

b. Estimated quotient

$$\begin{array}{r} 30\overline{)500}\,(16 \\ -30 \\ \hline 200 \\ -180 \\ \hline 20 \end{array}$$

Actual quotient

$$\begin{array}{r} 33\overline{)534}\,(16 \\ -33 \\ \hline 204 \\ -198 \\ \hline 6 \end{array}$$

The estimated quotient and actual quotient are equal.

c. Estimated quotient

$$\begin{array}{r} 40\overline{)700}\,(17 \\ -40 \\ \hline 300 \\ -280 \\ \hline 20 \end{array}$$

Actual quotient

$$\begin{array}{r} 43\overline{)678}\,(15 \\ -43 \\ \hline 248 \\ -215 \\ \hline 33 \end{array}$$

The estimated quotient 17 is 2 more than actual quotient 15.

d. Estimated quotient

$$\begin{array}{r} 30\overline{)400}\,(13 \\ -30 \\ \hline 100 \\ -\ 90 \\ \hline 10 \end{array}$$

Actual quotient

$$\begin{array}{r} 31\overline{)418}\,(13 \\ -31 \\ \hline 108 \\ -\ 93 \\ \hline 15 \end{array}$$

The estimated quotient and actual quotient both are equal.

2. Estimate the quotient of the following by rounding off to the nearest tens. Find the actual quotient too.

a. Estimated quotient

```
30 ) 70 ( 2
   - 60
   ----
     10
```

Actual quotient

```
29 ) 73 ( 2
   - 58
   ----
     15
```

The estimated quotient and actual quotient are equal.

b. Estimated quotient

```
20 ) 80 ( 4
   - 80
   ----
      0
```

Actual quotient

```
16 ) 75 ( 4
   - 64
   ----
     11
```

The estimated quotient and actual quotient are equal.

c. Estimated quotient

```
30 ) 670 ( 22
   -60
   ---
    70
   - 60
   ----
    10
```

Actual quotient

```
27 ) 674 ( 24
   -54
   ---
   134
  -108
  ----
    26
```

The estimated quotient 24 is 2 more than actual quotient 22.

d. Estimated quotient

```
30 ) 420 ( 14
   -30
   ---
   120
  -120
  ----
    00
```

Actual quotient

```
31 ) 418 ( 13
   -31
   ---
   108
   - 93
   ----
    15
```

The estimated quotient 14 is 1 more than actual quotient 13.

3. Estimate the quotient of the following by rounding off the dividend to the nearest thousands and divisor to the nearest hundreds. Find the actual quotient too.

a. Estimated quotient

```
100 ) 7000 ( 70
   -700
   ----
     00
```

Actual quotient

```
143 ) 6584 ( 46
   -572
   ----
    864
   - 858
   -----
      6
```

The estimated quotient 70 is 24 more than actual quotient 46.

b. Estimated quotient

```
200)10000(50
  -1000
  -----
     00
```

Actual quotient

```
192)9808(51
  -960
  ----
   208
  -192
  ----
    16
```

The estimated quotient 50 is 1 less than actual quotient 51.

c. Estimated quotient

```
100)8000(80
  -800
  ----
    00
```

Actual quotient

```
121)9375(69
  -726
  ----
  1115
 -1089
 -----
    26
```

The estimated quotient 80 is 11 less than actual quotient 69.

d. Estimated quotient

```
300)8000(26
  -600
  ----
  2000
 -1800
 -----
   200
```

Actual quotient

```
335)7561(22
  -670
  ----
   861
  -670
  ----
   191
```

The estimated quotient 26 is 4 more than actual quotient 22.

4. Match the columns as shown.

Question	Rounded off to the nearest 10 or 100	Division	Estimated quotient
A. 86 ÷ 27	a. 200 ÷ 20	i. 90 ÷ 4	I. 3
B. 91 ÷ 36	b. 300 ÷ 40	ii. 9 ÷ 3	II. 7
C. 193 ÷ 24	c. 900 ÷ 40	iii. 9 ÷ 4	III. 22
D. 315 ÷ 43	d. 90 ÷ 30	iv. 20 ÷ 2	IV. 2
E. 868 ÷ 37	e. 90 ÷ 40	v. 30 ÷ 4	V. 10

Exercise 7 J

1. Solve the following word problems using the unitary method.

a. Cost of 6 chocolates = ₹ 3600

Cost of a chocolate = ₹ 3600 ÷ 6

Cost of a chocolate is ₹ 600.

$$6\overline{)3600}\,(600$$
$$-36$$
$$000$$

	Th	H	T	O
	2	3	2	
	1	4	7	5
×				5
	7	3	7	5

b. Cost of 1 bicycles = ₹ 1475

Cost of a 5 bicycles = ₹ 1475 × 5

Cost of a 5 bicycles is ₹ 7375.

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

c. Man makes toys in oneday = 87

Man makes toys in five weeks = 7 × 5 × 87

= 35 × 87

A man makes 3,045 toys in 5 weeks.

d. Car covers distance in 25 hours = 2025 km

Car covers distance in 1 hours = 2025 ÷ 25

Car covers distance in 1 hours = 81 km

Car covers distance in 15 hours = 81 × 51

Car covers 4131 km in 15 hours.

$$25\overline{)2025}\,(81$$
$$-200$$
$$25$$
$$-\ 25$$
$$0$$

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

e. Rent of 12 months = ₹ 6000

Rent of 1 month = ₹ 6000 ÷ 12

Rent of 15 months = 15 × 500

Rent of 15 months is 7500.

$$12\overline{)6000}\,(500$$
$$-60$$
$$000$$

	Th	H	T	O
		5	0	0
×			1	5
	2	5	0	0
+	5	0	0	×
	7	5	0	0

f. Labour earned in 8 days = ₹ 1080

Labour earned in 1 day = ₹ 1080 ÷ 8

Labour earned in 4 days = 135 × 8

```
8 ) 1080 ( 135
   -8
   ---
    28
   -24
   ---
     40
   -  40
   -----
      0
```

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

g. Passengers carried by 13 buses = 715

Passengers carried by one bus = 715 ÷ 13

Passenger carried by 25 buses = 55 × 25

₹1,375 passengers carried by 25 buses.

```
13 ) 715 ( 55
   -65
   ---
    65
   -  65
   -----
      0
```

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

h. Man earns in 10 days = ₹ 4000

Man earns in 1 days = 4000 ÷ 10

= ₹ 400

Man earns in 2 days = 400 × 2

= ₹ 800

i. Cost of one cupboard = ₹ 357

Passengers carried by one bus = ₹ 357 × 5

Cost of 5 cupboards is ₹1785.

	Th	H	T	O
		2	3	
		3	5	7
×				5
	1	7	8	5

Word Problems

a. Numbers of bags = 6426

Number of trucks = 17

Number of bags loaded on each truck = 6426 ÷ 17

378 bags are there in each truck.

```
17 ) 6426 ( 378
   -51
   ---
    132
   -119
   ----
     136
   -  136
   ------
        0
```

b. 1 hour = 60 minutes
Hours in 3240 minutes = 3240 ÷ 60
54 hours in 3240 minutes.

```
60 ) 3240 ( 54
   - 300
     240
   -  240
      0
```

c. Product of number = 2016
One of the number = 84
Other number = 2016 ÷84
The other number is 24.

```
84 ) 2016 ( 24
   - 168
     336
   -  336
      0
```

d. Train cover distance in 24 hours = 8928 km
Train covers distance in one hour = 8928 ÷ 24
Train covers 372 km of distance in one hour.

```
24 ) 8928 ( 372
   - 72
     172
   - 168
      48
   -  48
      0
```

e. Number of eggs in a tray = 36
Total number of eggs = 1264
Tray required = 1264 ÷ 36
Karan need 35 trays to pack 1264 eggs and 4 egg will be left.

```
36 ) 1264 ( 35
   - 108
     184
   -  180
      4
```

f. Number of people = 4600
Number of buses = 100
Number of people in 1 bus = 4600 ÷ 100
= 46 peoples

g. Dividend = Divisor × Quotient + Remainder
Dividend = 25 × 167 + 20
Dividend = 4175 + 20
Dividend = 4195
So, The number is 4195.

Framing Word Problems

1. Frame word problems for the following division facts.

a. A man has to pack 75 toys equally in 15 packets. How many toys will be packed in one packet.

b. Rita bough 12 notebooks and paid ₹ 2784 to the shopkeeper. What is the cost of 1 notebook.

c. A man earns ₹ 1210 in 11 days. How much does he earn in 1 day?

d. The cost of 12 cardboard is ₹ 8160. Find the cost of one cardboard.

Mental Maths

1. Fill in the blanks one has been done for you.

a. 3800 ÷ 19 = 200 so 3800 ÷ 200 = 19

b. 2700 ÷ 18 = 150 so 2700 ÷ 150 = 18

c. 252 ÷ 14 = 18 so 252 ÷ 18 = 14

d. 1980 ÷ 44 = 45 so 1980 ÷ 45 = 44

2. In division, the Remainder should always be smaller than the Divisor.

3. When the Divisor is 1, the Quotient is equal to the Dividend.

4. In a correct division, the sum of Remainder and the product of Quotient and the Divisor is equal to the Dividend.

5. Fill in the missing digits for each of the following and find the quotient and the remainder.

a.
```
56)718(12
  -56
  158
 -112
   46
```

b.
```
35)918(26
  -70
  218
 -210
    8
```

c.
```
24)4285(178
  -24
  188
 -168
  205
 -192
   13
```

d.
```
59)6085(103
  -59
   18
  -00
  185
 -177
    8
```

6. Find the missing number in each case.

a. Quotient = 7 Divisor = 5
Remainder = 2 Dividend = 37

b. Quotient = ? Divisor = 12
Remainder = 2 Dividend = 144

c. Quotient = 100 Divisor = 10
Remainder = ? Dividend = 100

Chapter
8

Multiples and Factors

Exercise 8 A

1. Write the first four multiples of

a. 5 ⟶ 5 × 1 = 5 5 × 2 = 10 5 × 3 = 15 5 × 4 = 20

b. 6 ⟶ 6 × 1 = 6 6 × 2 = 12 6 × 3 = 18 6 × 4 = 24

c. 8 ⟶ 8 × 1 = 8 8 × 2 = 16 8 × 3 = 24 8 × 4 = 32

d. 2 ⟶ 2 × 1 = 2 2 × 2 = 4 2 × 3 = 6 2 × 4 = 8

e. 3 ⟶ 3 × 1 = 3 3 × 2 = 6 3 × 3 = 9 3 × 4 = 12

f. 9 ⟶ 9 × 1 = 9 9 × 2 = 18 9 × 3 = 27 9 × 4 = 36

2. Write the next three multiples in each of the following:

a. 2, 4, 6, 8, 10 , 12 , 14

b. 4, 8, 12, 16, 20 , 24 , 28

c. 6, 12, 18, 24, 30 , 36 , 42

d. 13, 26, 39, 52, 65 , 78 , 91

e. 11, 22, 33, 44, 55 , 66 , 77

f. 12, 24, 36, 48, 60 , 72 , 84

3. Colour the box blue containing the multiples of 9 in the following table.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
60	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

4. Answer the following questions in Yes or No.

a. Is 72 a multiple of 12? Yes

b. Is 85 a multiple of 5? Yes

c. Is 0 a multiple of 5? Yes

d. Is 56 a multiple of 59? No

e. Is 210 a multiple of 21? Yes

f. Is 95 a multiple of 18? No

5. Write the first five even multiples of the following.

a. First five even multiples are 12, 18, 24, 30, 36.

b. First five even multiples are 14, 28, 42, 56, 70.

c. First five even multiples are 18, 36, 54, 72, 90.

d. First five even multiples are 10, 20, 30, 40, 50.

e. First five even multiples are 24, 48, 72, 96, 120.

6. Write the two multiples of 10 lying from 120 to 150.

The two multiples of 10 lying from 120 to 150 are 130 and 140.

7. Fill in the blanks.

a. If 2 × 5 × 6 = 60, then 60 is the multiple of 2, 5 and 6.

b. All numbers which are multiples of 2 are called Even numbers.

c. All numbers which are not multiples of 2 are called odd numbers.

d. All multiples of 10 have 0 at the ones place.

e. All multiples of 5 have 5 or 0 at the ones place.

f. The first 9 multiples of 11 have the same digit at the ones and the tens place.

Exercise 8 B

1. Write the first 10 multiples of the following numbers and then find their common multiples.

a. Multiple of 3 = 3, 6, 9, (12), 15, 18, 21, (24), 27, 30

Multiple of 4 = 4, 8, (12), 16, 20, (24), 28, 32, 36, 40

12 and 24 are common multiples.

So, common multiples of 3 and 4 = 12 and 24.

b. Multiple of 2 = 2, (4), 6, (8), 10, (12), 14, (16), 18, (20)

Multiple of 4 = (4), (8), (12), (16), (20), 24, 28, 32, 36, 40

4, 8, 12, 16 and 20 are common multiples.

So, common multiples of 2 and 4 = 4, 8, 12 ,16 and 20.

c. Multiple of 7 = 7, 14, 21, 28, 35, 42, 49, 56, (63), 70

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

63 is common multiples.

So, common multiples of 7 and 9 = 63.

d. Multiple of 5 = 5, 10, 15, 20, 25, (30), 35, 40, 45, 50

Multiple of 6 = 6, 12, 18, 24, (30), 36, 42, 48, 54, 60

30 is common multiples.

So, common multiples of 5 and 6 = 30.

e. Multiple of 6 = 6, 12, 18, 24, 30, 36, 42, 48, 54, 60
Multiple of 8 = 8, 16, 24, 32, 40, 48, 56, 64, 72, 80
24 and 48 is a common multiples.
So, common multiples of 6 and 8 = 24 and 48.

f. Multiple of 8 = 8, 16, 24, 32, 40, 48, 56, 64, 72, 80
Multiple of 9 = 9, 18, 27, 36, 45, 54, 63, 72, 81, 90
72 is a common multiples.
So, common multiples of 8 and 9 = 72.

g. Multiple of 2 = 2, 4, 6, 8, 10, 12, 14, 16, 18, 20
Multiple of 3 = 3, 6, 9, 12, 15, 18, 21, 24, 27, 30
6, 12, 18 are common multiples.
So, common multiples of 2 and 3 = 6, 12 and 18.

h. Multiple of 6 = 6, 12, 18, 24, 30, 36, 42, 48, 54, 60
Multiple of 9 = 9, 18, 27, 36, 45, 54, 63, 72, 81, 90
18 and 54 are common multiples.
So, common multiples of 6 and 9 = 18 and 54.

i. Multiple of 4 = 4, 8, 12, 16, 20, 24, 28, 32, 36, 40
Multiple of 5 = 5, 10, 15, 20, 25, 30, 35, 40, 45, 50
20 and 40 are common multiples.
So, common multiples of 4 and 5 = 20 and 50.

j. Multiple of 10 = 10, 20, 30, 40, 50, 60, 70, 80, 90, 100
Multiple of 20 = 20, 40, 60, 80, 100, 120, 140, 160, 180, 200
20, 40, 60, 80 and 100 are common multiples.
So, common multiples of 10 and 20 = 20, 40, 60, 80 and 100.

k. Multiple of 12 = 12, 24, 36, 48, 60, 72, 84, 96, 108, 120
Multiple of 36 = 36, 72, 108, 144, 180, 216, 252, 288, 324, 360
36, 72, and 108 are common multiples.
So, common multiples of 12 and 36 = 36, 72, 108.

l. Multiple of 20 = 20, 40, 60, 80, 100, 120, 140, 160, 180, 200
Multiple of 60 = 60, 120, 180, 240, 300, 360, 420, 480, 540, 600
60, 120, and 180 are common multiples.
So, common multiples of 20 and 60 = 60, 120, 180.

m. Multiple of 20 = 20, 40, 60, 80, 100, 120, 140, 160, 180, 200
Multiple of 40 = 40, 80, 120, 160, 200, 240, 280, 320, 360, 400
Multiple of 60 = 60, 120, 180, 240, 300, 360, 420, 480, 540, 600
120 is a common factor.
So, common factor of 20, 40 and 60 = 120.

n. Multiple of 9 = 9, 18, 27, 36, 45, 54, 63, 72, 81, 90
Multiple of 8 = 8, 16, 24, 32, 40, 48, 56, 64, 72, 80
Multiple of 24 = 24, 48, 72, 96, 120, 144, 168, 192, 216, 240
72 is a common multiples.
So, common multiples of 9, 8 and 24 = 72.

Exercise 8 C

1. Find the LCM (Least Common Multiples) of the following numbers.

a. Multiple of 3 = 3, 6, 9, 12, 15
Multiple of 4 = 4, 8, 12, 16, 20
Common multiples of 3 and 4 = 12
So, the LCM of 3 and 4 is 12.

b. Multiple of 4 = 4, 8, 12, 16, 20
Multiple of 5 = 5, 10, 15, 20, 25
Common multiples of 4 and 5 = 20
So, the LCM of 4 and 5 is 20.

c. Multiple of 4 = 4, 8, 12, 16, 20
Multiple of 10 = 10, 20, 30, 40, 50
Common multiples of 4 and 10 = 20
So, the LCM of 4 and 10 is 20.

d. Multiple of 3 = 3, 6, 9, 12, 15, 18
Multiple of 6 = 6, 12, 18, 24, 30, 36
Multiple of 9 = 9, 18, 27, 36, 45, 54
Common multiples of 3, 6 and 9 = 18
So, the LCM of 3, 6 and 9 is 18.

e. Multiple of 2 = 2, 4, 6, 8, 10
Multiple of 4 = 4, 8, 12, 16, 20
Multiple of 8 = 8, 16, 24, 32, 40
Common multiples of 2, 4 and 8 = 8
So, the LCM of 2, 4 and 8 is 8.

f. Multiple of 4 = 4, 8, 12, 16, 20, 24, 28, 32, 36, 40
Multiple of 6 = 6, 12, 18, 24, 30, 36, 42, 48, 54, 60
Multiple of 8 = 8, 16, 24, 32, 40, 48, 56, 64, 72, 80
Common multiples of 4, 6 and 8 = 24
So, the LCM of 4, 6 and 8 is 24.

g. Multiple of 2 = 2, 4, 6, 8, 10, 12
Multiple of 3 = 3, 6, 9, 12, 15, 18
Multiple of 6 = 6, 12, 18, 24, 30, 36
Common multiples of 2, 3 and 6 = 6, 12
So, the LCM of 2, 3 and 6 is 6.

h. Multiple of 10 = 10, 20, 30, 40, 50, 60
Multiple of 20 = 20, 40, 60, 80, 100, 120
Multiple of 30 = 30, 60, 90, 120, 150, 180
Common multiples of 10, 20 and 30 = 60
So, the LCM of 10, 20 and 30 is 60.

2. By listing the multiples, find the LCM of the following numbers.

a. Multiple of 4 = 4, 8, 12, 16, 20, 24
Multiple of 8 = 8, 16, 24, 32, 40, 48
Common multiples of 4 and 8 = 8, 16, 24
So, the LCM of 4 and 8 is 8.

b. Multiple of 4 = 4, 8, 12, 16, 20
Multiple of 10 = 10, 20, 30, 40, 50
Common multiples of 4 and 10 = 20
So, the LCM of 4 and 10 is 20.

c. Multiple of 5 = 5, 10, 15, 20, 25, 35, 40
Multiple of 35 = 35, 70, 105, 140, 175, 210, 245
Common multiples of 5 and 35 = 35
So, the LCM of 5 and 35 is 35.

d. Multiple of 6 = 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66
Multiple of 11 = 11, 22, 33, 44, 55, 66, 77, 88, 99, 110, 121
Common multiples of 6 and 11 = 66
So, the LCM of 6 and 11 is 66.

e. Multiple of 8 = 8, 16, 24, 32, 40, 48, 56, 64, 72, 80
Multiple of 9 = 9, 18, 27, 36, 45, 54, 63, 72, 81, 90
Common multiples of 8 and 9 = 72
So, the LCM of 8 and is 72.

f. Multiple of 7 = 7, 14, 21, 28, 35, 42
Multiple of 14 = 14, 28, 42, 56, 70, 84
Common multiples of 7 and 14 = 14, 28, and 42
So, the LCM of 7 and 14 is 14.

g. Multiple of 8 = 8, 16, 24, 32, 40, 48
Multiple of 16 = 16, 32, 48, 64, 80, 96
Common multiples of 8 and 16 = 16, 32 and 48
So, the LCM of 8 and 16 is 16.

h. Multiple of 6 = 6, 12, 18, 24, 30, 36
Multiple of 12 = 12, 24, 36, 48, 60, 72
Common multiples of 6 and 12 = 12, 24, and 36
So, the LCM of 6 and 12 is 12.

i. Multiple of 10 = 10, 20, 30, 40, 50, 60
Multiple of 30 = 30, 60, 90, 120, 150, 180
Common multiples of 10 and 30 = 30 and 60
So, the LCM of 10 and 30 is 30.

j. Multiple of 11 = 11, 22, 33, 44, 55, 66
Multiple of 22 = 22, 44, 66, 88, 110, 132
Common multiples of 11 and 22 = 22, 44 and 66
So, the LCM of 11 and 22 is 22.

k. Multiple of 8 = 8, 16, 24, 32, 40, 48, 56, 64, 72, 80
Multiple of 10 = 10, 20, 30, 40, 50, 60, 70, 80, 90, 100
Common multiples of 8 and 10 = 40 and 80
So, the LCM of 8 and 10 is 40.

l. Multiple of 7 = 7, 14, 21, 28, 35
Multiple of 21 = 21, 42, 63, 84, 105
Common multiples of 7 and 21 = 21
So, the LCM is 21.

Exercise 8 D

1. Write the factors from the given multiplication facts.

a. 8 and 9 are the factors of multiplication.

b. 7 and 6 are the factors of multiplication.

c. 15 and 5 are the factors of multiplication.

d. 3 and 6 are the factors of multiplication.

2. Fill in the blanks.

a. 1 is the smallest factor of every number.

b. A factor of a number is always greater than or equal to the number.

c. Every number except 1 has at least two factors.

d. Every number has two factors.

e. 2 is a factor of all even numbers.

3. Tick (✓) the pair of numbers, if the smaller number is a factor of the bigger number.

a. 2, 24	✓	b. 3, 33	✓	c. 5, 18	
d. 9, 90	✓	e. 4, 25		f. 12, 36	✓

4. Answer the following questions in Yes or No:

a. Is 7 a factor of 56? Yes **b.** Is 2 a factor of 18? No

c. Is 6 a factor of 19? Yes **d.** Is 15 a factor of 35? No

e. Is 14 a factor of 28? Yes **f.** Is 4 a factor of 154? No

5. Find all the factors of the following numbers:

a. 18

$1 \times 18 = 18, 2 \times 9 = 18, 3 \times 6 = 18, 6 \times 3 = 18, 9 \times 2 = 18, 18 \times 1 = 18$

Thus, The factors of 18 are 1, 2, 3, 6, 9, 18.

b. 24

$1 \times 24 = 24, 2 \times 12 = 24, 3 \times 8 = 24, 4 \times 6 = 24, 6 \times 4 = 24, 8 \times 3 = 24$

Thus, The factors of 24 are 1, 2, 3, 4, 6, 8, 12, 24.

c. 28

$1 \times 28 = 28, 2 \times 14 = 28, 4 \times 7 = 28, 7 \times 4 = 28, 14 \times 2 = 28, 28 \times 1 = 28$

Thus, The factors of 28 are 1, 2, 3, 4, 6, 8, 12, 24.

d. 36

$1 \times 36 = 36, 2 \times 18 = 36, 3 \times 12 = 36, 4 \times 9 = 36, 6 \times 6 = 36, 9 \times 4 = 36$

$12 \times 3 = 36, 18 \times 2 = 36, 36 \times 1 = 36$

Thus, The factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18, 36.

e. 42

$1 \times 42 = 42, 2 \times 21 = 42, 3 \times 14 = 42, 6 \times 7 = 42, 1 \times 42 = 42, 2 \times 21 = 42$

$42 \times 1 = 42$

Thus, The factors of 42 are 1, 2, 3, 6, 7, 14, 21, 42.

f. 75

$1 \times 75 = 75, 3 \times 25 = 75, 5 \times 15 = 75, 15 \times 5 = 75, 25 \times 3 = 75, 75 \times 1 = 75$

Thus, The factors of 75 are 1, 3, 5, 15, 25, 75.

g. 64

$1 \times 64 = 64$, $2 \times 32 = 64$, $4 \times 16 = 64$, $8 \times 8 = 64$, $16 \times 4 = 64$, $32 \times 2 = 64$
$64 \times 1 = 64$

Thus, The factors of 64 are 1, 2, 4, 8, 16, 32, 64.

h. 95

$1 \times 95 = 95$, $5 \times 19 = 95$, $19 \times 5 = 95$, $95 \times 1 = 95$

Thus, The factors of 95 are 1, 5, 19, 95.

i. 39

$1 \times 39 = 64$, $3 \times 13 = 39$, $13 \times 3 = 39$, $39 \times 1 = 39$

Thus, The factors of 39 are 1, 3, 13, 39.

j. 75

$1 \times 78 = 78$, $2 \times 39 = 78$, $3 \times 26 = 78$, $6 \times 13 = 78$, $13 \times 6 = 78$, $26 \times 3 = 78$
$39 \times 2 = 78$, $78 \times 1 = 78$

Thus, The factors of 78 are 1, 2, 3, 6, 13, 26, 39, 78.

k. 84

$1 \times 84 = 84$, $2 \times 42 = 84$, $3 \times 28 = 84$, $4 \times 21 = 84$, $6 \times 14 = 84$, $7 \times 12 = 84$
$12 \times 7 = 84$, $14 \times 6 = 84$, $21 \times 4 = 84$, $28 \times 3 = 84$, $42 \times 2 = 84$, $84 \times 1 = 84$

Thus, The factors of 84 are 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84.

l. 96

$1 \times 96 = 96$, $2 \times 48 = 96$, $3 \times 32 = 96$, $4 \times 24 = 96$, $6 \times 16 = 96$, $8 \times 12 = 96$
$16 \times 6 = 96$, $24 \times 4 = 96$, $32 \times 3 = 96$, $48 \times 2 = 96$, $96 \times 1 = 95$

Thus, The factors of 96 are 1, 2, 3, 4, 6, 8, 16, 24, 32, 48, 96.

m. 68

$1 \times 68 = 68$, $2 \times 34 = 68$, $4 \times 17 = 68$, $17 \times 4 = 68$, $34 \times 2 = 68$, $68 \times 1 = 68$

Thus, The factors of 68 are 1, 2, 4, 17, 16, 34, 68.

n. 44

$1 \times 44 = 44$, $2 \times 22 = 44$, $4 \times 11 = 44$, $11 \times 4 = 44$, $22 \times 2 = 44$, $44 \times 1 = 44$

Thus, The factors of 44 are 1, 2, 4, 11, 22, 44.

o. 49

$1 \times 49 = 49$, $7 \times 7 = 49$, $49 \times 1 = 49$

Thus, The factors of 49 are 1, 7, 49.

Exercise 8 E

1. Find the common factors of the following:

a. Factors of 12 = 1, 2, 3, 4, 6, 12
Factors of 15 = 1, 3, 5, 15
Common factor of 12 and 15 = 3

b. Factors of 5 = 1, 5
Factors of 20 = 1, 2, 4, 5, 10, 20
Common factor of 5 and 20 = 5

c. Factors of 3 = 1, 3
Factors of 12 = 1, 3, 6, 9, 12
Common factor of 3 and 12 = 3

d. Factors of 18 = 1, 2, 3, 6, 9, 18
Factors of 20 = 1, 2, 4, 5, 10, 10
Common factor of 18 and 20 = 2

e. Factors of 8 = 1, 2, 4, 8
Factors of 10 = 1, 2, 5, 10
Common factor of 8 and 10 = 2

f. Factors of 12 = 1, 2, 3, 4, 6, 12
Factors of 18 = 1, 2, 3, 6, 9, 18
Factors of 36 = 1, 2, 3, 4, 6, 9, 12, 36
Common factor of 12, 18 and 36 = 36

g. Factors of 15 = 1, 3, 5
Factors of 45 = 1, 5, 9, 45
Factors of 55 = 1, 5, 11, 55
Common factor of 15, 48 and 55 = 5

h. Factors of 20 = 1, 2, 4, 5, 10, 20
Factors of 40 = 1, 2, 4, 5, 8, 10, 20, 40
Factors of 60 = 1, 2, 3, 4, 5, 6, 10, 15, 20, 30, 60
Common factor of 20, 40 and 60 = 2, 4, 5, 10 and 20.

2. Find the HCF of the following:

a. Factors of 5 = 1, 5
Factors of 15 = 1, 3, 5
Common factor of 5 and 15 = 1 and 5
HCF = 5

b. Factors of 4 = 1, 2, 4
Factors of 6 = 1, 2, 3
Common factor of 4 and 6 = 1 and 2
HCF = 2

c. Factors of 9 = 1, 3, 9
Factors of 12 = 1, 3, 4, 6, 12
Common factor of 9 and 12 = 1 and 3
HCF = 3

d. Factors of 16 = 1, 2, 4, 16
Factors of 20 = 1, 2, 4, 5, 10, 20
Common factor of 16 and 20 = 1, 2 and 4
HCF = 4

e. Factors of 30 = 1, 2, 3, 5, 6, 10, 15, 30
Factors of 45 = 1, 5, 9, 15, 45
Common factor of 30 and 45 = 1, 5 and 15
HCF = 15

f. Factors of 25 = 1, 5, 25
Factors of 45 = 1, 5, 9, 15, 45
Common factor of 25 and 45 = 1 and 5
HCF = 5

g. Factors of 21 = 1, 3, 7, 21
Factors of 35 = 1, 5, 7, 35
Common factor of 21 and 35 = 1 and 7
HCF = 7

h. Factors of 10 = 1, 2, 5, 10
Factors of 15 = 1, 2, 3, 5, 15
Common factor of 10 and 15 = 1 and 5
HCF = 5

i. Factors of 24 = 1, 2, 3, 4, 6, 8, 12, 24
Factors of 48 = 1, 2, 3, 4, 6, 8, 12, 24, 48
Common factor of 24 and 48 = 1, 2, 3, 4, 6, 8, 12 and 24
HCF = 24

j. Factors of 16 = 1, 2, 4, 8, 16
Factors of 45 = 1, 2, 3, 4, 6, 8, 12, 24
Common factor of 16 and 24 = 1, 2, 4 and 8
HCF = 8

k. Factors of 16 = 1, 2, 4, 8, 16
Factors of 20 = 1, 2, 4, 5, 10, 20
Factors of 24 = 1, 2, 3, 4, 6, 8, 12, 24
Common factor of 16, 20 and 24 = 1, 2 and 4
HCF = 4

l. Factors of 12 = 1, 2, 3, 4, 6, 12
Factors of 15 = 1, 3, 5, 15,
Factors of 18 = 1, 3, 6, 9, 18
Common factor of 12, 15 and 18 = 1 and 3
HCF = 3

3. State whether true or false.

a. 5 is a factor of 18. False
b. Every number is factor of itself. True
c. 20 is a factor of 80. True
d. 5 is a factor of every odd number. False
e. 1 is the greatest factor of any number. False

Exercise 8 F

1. Fill in the blanks.

a. The smallest prime number is 2.
b. The smallest composite number is 4.
c. Each prime number has exactly Two factors.
d. 3 is the smallest odd prime number.
e. The smallest odd composite number is 9.
f. The only even prime number is 2.
g. There are 10 composite numbers between 1 and 20.

2. Circle the prime numbers in each part.

a. 6 9 15 17 **b.** 7 11 13 21
c. 22 25 29 33 **d.** 31 43 47 58

3. Find the prime numbers between the following.

a. Prime numbers between 12 and 30 are 13, 17, 19, 23, 29.
b. Prime numbers between 45 and 59 are 47 and 53.
c. Prime numbers between 65 and 79 are 67, 71, 73.
d. Prime numbers between 84 and 102 are 97, 98 and 101.

4. Find the composite numbers between the following.

a. Composite numbers between 5 and 12 are 6, 8, 9 and 10.

b. Composite numbers between 32 and 41 are 33, 34, 35, 36, 38 and 40.

c. Composite numbers between 45 and 52 are 46, 49, 50 and 51.

d. Composite numbers between 133 and 140 are 134, 135, 136 and 138.

Exercise 8 G

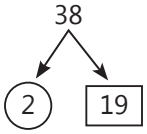
1. Write the prime factorisation of each of the following numbers by building the factor trees.

a.

2	38
19	19
	1

Prime factorisation 38 = 2 × 19

Factor Tree

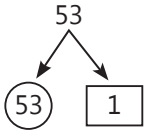


b.

53	53
	1

Prime factorisation 53 = 53 × 1

Factor Tree

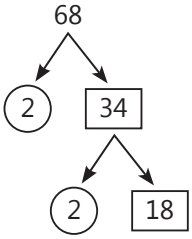


c.

2	68
2	34
17	17
	1

Prime factorisation 68 = 2 × 2 × 17

Factor Tree

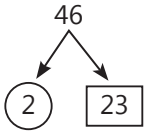


d.

2	46
23	23
	1

Prime factorisation 46 = 2 × 23

Factor Tree

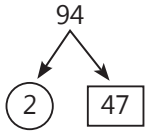


e.

2	94
47	47
	1

Prime factorisation 94 = 47 × 2

Factor Tree

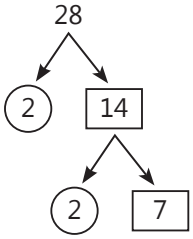


f.

2	28
2	14
7	7
	1

Prime factorisation 28 = 2 × 2 × 7

Factor Tree

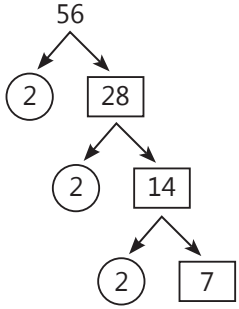


g.

2	56
2	28
2	14
7	7
	1

Prime factorisation 56 = 2 × 2 × 2 × 7

Factor Tree

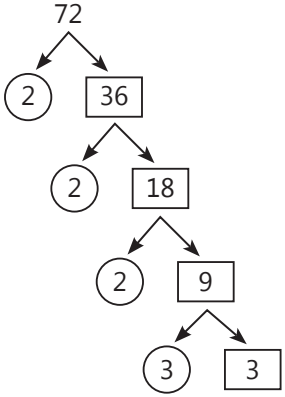


h.

2	72
2	36
2	18
3	9
3	3
	1

Prime factorisation 72
= 2 × 2 × 2 × 3 × 3

Factor Tree

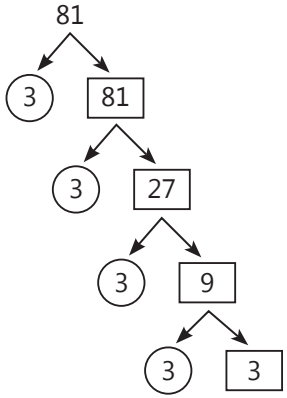


i.

3	81
3	27
3	9
3	3
	1

Prime factorisation 81 = 3 × 3 × 3 × 3

Factor Tree



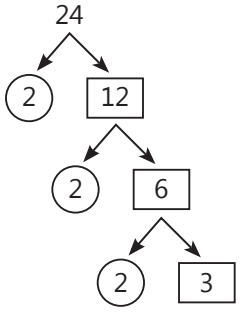
j.

2	24
2	12
2	6
3	3
	1

Prime factorisation 24

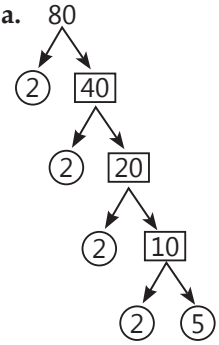
= 2 × 2 × 2 × 3

Factor Tree

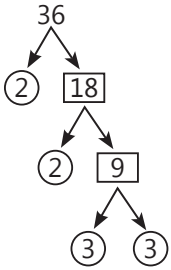


2. Fill in to complete the factor tree. Then, colour the prime factors.

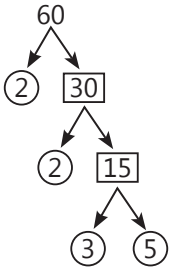
a.



b.



c.



Exercise 8 H

1. Check whether the following numbers are divisible by 2 or not.

422 275 642 8150 7754

A number is divisible by 2, if digit at its ones place is any one of 0, 2, 4, 6, 8.

4 2 2, 6 4 2, 8 1 5 0, 7 7 5 4 is divisible 2. But 275 is not divisible by 2.

2. Check whether the following numbers are divisible by 3 or not.

210 5278 231 7200 8372

A number is divisible by 3, if the sum of its digit is divisible by 3.

210 (2 + 1 = 3), 231 (2 + 3 + 1 = 6), 7200 (7 + 2), is divisible by 3. But 5278 (5 + 2 + 7 + 8 = 22), (8 + 3 + 7 + 2 = 20) is not divisible by 3.

3. Check whether the following numbers are divisible by 4 or not.

536 4130 7041 7500 8331

A number is divisible by 4, if the number farmed by its last two digits is divisible by 4.

5 3 $\boxed{6}$, 7 5 $\boxed{0\ 0}$, is divisible by 4. But 4130, 7041, 8331 is not divisible by 4.

4. Check whether the following numbers are divisible by 5 or not.

538 5055 8080 8545 7709

A number is divisible by 5, if digit at its ones place is 0 or 5.

5 0 5 $\boxed{5}$, 8 0 8 $\boxed{0}$, 8 5 4 $\boxed{5}$ is divisible by 5. But 538, 7709 is not divisible by 5.

5. Check whether the following numbers are divisible by 6 or not.

666 179 705 3780 9612

A number is divisible by 6, if it is divisible by 2 and 3.

6 6 6 , 3 7 8 0 , 9 6 1 2 is divisible by both 3 and 2. But 179, 705 is not divisible by 2 and 3 both.

6. Check whether the following numbers are divisible by 7 or not.

343 8395 889 1617 3515

1. Double the digits at ones place.
2. Subtract the number obtained in step 1 from the number made with remaining digits.
3. If the number thus obtained is divisible by 7, the given number is divisible by 7. (Note: Repeat the above steps if the number obtained in step 3 if still large)

   343, 889, 1617 is divisible by 7, but 8395, 3515 is not divisible by 7.

7. Check whether the following numbers are divisible by 8 or not.

2168 9000 4328 1008 7000

A number is divisible by 8, if the number formed by its last 3 digit is divisible by 8.

2$\boxed{1\ 6\ 8}$, 9$\boxed{0\ 0\ 0}$, 4$\boxed{3\ 2\ 8}$, 1$\boxed{0\ 0\ 8}$, 7$\boxed{0\ 0\ 0}$ is divisible by 8.

HOTS

Check the divisibility of numbers 2 to 10 for the number 750282.

750282 is divisible by 2, 3, 6.

Mental Maths

1. 9 + 6th multiple of 8 = 120

2. 8 is a factor of a number which lies between 20 and 25. What is the number? 24

3. 6 is a factor of a number which lies between 15 and 20. What is the number? 18

4. Which is the smallest 2-digit number having exactly four factors? 6

Chapter
9 Fractions

Exercise 9 A

1. Write the following fractions in numbers.

a. One-fifth = $\frac{1}{5}$ b. Four-sevenths = $\frac{4}{7}$

c. Three-eighths = $\frac{3}{8}$ d. Three-sevenths = $\frac{3}{7}$

e. One-sixth = $\frac{1}{6}$ f. One-fourth = $\frac{1}{4}$

2. What is the fraction of the shaded area?

a.  $\frac{4}{6}$

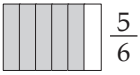
b.  $\frac{1}{8}$

c.  $\frac{1}{3}$

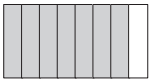
d.  $\frac{3}{5}$

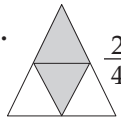
e.  $\frac{4}{5}$

f.  $\frac{3}{6}$

g.  $\frac{5}{6}$

h.  $\frac{5}{9}$

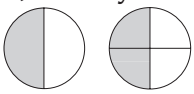
i.  $\frac{7}{8}$

j.  $\frac{2}{4}$

k.  $\frac{2}{10}$

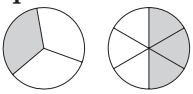
Exercise 9 B

1. Fill in the boxes to represent the fractions for the shaded portions. Also, identify if they are equivalent.

a. 

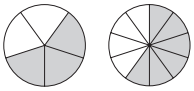
$\frac{1}{2}$ $\frac{2}{4}$

Equivalent

b. 

$\frac{1}{3}$ $\frac{3}{6}$

Not equivalent

c. 

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

Equivalent

2. Write the next three equivalent fractions.

a. $\frac{1}{5} = \frac{2}{10}, \frac{3}{15}, \frac{4}{20}$ b. $\frac{4}{5} = \frac{8}{10}, \frac{12}{15}, \frac{16}{20}$

c. $\frac{2}{7} = \frac{4}{14}, \frac{6}{21}, \frac{8}{28}$ d. $\frac{3}{6} = \frac{6}{12}, \frac{9}{18}, \frac{12}{24}$

e. $\frac{3}{4} = \frac{6}{8}, \frac{9}{12}, \frac{12}{16}$ f. $\frac{4}{9} = \frac{8}{18}, \frac{12}{27}, \frac{16}{36}$

3. Which of the following pairs are equivalent? Encircle them.

a. $\frac{9}{15}, \frac{3}{5}$ **b.** $\frac{7}{8}, \frac{14}{16}$ **c.** $\frac{6}{8}, \frac{3}{4}$

d. $\frac{2}{16}, \frac{1}{9}$ **e.** $\frac{3}{8}, \frac{6}{16}$ **f.** $\frac{2}{3}, \frac{10}{15}$

4. Fill in the boxes to make the equivalent fractions.

a. $\frac{1}{2} = \frac{3}{6}$ **b.** $\frac{1}{3} = \frac{4}{12}$ **c.** $\frac{12}{15} = \frac{24}{30}$ **d.** $\frac{9}{11} = \frac{27}{33}$

e. $\frac{2}{7} = \frac{8}{28}$ **f.** $\frac{13}{14} = \frac{26}{28}$ **g.** $\frac{6}{11} = \frac{36}{66}$ **h.** $\frac{4}{9} = \frac{16}{36}$

5. Write an equivalent fraction of

a. $\frac{24}{28}$ with denominator 7 is $\frac{6}{7}$.

b. $\frac{15}{45}$ with denominator 9 is $\frac{3}{9}$.

c. $\frac{144}{180}$ with denominator 15 is $\frac{12}{15}$.

d. $\frac{24}{36}$ with denominator 9 is $\frac{6}{9}$.

6. Check whether the given fractions are equivalent or not.

a. $\frac{3}{5} \rightarrow \frac{15}{25}$

$3 \times 25 = 75$ and $15 \times 5 = 75$

$75 = 75$

Therefore, $\frac{3}{5}$ and $\frac{15}{25}$ are equivalent.

b. $\frac{4}{7} \rightarrow \frac{12}{20}$

$4 \times 20 = 80$ and $12 \times 7 = 84$

$80 = 84$

Therefore, $\frac{4}{7}$ and $\frac{12}{20}$ are not equivalent.

c. $\frac{2}{5} \rightarrow \frac{6}{20}$

$2 \times 20 = 40$ and $6 \times 5 = 30$

$40 = 30$

Therefore, $\frac{2}{5}$ and $\frac{6}{20}$ are not equivalent.

d. $\frac{3}{4} \times \frac{9}{8}$

$3 \times 8 = 24$ and $9 \times 4 = 36$

$24 = 36$

Therefore, $\frac{3}{4}$ and $\frac{9}{8}$ are not equivalent.

e. $\frac{5}{11} \times \frac{55}{12}$

$12 \times 5 = 60$ and $55 \times 11 = 605$

$60 = 605$

Therefore, $\frac{5}{11}$ and $\frac{55}{12}$ are not equivalent.

Exercise 9 C

1. Reduce each fraction to its lowest terms.

a. First, we find the HCF of 14 and 24 which is 2.

Thus, we get, $\frac{14}{24} = \frac{14 \div 2}{16 \div 2} = \frac{7}{8}$

So, $\frac{7}{8}$ is the simplest form of $\frac{14}{24}$.

b. First, we find the HCF of 12 and 40 which is 4.

Thus, we get, $\frac{12 \div 4}{40 \div 4} = \frac{3}{10}$

So, $\frac{3}{10}$ is the simplest form of $\frac{12}{40}$.

c. First, we find the HCF of 25 and 60 which is 5.

Thus, we get, $\frac{25}{60} = \frac{25 \div 5}{60 \div 5} = \frac{5}{12}$

So, $\frac{5}{12}$ is the simplest form of $\frac{25}{60}$.

d. First, we find the HCF of 28 and 40 which is 4.

Thus, we get, $\frac{28}{40} = \frac{28 \div 4}{40 \div 4} = \frac{7}{10}$

So, $\frac{7}{10}$ is the simplest form of $\frac{28}{40}$.

e. First, we find the HCF of 10 and 35 which is 5.

Thus, we get, $\frac{10}{35} = \frac{10 \div 5}{35 \div 5} = \frac{2}{7}$

So, $\frac{2}{7}$ is the simplest form of $\frac{10}{35}$.

f. First, we find the HCF of 35 and 50 which is 5.

Thus, we get, $\frac{35}{50} = \frac{35 \div 5}{50 \div 5} = \frac{7}{10}$

So, $\frac{7}{10}$ is the simplest form of $\frac{35}{50}$.

2. Circle the fractions that are in the simplest form or lowest term.

a. $\frac{4}{6}$ (b.) $\frac{5}{7}$ (c.) $\frac{8}{9}$ (d.) $\frac{1}{4}$ e. $\frac{12}{18}$

(f.) $\frac{7}{9}$ g. $\frac{2}{10}$ (h.) $\frac{6}{11}$ i. $\frac{10}{50}$ (j.) $\frac{11}{19}$

Exercise 9 D

1. Find out and fill in the blanks with proper, improper or unit fraction.

a. Proper fraction **b.** Unit fraction

c. Improper fraction **d.** Unit fraction

e. Improper fraction **f.** Proper fraction

2. Identify the following set of fractions as like and unlike fractions.

a. Like fraction **b.** Like fraction

c. Unlike fraction **d.** Like fraction

3. Convert the following improper fractions into mixed fractions.

a. $\frac{9}{2}$

Quotient	Remainder	Mixed fraction
4	1	$4\frac{1}{2}$

b. $\frac{21}{5}$

Quotient	Remainder	Mixed fraction
4	1	$4\frac{1}{5}$

c. $\frac{30}{7}$

Quotient	Remainder	Mixed fraction
4	2	$4\frac{2}{7}$

d. $\frac{13}{2}$

Quotient	Remainder	Mixed fraction
6	1	$6\frac{1}{2}$

e. $\frac{52}{7}$

Quotient	Remainder	Mixed fraction
7	3	$7\frac{3}{7}$

4. Convert the following mixed fractions into improper fractions.

a. Mixed fraction = $2\frac{5}{9}$

Whole number = 2

Proper fraction part of the mixed fraction = $\frac{5}{9}$

Multiply = 2 × 9 = 18

Add the numerator 5 to the product 18.

18 + 5 = 23

23 is the numerator of the improper fraction.

Thus, improper fraction = $\frac{23}{9}$.

b. Mixed fraction = $4\frac{4}{7}$

Whole number = 4

Proper fraction part of the mixed fraction = $\frac{4}{7}$

Multiply = 7 × 4 = 28, Add the numerator 4 + 28 = 32.

28 is the numerator of the improper fraction.

Thus, improper fraction = $\frac{32}{7}$.

c. Mixed fraction = $7\frac{3}{4}$

Whole number = 7

Proper fraction part of the mixed fraction = $\frac{3}{4}$

Multiply = 7 × 4 = 28

Add the numerator 3 to the product 28.

28 + 3 = 31

31 is the numerator of the improper fraction.

Thus, improper fraction = $\frac{31}{4}$.

d. Mixed fraction = $2\frac{5}{8}$

Whole number = 2

Proper fraction part of the mixed fraction = $\frac{5}{8}$

Multiply = 2 × 8 = 16

Add the numerator 5 to the product 16.

16 + 5 = 21

21 is the numerator of the improper fraction.

Thus, improper fraction = $\frac{21}{8}$.

e. Mixed fraction = $12\frac{8}{5}$

Whole number = 12

Proper fraction part of the mixed fraction = $\frac{8}{5}$

Multiply = 12 × 5 = 60

Add the numerator 8 to the product 60.

60 + 8 = 68

68 is the numerator of the improper fraction.

Thus, improper fraction = $\frac{68}{5}$.

f. Mixed fraction = $20\frac{1}{4}$

Whole number = 20

Proper fraction part of the mixed fraction = $\frac{1}{4}$

Multiply = 20 × 4 = 80

Add the numerator 1 to the product 80.

80 + 1 = 81

81 is the numerator of the improper fraction.

Thus, improper fraction = $\frac{81}{4}$.

g. Mixed fraction = $9\frac{2}{3}$

Whole number = 9

Proper fraction part of the mixed fraction = $\frac{2}{3}$

Multiply = 9 × 3 = 27

Add the numerator 2 to the product 27.

27 + 2 = 29

29 is the numerator of the improper fraction.

Thus, improper fraction = $\frac{29}{3}$.

h. Mixed fraction = $10\frac{2}{3}$

Whole number = 10

Proper fraction part of the mixed fraction = $\frac{2}{3}$

Multiply = 10 × 3 = 30

Add the numerator 2 to the product 30.

30 + 2 = 32

32 is the numerator of the improper fraction.

Thus, improper fraction = $\frac{32}{3}$.

Exercise 9 E

1. Put the sign '<, >' or '=' between the fractions.

a. $\frac{2}{5}$ [<] $\frac{4}{5}$

b. $\frac{1}{7}$ [<] $\frac{1}{3}$

c. $\frac{5}{6}$ [=] $\frac{5}{6}$

d. $\frac{10}{11}$ [>] $\frac{5}{11}$

2. Circle the smallest fraction in each of the following.

a. (1/8), $\frac{3}{8}$, $\frac{5}{8}$

b. $\frac{1}{2}$, (1/8), $\frac{1}{4}$

c. (2/7), $\frac{5}{7}$, $\frac{3}{7}$

d. $\frac{4}{5}$, $\frac{3}{5}$, (1/5)

3. Arrange in ascending order.

a. Since, their denominators are same, we compare the numerators.

$1 < 4 < 5 < 7 < 8$

So, $\frac{1}{3} < \frac{4}{3} < \frac{5}{3} < \frac{7}{3} < \frac{8}{3}$

b. Since, their denominators are same, we compare the numerators.

$4 < 5 < 12 < 13 < 16$

So, $\frac{4}{7} < \frac{5}{7} < \frac{12}{7} < \frac{13}{7} < \frac{16}{7}$

c. Since, their denominators are same, we compare the numerators.

$3 < 7 < 9 < 12 < 14$

So, $\frac{3}{5} < \frac{7}{5} < \frac{9}{5} < \frac{12}{5} < \frac{14}{5}$

d. Since, their denominators are same, we compare the numerators.

$8 < 5 < 4 < 3 < 2$

So, $\frac{1}{8} < \frac{1}{5} < \frac{1}{4} < \frac{1}{3} < \frac{1}{2}$

e. Since, their denominators are same, we compare the numerators.

$5 < 6 < 7 < 8 < 9 < 10$

So, $\frac{5}{11} < \frac{6}{11} < \frac{7}{11} < \frac{8}{11} < \frac{9}{11} < \frac{10}{11}$

4. Arrange in descending order.

a. Since, their denominators are same, we compare at the numerators.

$8 > 7 > 6 > 2 > 1$

So, $\frac{8}{5} > \frac{7}{5} > \frac{6}{5} > \frac{2}{5} > \frac{1}{5}$

b. Since, their denominators are same, we compare at the numerators.

$14 > 13 > 8 > 7 > 6$

So, $\frac{14}{3} > \frac{13}{3} > \frac{8}{3} > \frac{7}{3} > \frac{5}{3}$

c. Since, their denominators are same, we compare at the numerators.

$14 > 11 > 7 > 5 > 1$

So, $\frac{14}{6} > \frac{11}{6} > \frac{7}{6} > \frac{5}{6} > \frac{1}{6}$

d. Since, their denominators are same, we compare at the numerators.

$\mathbf{15} > 13 > 12 > 11 > 4$

So, $\frac{15}{7} > \frac{13}{7} > \frac{12}{7} > \frac{11}{7} > \frac{4}{7}$

e. Since, their denominators are same, we compare at the numerators.

$5 > 4 > 3 > 2 > 1$

So, $\frac{5}{8} > \frac{4}{8} > \frac{3}{8} > \frac{2}{8} > \frac{1}{8}$

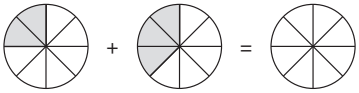
f. Since, their denominators are same, we compare at the numerators.

$10 > 9 > 6 > 5$

So, $\frac{10}{23} > \frac{9}{23} > \frac{6}{23} > \frac{5}{23}$

Exercise 9 F

1. Fill in the blanks with the help of the given figures.

a. 

$\frac{2}{8} + \frac{3}{8} = \frac{2+3}{8} = \frac{5}{8}$

b. 

$\frac{1}{4} + \frac{2}{4} = \frac{1+2}{4} = \frac{3}{4}$

2. Find the sum of the following.

a. $\frac{3}{7} + \frac{5}{7} = \frac{3+5}{7} = \frac{8}{7}$

b. $\frac{1}{4} + \frac{3}{4} + \frac{5}{4} = \frac{1+3+5}{4} = \frac{9}{4}$

c. $\frac{2}{7} + \frac{1}{7} = \frac{2+1}{7} = \frac{3}{7}$

d. $\frac{4}{3} + \frac{5}{3} + \frac{1}{3} = \frac{4+5+1}{3} = \frac{10}{3}$

e. $\frac{1}{8} + \frac{5}{8} + \frac{1}{8} = \frac{1+5+1}{8} = \frac{7}{8}$

f. $\frac{6}{7} + \frac{5}{7} + \frac{2}{7} = \frac{6+5+2}{7} = \frac{13}{7}$

g. $4\frac{1}{4} + 3\frac{3}{4} = \frac{4\times4+1}{4} + \frac{3\times4+3}{4}$

$= \frac{17}{4} + \frac{15}{4}$

$= \frac{17+15}{4}$

$= \frac{32}{4}$

$= 8$

h. $\frac{13}{20} + \frac{7}{20} = \frac{13+7}{20} = \frac{20}{20}$

$= 1$

3. Fill in the blanks.

a. half + half = Whole

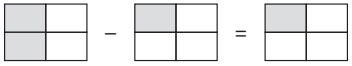
b. 0 added to $\frac{5}{7}$ is $\frac{5}{7}$

c. $\frac{3}{4} + \frac{1}{4} = \frac{4}{4}$ or 1

d. There are 4 quarters in a whole.

Exercise 9 G

1. Fill in the blanks with the help of the following figures.

a. 

$\frac{2}{4} - \frac{1}{4} = \frac{2-1}{4} = \frac{1}{4}$

b. 

$\frac{3}{8} - \frac{2}{8} = \frac{3-2}{8} = \frac{1}{8}$

2. Find the difference of the following.

a. $\frac{7}{5} - \frac{3}{5} = \frac{7-3}{5} = \frac{4}{5}$

b. $\frac{11}{3} - \frac{2}{3} = \frac{11-2}{3} = \frac{9}{3} = 3$

c. $\frac{8}{5} - \frac{3}{5} = \frac{8-3}{5} = \frac{5}{5} = 1$

d. $\frac{16}{17} - \frac{15}{17} = \frac{16-15}{17} = \frac{1}{17}$

e. $\frac{4}{5} - \frac{2}{5} = \frac{4-2}{5} = \frac{2}{5}$

f. $\frac{6}{9} - \frac{3}{9} = \frac{6-3}{9} = \frac{3}{9} = \frac{1}{3}$

g. $\frac{20}{27} - \frac{12}{27} = \frac{20-12}{27} = \frac{8}{27}$

h. $\frac{13}{7} - \frac{12}{7} = \frac{13-12}{7} = \frac{1}{7}$

3. Find the difference of the following.

a. $6\frac{1}{8} - 5\frac{2}{8} = \frac{49}{8} - \frac{42}{8} = \frac{49-42}{8} = \frac{7}{8}$

b. $9\frac{1}{7} - 3\frac{2}{7} = \frac{64}{7} - \frac{23}{7} = \frac{64-23}{7} = \frac{41}{7} = 5\frac{6}{7}$

c. $3\frac{3}{5} - 2\frac{2}{5} = \frac{18}{5} - \frac{12}{5} = \frac{18-12}{5} = \frac{6}{5} = 1\frac{1}{5}$

d. $4\frac{1}{2} - 2\frac{1}{2} = \frac{9}{2} - \frac{5}{2} = \frac{9-5}{2} = \frac{4}{2} = 2$

e. $6\frac{2}{9} - 6\frac{1}{9} = \frac{56}{9} - \frac{55}{9} = \frac{56-55}{9} = \frac{1}{9}$

f. $7\frac{1}{7} - 6\frac{1}{7} = \frac{50}{7} - \frac{43}{7} = \frac{50-43}{7} = \frac{7}{7} = 1$

g. $7\frac{5}{10} - 3\frac{6}{10} = \frac{75}{10} - \frac{36}{10} = \frac{75-36}{10} = \frac{39}{10} = \frac{39}{10}$

h. $11\frac{5}{9} - 7\frac{2}{9} = \frac{104}{9} - \frac{65}{9} = \frac{39}{9} = \frac{13}{3} = 4\frac{1}{3}$

Word Problems

1. Solve the following word problems using proper statements.

a. Part of book readed in the morning $= \frac{3}{7}$

Part of book readed in the evening $= \frac{2}{7}$

Total Part of book readed $= \frac{3}{7} + \frac{2}{7} = \frac{5}{7}$

b. Total amount of juice $= \frac{7}{9}$ litres.

Salina drank $= \frac{4}{9}$ litres.

Juice left $= \frac{7}{9} - \frac{4}{9}$

$= \frac{7-4}{9} \quad \frac{3}{9} = \frac{1}{3}$

c. Total length of ribbon $= 3\frac{5}{7}$ m

Length of piece of ribbon cutted $= 1\frac{2}{7}$ m

Remaining length of the ribbon $= 3\frac{5}{7} - 1\frac{2}{7}$

$= \frac{26}{7} - \frac{9}{7} = \frac{26-9}{7} = \frac{17}{7} = 2\frac{3}{7}$ litres.

$2\frac{3}{7}$ litres of juice is remaining.

d. Amount of rice purchased by Jack $= \frac{2}{5}$ kg

Amount of rice purchased by his brother $= \frac{1}{5}$ kg

Total weight of rice $= \frac{2}{5} + \frac{1}{5}$

$= \frac{2+1}{5} = \frac{3}{5}$ kg.

e. Part of cake given to the brother $= \frac{8}{14}$

Part of cake given to the sister $= \frac{6}{14}$

$\frac{8}{14} - \frac{6}{14} = \frac{2}{14} = \frac{1}{7}$

Brother got more cake by $\frac{1}{7}$.

f. Part of book readed on Monday $= \frac{4}{11}$

Part of book readed on Tuesday $= \frac{3}{11}$

Part of book readed on Wednesday $= \frac{2}{11}$

Total part of book readed $= \frac{4}{11} + \frac{3}{11} + \frac{2}{11}$

$= \frac{4+3+2}{11} = \frac{9}{11}$

g. Time spent by Mohit $= 5\frac{1}{4}$ hours.

Time spent by Rohit $= 3\frac{3}{4}$ hours.

$3\frac{1}{4} - 3\frac{3}{4}$

$\frac{21}{4} - \frac{15}{4} = \frac{6}{4} = \frac{3}{2} = 1\frac{1}{2}$

Mohit spent more time on homework by $1\frac{1}{2}$ hours.

HOTS

1. Fourth equivalent fraction of $\frac{6}{11}$

$\frac{6 \times 4}{11 \times 4} = \frac{24}{44}$

2. Equivalent fraction of $\frac{6}{11}$ with denomination 24.

$\frac{5 \times 4}{6 \times 4} = \frac{20}{24}$

3. Equivalent fraction of $\frac{2}{7}$ with numerator 18.

$\frac{2 \times 9}{7 \times 4} = \frac{18}{63}$

4. Equivalent fraction of $\frac{45}{60}$ with denomination 20.

$\frac{46 \div 3}{60 \div 3} = \frac{15}{20}$

5. Equivalent fraction of $\frac{16}{40}$ with numerator 4.

$\frac{16 \div 4}{40 \div 4} = \frac{4}{10}$

6. $\frac{1}{4}$ of a pizza.

7. $\frac{1}{4}$ hours.

6. I will prefer $\frac{1}{4}$ km to reach home.

Mental Maths

1. Equivalent fractions of an Improper fraction will be improper fractions only.

2. A proper fraction will always be lesser than an improper fraction.

3. In unit fractions, the fraction with the bigger numerator will be bigger.

4. A/An proper unit fraction cannot be converted into a mixed numbers.

5. **Fill in the blanks** '> or <'

a. Improper fractions [>] unit.

b. Mixed number [>] proper fraction

c. Improper fraction [>] proper fractions.

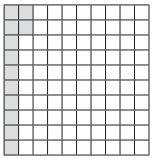
Chapter
10

Decimals

Exercise 10 A

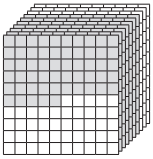
1. Write the decimal fraction and decimal number for equal of the following shaded regions.

a.



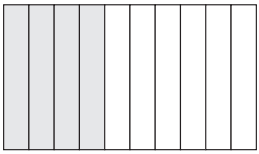
$\frac{12}{100} = 0.12$

b.



$\frac{650}{1000} = 0.650$

c.



$\frac{4}{10} = 0.4$

2. Complete the following table.

Decimal Number	Whole Number Part	Decimal Part
0.56	0	56
57.25	57	25
30.65	30	65
100.235	100	235
4056.700	4056	700

3. Write the following whole numbers as decimal numbers.

a. 6.0 **b.** 67.0 **c.** 143.0 **d.** 175.0 **e.** 205.0

4. Represent 1.5 in pictorial form.

$\frac{10}{10} + 1$ (Whole number) + $\frac{5}{10} + 0.5$ (decimal part) $= 1 + 0.5$

$= 1.5$ (decimal point)

Exercise 10 B

1. Read and write the following decimal numbers in words:

a. 2.467 = Two Point Four Six Seven

b. 8.007 = Eight Point Zero Zero Seven

c. 3.256 = Three point two five six

d. 1087.346 = One Thousand Eight Hundred Seven Point Three Four Six

e. 45.025 = Forty Five Point Zero Two Five.

f. 65.081 = Sixty Five Point Zero Eight One.

g. 92.001 = Ninety Two Point Zero Zero One.

h. 720.210 = Seven Hundred Twenty Point Two One Zero.

2. Write each of the following as a decimal number:

a. Since it is 10 in the denominator, we put decimal point before ones digit.

$\frac{2}{10} = 0.2$

b. $\frac{5}{10} = 0.5$ **c.** $\frac{18}{100} = 0.18$

d. 0.27 **e.** 0.05 **f.** 0.145 **g.** 0.045

h. 0.682 **i.** 0.333 **j.** 0.8 **k.** 0.2

l. 3.4 **m.** 72.5 **n.** 0.06 **o.** 0.57

p. 1.08 **q.** 71.46 **r.** 0.004 **s.** 0.092

t. 0.104 **u.** 2.246 **v.** 7.246 **w.** 0.265

x. 7.239

3. Write each of the following as a fraction:

a. $0.4 = \frac{4}{10}$ **b.** $0.8 = \frac{8}{10}$

c. $0.03 = \frac{3}{100}$ **d.** $1.14 = \frac{114}{100}$

e. $5.006 = \frac{5006}{1000}$ **f.** $12.29 = \frac{1229}{1000}$

g. $5.25 = \frac{525}{100}$ **h.** $8.651 = \frac{8651}{1000}$

i. $0.14 = \frac{14}{100}$ **j.** $57.75 = \frac{5775}{1000}$

k. $0.3 = \frac{3}{10}$ **l.** $0.8 = \frac{8}{10}$

m. $0.7 = \frac{7}{10}$ **n.** $0.9 = \frac{9}{10}$

o. $0.04 = \frac{4}{100}$ **p.** $0.06 = \frac{6}{100}$

q. $0.02 = \frac{2}{100}$ **r.** $0.720 = \frac{720}{1000}$

s. $0.008 = \frac{8}{1000}$ **t.** $0.004 = \frac{4}{1000}$

4. Write the decimal number for each of the following:

a. 0.18 **b.** 0.302 **c.** 12.5 **d.** 72.1

e. 60.014 **f.** 11.7 **g.** 0.009 **h.** 102.00

Chapter
11

The Metric System

Exercise 11 A

1. Estimate the measurement of these objects and circle the correct answer.

a.	Length of a pencil	(10 cm)	100 cm	10 m
b.	Height of a door	20 m	(2 m)	200 m
c.	Length of a cricket bat	(1 m)	10 m	10 cm
d.	Height of an electric pole	2 m	200 m	(12 m)
e.	Length of the cricket pitch	(20 m)	2 m	200 m

2. Convert each of the following into metres (m).

a. 1 km = 1000 m
6 km = 1000 × 6 = 6000 m

b. 1 km = 1000 m
4 km = 4 × 1000 m = 4000 m

c. 1 km = 1000 m
2 km 355 m
= 2 × 1000 m + 355 m
= 2000 m + 355 m
= 2355 m

d. 1 km = 1000 m
7 km 560 m
= 7 × 1000 m + 560 m
= 7000 m + 560 m
= 7560 m

e. 1 km = 1000 m
3 km 260 m
= 3 × 1000 m + 260 m
= 3000 m + 260 m
= 3260 m

f. 1 km = 1000 m
5 km 800 m
= 5 × 1000 m + 800 m
= 5000 m + 800 m
= 5800 m

3. Convert each of the following into centimetres (cm).

a. 1 m = 100 cm
6 m = 6 × 100 cm = 600 cm

b. 1 m = 100 cm
8 m = 8 × 100 cm = 800 cm

c. 1 m = 100 cm
19 m = 19 × 100 cm = 1900 cm

d. 1 m = 100 cm
42 m 25 cm
42 × 100 cm + 25 cm
4200 cm + 25 cm
4225 cm

e. 1 m = 100 cm
25 m 30 cm
25 × 100 cm + 30 cm
2500 cm + 30 cm
2530 cm

f. 1 m = 100 cm
54 m 33 cm
54 × 100 cm + 33 cm
5400 cm + 33 cm
5433 cm

4. Convert each of the following into millimetres (mm).

a. 1 cm = 10 mm
6 cm = 6 × 10 mm = 60 mm

b. 1 cm = 10 mm
5 cm = 5 × 10 mm = 50 mm

c. 1 cm = 100 mm
12 cm 1 mm
12 × 10 mm + 1 mm
120 mm + 1 mm
121 mm

d. 1 cm = 100 mm
23 cm 5 mm
23 × 10 mm + 5 mm
230 mm + 5 mm
235 mm

e. 1 cm = 100 mm
43 cm 8 mm
43 × 10 mm + 8 mm
430 mm + 8 mm
438 mm

f. 1 cm = 100 mm
32 cm 2 mm
32 × 10 mm + 2 mm
320 mm + 2 mm
322 mm

5. Convert each of the following into decimetres (dm).

a. 1 m = 10 dm

8 m = 8 × 10 dm = 80 dm

b. 1 m = 10 dm

2 m = 2 × 10 dm = 20 dm

c. 21 m = 10 dm

21 m = 21 × 10 dm = 210 dm

d. 1 m = 10 dm

36 m 5 dm

36 × 10 dm + 5 dm

360 dm + 5 dm

365 dm

e. 1 m = 10 dm

55 m 4 dm

55 × 10 dm + 4 dm

550 dm + 4 dm

550 dm

f. 1 m = 10 dm

12 m 8 dm

12 × 10 dm + 8 dm

120 dm + 8 dm

128 dm

6. Convert each of the following into centimetres (cm).

a. 1 dm = 10 cm

12 dm = 12 × 10 cm = 120 cm

b. 1 dm = 10 cm

25 dm = 25 × 10 cm = 250 cm

c. 1 dm = 10 cm

14 dm = 14 × 10 cm = 140 cm

d. 1 dm = 10 cm

17 dm = 12 × 10 cm = 170 cm

e. 1 dm = 10 cm

55 dm = 55 × 10 cm = 550 cm

f. 1 dm = 10 cm

48 dm = 48 × 10 cm = 480 cm

Exercise 11 B

1. Convert the following.

a. 10 mm = 1 cm

$60 \text{ mm} = \frac{60}{10} \text{ cm} = 6 \text{ cm}$

b. 10 mm = 1 cm

$14 \text{ mm} = \frac{14}{10} \text{ cm} = 1.4 \text{ cm}$

c. 10 mm = 1 cm

$54 \text{ mm} = \frac{54}{10} \text{ cm} = 5.4 \text{ cm}$

d. 100 cm = 1 m

$400 \text{ cm} = \frac{400}{100} \text{ m} = 4 \text{ m}$

e. 100 cm = 1 m

$200 \text{ cm} = \frac{200}{100} \text{ m} = 2 \text{ m}$

f. 100 cm = 1 m

$320 \text{ cm} = \frac{320}{100} \text{ m} = 3.2 \text{ m}$

g. 1000 m = 1 km

$5000 \text{ m} = \frac{5000}{1000} \text{ km} = 5 \text{ km}$

h. 1000 m = 1 km

$3206 \text{ m} = \frac{3206}{1000} \text{ km} = 3.206 \text{ km}$

i. 1000 m = 1 km

$9200 \text{ m} = \frac{9200}{1000} \text{ km} = 9.2 \text{ km}$

j. 100 cm = 1 m

$426 \text{ cm} = \frac{426}{100} \text{ m} = 4.26 \text{ m}$

k. 1000 m = 1 km

$1900 \text{ m} = \frac{1900}{1000} \text{ km} = 1.9 \text{ km}$

l. 1000 m = 1 km

$3260 \text{ m} = \frac{3260}{1000} \text{ km} = 3.260 \text{ km}$

m. 100 cm = 1 m

$625 \text{ cm} = \frac{625}{100} \text{ m} = 6.25 \text{ m}$

n. 10 mm = 1 cm

$78 \text{ mm} = \frac{78}{10} \text{ cm} = 7.8 \text{ cm}$

o. 1000 m = 1 km

$8567 \text{ m} = \frac{8567}{1000} \text{ km} = 8.567 \text{ km}$

Exercise 11 C

1. Estimate the weight of each item and circle the best estimated weight.

a.  2 kg 20 kg

b.  80 g 2 kg

c.  300 g 30 g

d.  950 g 5 kg

2. Covert the following into 'g'.

a. 1 kg = 1000 g

8 kg = 8 × 1000 g = 8000 g

b. 1 kg = 1000 g

16 kg = 16 × 1000 g = 16000 g

c. 1 kg = 1000 g
6 kg 155 g
6 × 1000 g + 155 g
6000 g + 155 g
6155 g

d. 1 kg = 1000 g
4 kg 112 g
4 × 1000 g + 112 g
4000 g + 112 g
4112 g

e. 1 kg = 1000 g
15 kg 340 g
15 × 1000 g + 340 g
15000 g + 340 g
15340 g

f. 1 kg = 1000 g
22 kg 700 g
22 × 1000 g + 700 g
22000 g + 700 g
22700 g

g. 1 kg = 1000 g
118 kg 325 g
118 × 1000 g + 325 g
118000 g + 325 g
118325 g

h. 1 kg = 1000 g
117 kg 100 g
117 × 1000 g + 100 g
117000 g + 100 g
117100 g

3. Convert the following into 'mg'.

a. 1 g = 1000 mg
20 g = 20 × 1000 mg = 20000 mg

b. 1 g = 1000 mg
17 g = 17 × 1000 mg = 17000 mg

c. 1 g = 1000 mg
31 g 120 mg
31 × 1000 mg + 120 mg
31000 mg + 120 mg
31120 mg

d. 1 g = 1000 mg
80 g 710 mg
80 × 1000 mg + 710 mg
80000 mg + 710 mg
80710 mg

e. 1 g = 1000 mg
45 g 345 mg
45 × 1000 mg + 345 mg
45000 mg + 345 mg
45345 mg

f. 1 g = 1000 mg
67 g 788 mg
67 × 1000 mg + 788 mg
67000 mg + 788 mg
67788 mg

g. 1 g = 1000 mg, 1 kg = 1000 g
70 kg 825 mg
70 × 1000 g + 825 mg
70000 g + 825 mg
70825 g
70825 × 1000 mg
70825000 mg

h. 1 kg = 1000 mg

85 kg 249 mg

85 × 1000 g + 249 g

85000 g + 249 g

85249 g

1 g = 1000 mg

85249 g = 85249 × 1000 mg

85249000 mg

Exercise 11 D

1. Convert the following into 'g'.

a. 1000 mg = 1 g

2000 mg = $\frac{2000}{1000}$ g = 2 g

b. 1000 mg = 1 g

5000 mg = $\frac{5000}{1000}$ g = 5 g

c. 1000 mg = 1 g

2199 mg = $\frac{2199}{1000}$ g = 2.199 g

d. 1000 mg = 1 g

3078 mg = $\frac{3078}{1000}$ g = 3.078 g

e. 1000 mg = 1 g

2349 mg = $\frac{2349}{1000}$ g = 2.349 g

f. 1000 mg = 1 g

5671 mg = $\frac{5671}{1000}$ g = 5.671 g

g. 1000 mg = 1 g

7035 mg = $\frac{7035}{1000}$ g = 7.035 g

h. 1000 mg = 1 g

8707 mg = $\frac{8707}{1000}$ g = 7.707 g

i. 1000 mg = 1 g

7683 mg = $\frac{7683}{1000}$ g = 7.683 g

2. Convert the following into 'kg'.

a. 1000 g = 1 kg

175000 g = $\frac{175000}{1000}$ kg = 17.5 kg

b. 1000 g = 1 kg

5000 g = $\frac{5000}{1000}$ kg = 5 kg

c. 1000 g = 1 kg

7414 g = $\frac{7414}{1000}$ kg = 7.414 kg

d. 1000 g = 1 kg

3276 g = $\frac{3276}{1000}$ kg = 3.276 kg

e. 1000 g = 1 kg

25000 g = $\frac{25000}{1000}$ kg = 25 kg

f. 1000 g = 1 kg

3784 g = $\frac{3784}{1000}$ kg = 3.784 kg

g. 1000 g = 1 kg

4225 g = $\frac{4225}{1000}$ kg = 4.225 kg

h. 1000 g = 1 kg

9425 g = $\frac{9425}{1000}$ kg = 9.425 kg

i. 1000 g = 1 kg

$8941 \text{ g} = \frac{8941}{1000} \text{ kg} = 8.941 \text{ kg}$

Exercise 11 E

1. Convert the following into 'L'.

a. 1 kL = 1000 L

7 kL = 7 × 1000 L = 7000 L

b. 1 kL = 1000 L

8 kL = 8 × 1000 L = 8000 L

c. 1 kL = 1000 L

15 kL 171 L

15 × 1000 L + 171 L

15000 L + 171 L

15171 L

d. 1 kL = 1000 L

8 kL 500 L

8 × 1000 L + 500 L

8000 L + 500 L

8500 L

e. 1 kL = 1000 L

25 kL 450 L

25 × 1000 L + 450 L

25000 L + 450 L

25450 L

f. 1 kL = 1000 L

33 kL 220 L

33 × 1000 L + 220 L

33000 L + 220 L

33220 L

g. 1 kL = 1000 L

17 kL 400 L

17 × 1000 L + 400 L

17000 L + 400 L

17400 L

h. 1 kL = 1000 L

121 kL 320 L

121 × 1000 L + 320 L

121000 L + 320 L

121320 L

2. Convert the following into 'mL'.

a. 1 L = 1000 mL

5 L = 5 × 1000 mL = 5000 mL

b. 1 L = 1000 mL

8 L = 8 × 1000 mL = 8000 mL

c. 1 L = 1000 mL

13 L 165 mL

13 × 1000 mL + 165 mL

13000 mL + 165 mL

13165 mL

d. 1 L = 1000 mL

71 L 206 mL

71 × 1000 mL + 206 mL

71000 mL + 206 mL

70206 mL

e. 1 L = 1000 mL
32 L 400 mL
32 × 1000 mL + 400 mL
32000 mL + 400 mL
32400 mL

f. 1 L = 1000 mL
65 L 345 mL
65 × 1000 mL + 345 mL
65000 mL + 345 mL
65345 mL

g. 1 L = 1000 mL
702 L 10 mL
702 × 1000 mL + 10 mL
702000 mL + 10 mL
702010 mL

h. 1 L = 1000 mL
125 L 300 mL
125 × 1000 mL + 300 mL
125000 mL + 300 mL
125300 mL

Exercise 11 F

1. Corvert each of the following into litre.

a. 1000 mL = 1 L

$4000 \text{ mL} = \frac{4000}{1000} \text{ mL} = 4 \text{ L}$

b. 1000 mL = 1 L

$7000 \text{ mL} = \frac{7000}{1000} \text{ mL} = 7 \text{ L}$

c. 1000 mL = 1 L

$9000 \text{ mL} = \frac{9000}{1000} \text{ mL} = 9 \text{ L}$

d. 1000 mL = 1 L

$6225 \text{ mL} = \frac{6225}{1000} \text{ mL} = 6.225 \text{ L}$

e. 1000 mL = 1 L

$7125 \text{ mL} = \frac{7125}{1000} \text{ mL} = 7.125 \text{ L}$

f. 1000 mL = 1 L

$6003 \text{ mL} = \frac{6003}{1000} \text{ mL} = 6.003 \text{ L}$

g. 1000 mL = 1 L

$1111 \text{ mL} = \frac{1111}{1000} \text{ mL} = 1.111 \text{ L}$

h. 1000 mL = 1 L

$3333 \text{ mL} = \frac{3333}{1000} \text{ mL} = 3.333 \text{ L}$

2. Convert each of the following into kilolitre.

a. 1000 L = 1 kL

$8000\ \text{L} = \frac{8000}{1000}\ \text{L} = 8\ \text{kL}$

b. 1000 L = 1 kL

$9000\ \text{L} = \frac{9000}{1000}\ \text{L} = 9\ \text{kL}$

c. 1000 L = 1 kL

$7225\ \text{L} = \frac{7225}{1000}\ \text{L} = 7.225\ \text{kL}$

d. 1000 L = 1 kL

$8050\ \text{L} = \frac{8050}{1000}\ \text{L} = 8.050\ \text{kL}$

e. 1000 L = 1 kL

$3250\ \text{L} = \frac{3250}{1000}\ \text{L} = 3.250\ \text{kL}$

f. 1000 L = 1 kL

$7225\ \text{L} = \frac{7225}{1000}\ \text{L} = 7.225\ \text{kL}$

g. 1000 L = 1 kL

$9400\ \text{L} = \frac{9400}{1000}\ \text{L} = 9.400\ \text{kL}$

h. 1000 L = 1 kL

$7005\ \text{L} = \frac{7005}{1000}\ \text{L} = 7.005\ \text{kL}$

Exercise 11 G

1. Add the following.

a.

	m		cm	
	1		1	
	1	4	3	6
+		8	5	4
	2	2	9	0

b.

	m		cm	
	1	1	1	
	6	5	4	5
+	1	6	7	5
	8	2	2	0

c.

	m		cm	
	1	1	1	
	1	8	6	3
+		6	6	7
	2	5	3	0

d.

	km	m		
	1	1	1	
	6	2	3	5
+	5	8	7	5
	12	1	1	0

e.

	m		cm	
		1	1	
	6	0	5	5
+	5	5	4	5
	11	6	0	0

f.

	m		cm		
		1			
	5	6	6	5	6
+	3	2	5	4	3
	8	9	1	9	9

2. Subtract the following.

a.

	m		cm	
		16		
	1	6	12	
	2	7	2	0
–	1	9	6	0
	0	7	6	0

b.

	m		cm	
			12	
		7	2	17
	2	8	3	7
–	1	6	5	9
	1	1	7	8

c.

	km		m		
		13	9	17	
	2	3	10	7	
	3	4	0	7	5
–	1	8	2	8	0
	1	5	7	9	5

d.

	km		m		
		15	12		
	7	5	2	10	
	8	6	3	0	5
–	5	7	4	2	5
	2	8	8	8	0

e.

	L		mL		
	0	12		4	10
	1	2	1	5	0
–	0	5	1	1	5
		7	0	3	5

f.

	L		mL		
		14	12		
	1	4	2	14	
	2	5	3	4	5
–	1	5	4	5	5
	0	9	8	9	0

Word Problems

1. Using the proper statements, solve the following word problems.

a.

			km		m	
			1	1	1	
Travelled by car	=		0	5	0	2	5
Travelled by Train	=		1	2	7	5	9
Travelled by Rickshaw	=	+	0	0	5	7	5
Total distance travelled	=		1	8	3	5	9

b. Mr. Gupta travelled by car = 60 km 750 m

Distance covered in metres = 60 × 1000 m + 750 m

= 6000 m + 750 m

= 6750 m

c.

			km		m		
					1		
Travelled on Day 1	=		1	0	2	5	0
Travelled on Day 2	=	+	1	5	5	5	0
Total distance travelled	=		2	5	8	0	0

d.

			kg		g		
				1			
Sale of Potatoes	=		4	5	7	0	0
Sale of Onions	=	+	3	2	5	0	0
Total sale of vegetables	=		7	8	2	0	0

e. Weight of Pumpkin =
Weight of watermelon =
Pumpkin is 3 kg 150 g more heavier than watermelon.

	kg	g		
	8	6	7	0
–	5	5	4	0
	3	1	5	0

f. Weight of Justin =
Weight of Mohan =
Weight of Sohan =
Total weight =

	kg		g		
	8	0	0	0	0
	4	0	0	0	0
+	6	0	0	0	0
	18	0	0	0	0

Mental Maths

1. Fill in the blanks.

a. 4 km = 4000 m
b. 7 kg 300 g = 7300 g
c. 11 l 125 mL = 11125 mL
d. 18 m 33 cm = 1833 cm

2. 33 cm 5 mm = _____ mm

a. 444 mm ☐ b. 335 mm ✓ c. 377 mm ☐

3. 9 cm 1 mm + 1 cm 9 mm = _____

a. 12 cm 1 mm ☐ b. 11 cm ✓ c. 28 cm ☐

Chapter
12 Perimeter and Area

Exercise 12 A

1. Use a string to measure the perimeter of the following objects :

a.  _____

b.  _____

c.  _____

Exercise 12 B

1. Find the perimeter of a triangle whose sides are:

a. The Perimeter of a triangle = 16 cm + 18 cm + 24 cm
= 58 cm

b. The Perimeter of a triangle = 3 cm + 4 cm + 5 cm
= 12 cm

c. The Perimeter of a triangle = 31 cm + 45 cm + 68 cm
= 144 cm

d. The Perimeter of a triangle = 3 cm + 5 cm + 8 cm
= 16 cm

2. Find the perimeter of the following figures.

a. Perimeter = 9 cm + 10 cm + 11 cm
= 30 cm

b. Perimeter = **5** cm + 5 cm + 18 cm + 18 cm
= 46 cm

c. Perimeter = 7 cm + 8 cm + 6 cm
= 21 cm

3. Find the perimeter of the rectangle whose:

a. Perimeter of the rectangle = 2 (L + B)
= 2 (36 + 24) cm
= 2 (60) cm
= 120 cm

b. Perimeter of the rectangle = 2 (L + B)
= 2 (17 + 6) m
= 2 (23) m
= 46 m

c. Perimeter of the rectangle = 2 (L + B)
= 2 (28 + 19) cm
= 2 (47) cm
= 94 cm

d. Perimeter of the rectangle = 2 (L + B)
= 2 (9 + 5) m
= 2 (14) m
= 28 m

4. Find the perimeter of a square whose side is:

a. The perimeter of the square = 4 × sides
= 4 × 16 cm
= 64 cm

b. The perimeter of the square = 4 × sides
= 4 × 21 cm
= 84 cm

c. The perimeter of the square = 4 × sides
= 4 × 11 m
= 44 m

d. The perimeter of the square = 4 × sides
= 4 × 9 cm
= 36 cm

5. Complete the statements.

a. The sum of the lengths of the boundary of a figure is called its perimeter.

b. The perimeter of a square is 4 times its sides.

c. The perimeter of a rectangle is 2 times the sum of its length and breadth

Exercise 12 C

1. Find the area of the following figures in sq. units.

a. Area of the figure = 5 × 5
= 25 sq. units

b. Area of the figure = 6 × 4
= 24 sq. units

c. Area of the figure = 6 × 6
= 36 sq. units

Exercise 12 D

1. Count the unit squares and find the area of the given figures.

a. Area of the given figure = 5 × 5
= 25 sq. units

b. Area of the given figure = 9 sq. units

c. Area of the given figure = 6 sq. units

d. Area of the given figure = 16 sq. units

2. Find the area of a square whose:

a. Area of the square = Side × Side
= 3 cm × 3 cm
= 9 cm^2

b. Area of the square = Side × Side
= 6 cm × 6 cm
= 36 cm^2

c. Area of the square = Side × Side
= 8 cm × 8 cm
= 64 cm^2

d. Area of the square = Side × Side
= 10 cm × 10 cm
= 100 cm^2

e. Area of the square = Side × Side
= 21 cm × 21 cm
= 441 cm^2

f. Area of the square = Side × Side
= 14 cm × 14 cm
= 196 cm^2

3. Find the area of a rectangle whose:

a. Area of the rectangle = Length × Breadth
= 7 cm × 6 cm
= 42 cm^2

b. Area of the rectangle = Length × Breadth
= 3 cm × 2 cm
= 6 cm^2

c. Area of the rectangle = Length × Breadth
= 4 cm × 3 cm
= 12 cm^2

d. Area of the rectangle = Length × Breadth
= 8 cm × 5 cm
= 40 cm^2

e. Area of the rectangle = Length × Breadth
= 7 cm × 4 cm
= 28 cm^2

f. Area of the rectangle = Length × Breadth
= 9 cm × 2 cm
= 18 cm^2

Word Problems

1. Using the proper statements, solve the following word problems.

a. The Perimeter of a square park = 4 × side
= 4 × 80 m
= 320 m

b. The Perimeter of a rectangle field = 2 (length + Breadth)
= 2 (140 m + 30 m)
= 2 (170 m)
= 340 m

c. The perimeter of triangular park = 258 m + 182 m + 231 m
= 671 m

d. The Perimeter of a rectangle = 2 (length + Breadth)
= 2 (10 m + 6 m)
= 2 (16 m)
= 32 m

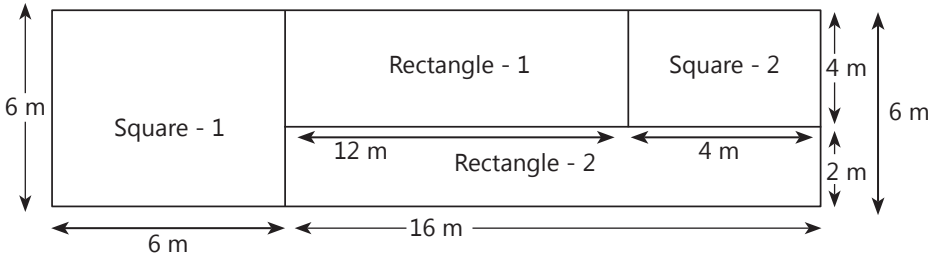
e. The Perimeter of a square field = 4 × side
= 4 × 22 m
= 88 m

f. The Perimeter of a rectangle park = 2 (length + Breadth)
= 2 (125 m + 6 m)
= 2 (131 m)
= 262 m

2 complete round of park covers = 262 × 2
= 524 m

g. The area of square room = Side × Side
= 4 m × 4 m
= 16 m^2

HOTS



Area of square 1 = Side × Side
= 6 m × 6 m
= 36 m^2
Area of square 2 = Side × Side
= 4 m × 4 m
= 16 m^2
Area of Rectangle 1 = Length × Breadth
= 12 m × 4 m
= 48 m^2
Area of Rectangle 2 = Length × Breadth
= 16 m × 2 m
= 32 m^2
Area of whole figure = 36 m^2 + 6 m^2 + 48 m^2 + 32 m^2
= 132 m^2

2. Find the missing length in each of the following shapes.

a. Perimeter of the figure = 23 cm
23 cm = 7 cm + 5 cm + 6 cm + missing length
Missing length = 23 cm – 7 cm + 5 cm + 6 cm
Missing length = 5 cm

b. Perimeter of the rectangle = 24 cm

2 (Length + Breadth) = 24 cm

Length = $\frac{24}{2}$ cm – breadth

Length = $\frac{24}{2}$ cm – 7 cm

= 12 cm – 7 cm

= 5 cm

c. Perimeter of the figure = 32 cm

32 cm = 3 cm + 6 cm + 10 cm + 2 cm + 7 cm + missing length

Missing Length = 32 cm – 3 cm + 6 cm + 10 cm + 2 cm + 7 cm

= 32 cm – 28 cm

= 4 cm

Chapter
13

Time and Calendar

Exercise 13 A

1. The small hand is the **hour** hand and the big hand is the **minute** hand.
2. The thinnest hand moves **1440** times around the clock in 24 hours.
3. There are **60** minutes in one hour and **24** hours in one day.
4. There are **5** minutes between two adjacent numbers on the clock face.
5. There are **60** seconds in one minute.
6. There are **12** months in one year.
7. There are **7** days in a week.
8. There are **365** days in a normal year.
9. There are **366** days in a leap year.
10. January has **31** days.
11. In a leap year, February has **29** days.
12. July and August have **31** days.
13. **Second** hand, out of the three hands in a clock, moves the fastest.
14. The minute hand covers **60** minutes when the hour hand moves from 4 to 5.

Exercise 13 B

1. **Fill in the blanks.**
   - **a.** 34 minutes past 11 = **26** minutes to 12.
   - **b.** 40 minutes past 5 = **20** minutes to 6.
   - **c.** 53 minutes past 8 = **7** minutes to **9**.
   - **d.** 14 minutes to 9 = **46** minutes past **8**.
   - **e.** We read 7:42 as **42 minutes past 7**.

2. **Write the number of minutes past the hour and the number of minutes to the next hour. Then write the exact time on the digital clock. One has been done for you**

a. 

50 minutes to **11**

10 : 10

b. 

45 minutes past **6**

6 : 45

c. 

10 minutes past **5**

5 : 10

d. 

30 minutes past **7**

7 : 30

e. 

10 minutes to **12**

11 : 50

f. 

25 minutes to **7**

6 : 35

3. Write the following digital time as 'minutes to'.

a. 1 : 30 **30** minutes to **2**

3 : 20 **40** minutes to **4**

b. 2 : 15 **45** minutes to **3**

11 : 35 **25** minutes to **12**

Exercise 13 C

1. Write the time as 'a.m.' or 'p.m'.

a. 6 o' clock in the morning. **6:00 a.m.**

b. 4 o' clock at night. **4:00 a.m.**

c. 11 o' clock in the morning. **11:00 a.m.**

d. 10 o' clock at night. **10:00 p.m.**

e. 8 o' clock in the morning. **8:00 p.m.**

f. 7 o' clock at night. **7:00 p.m.**

2. Fill in the blanks using a.m or p.m.

a. The sun rises at 5:30 **a.m.** .

b. The sun sets at 6:00 **p.m.** .

c. I have my dinner at 8:30 **p.m.** .

d. My mom cooks breakfast at 9:00 **a.m.** .

e. The lunch break starts at 11:00 **a.m.** in the school.

f. I reach home from the school at 2:30 **p.m.** .

g. Raj plays with his friends at 6:00 **p.m.** in the evening.

Exercise 13 D

1. Convert into 24-hour clock time.

a. 03:00 a.m. = 0300 hours

b. 05:20 p.m. = 1720 hours

c. 04:00 a.m. = 0400 hours

d. 01:15 a.m. = 0115 hours

e. 07:25 p.m. = 1925 hours

f. 12:30 a.m. = 1230 hours

g. 02:30 a.m. = 0230 hours

h. 08:45 p.m. = 2045 hours

i. 03:59 = 0359 hours

2. Convert into 12-hour clock time.

a. 0200 hours = 02:00 **b.** 1130 hours = 11:30

c. 1430 hours = 2:30 **d.** 0625 hours = 6:25

e. 0616 hours = 6:16 **f.** 2310 hours = 11:10

g. 0825 hours = 8:25 **h.** 0705 hours = 7:05

Exercise 13 E

1. Convert the following into minutes.

a. 1 hour = 60 minutes

5 hour = 5 × 60 minutes = 300 minutes

b. 1 hour = 60 minutes

3 hour = 3 × 60 minutes = 180 minutes

c. 1 hour = 60 minutes

4 hours 25 minutes

4 × 60 minutes + 25 minutes

240 minutes = 25 minutes

265 minutes

d. 1 hour = 60 minutes

5 hours 35 minutes

5 × 60 minutes + 35 minutes

300 minutes = 35 minutes

335 minutes

2. Convert the following into hours.

a. 60 minutes = 1 hours

225 minutes = 225 ÷ 60

3 hours 45 minutes.

$$\begin{array}{r} 60\overline{)225}(3 \text{ Hours} \\ -180 \\ \hline 45 \text{ Minutes} \end{array}$$

b. 60 minutes = 1 hours

322 minutes = (322 ÷ 60)

5 hours 2 minutes.

$$\begin{array}{r} 60\overline{)322}(5 \text{ Hours} \\ -300 \\ \hline 22 \text{ Minutes} \end{array}$$

c. 60 minutes = 1 hours

338 minutes = (338 ÷ 60)

5 hours 38 minutes.

$$\begin{array}{r} 60\overline{)338}(5 \text{ Hours} \\ -300 \\ \hline 38 \text{ Minutes} \end{array}$$

d. 60 minutes = 1 hours

526 minutes = (526 ÷ 60)

8 hours 46 minutes.

$$\begin{array}{r} 60\overline{)526}(8 \text{ Hours} \\ -480 \\ \hline 46 \text{ Minutes} \end{array}$$

3. Convert the following into seconds.

a. 1 minute = 60 seconds.

5 minute = 5 × 60 seconds = 300 seconds.

b. 1 minute = 60 seconds.

6 minute = 6 × 60 seconds = 360 seconds.

c. 1 minute = 60 seconds

6 minutes 30 seconds.

6 × 60 seconds + 30 seconds

360 seconds + 30 seconds

390 seconds.

d. 1 minute = 60 seconds

9 minute 18 seconds

9 × 60 seconds + 18 seconds

540 seconds + 18 seconds

558 seconds

4. Convert the following into minutes.

a. 60 seconds = 1 minute

216 seconds = (216 ÷ 60)

3 minute 36 second.

$$\begin{array}{r} 60\overline{)216}(3 \text{ Minutes} \\ -180 \\ \hline 36 \text{ Seconds} \end{array}$$

b. 60 seconds = 1 minute

362 seconds = (362 ÷ 60)

6 minute 2 second.

$$\begin{array}{r} 60\overline{)362}(6 \text{ Minutes} \\ -360 \\ \hline 2 \text{ Seconds} \end{array}$$

c. 60 seconds = 1 minute

224 seconds = (224 ÷ 60)

3 minute 44 second.

$$\begin{array}{r} 60\overline{)224}(3 \text{ Minutes} \\ -180 \\ \hline 44 \text{ Seconds} \end{array}$$

d. 60 seconds = 1 minute

373 seconds = (373 ÷ 60)

6 minute 13 second.

$$\begin{array}{r} 60\overline{)373}(6 \text{ Minutes} \\ -360 \\ \hline 13 \text{ Seconds} \end{array}$$

5. Convert the following into seconds.

a. 1 hour = 3600 seconds

2 hour = 2 × 3600 seconds = 7200 seconds

b. 1 hour = 3600 seconds

4 hour = 4 × 3600 seconds = 14400 seconds

c. 1 hour = 3600 seconds, 1 minute = 60 seconds

4 hour 6 minutes 30 seconds

4 × 3600 seconds + 6 × 60 seconds + 30 seconds

14400 seconds + 360 seconds + 30 seconds

14790 seconds

d. 1 hour = 3600 seconds, 1 minute = 60 seconds

5 hour 3 minutes 30 seconds

5 × 3600 seconds + 3 × 60 seconds + 30 seconds

18000 seconds + 180 seconds + 30 seconds

18210 seconds

Exercise 13 F

1. Add the following.

a.

	Hours		Minutes	
	1			
		8	1	5
+		6	2	5
	1	4	4	0

Therefore, 14 hours 40 minutes.

b.

	Hours		Minutes	
	1		1	
		7	2	5
+		5	4	5
	1	2	7	0

12 hours 70 minutes

12 hours + 60 minutes + 10 minutes

12 hours + 1 hour + 10 minute

13 hours 10 minutes.

c.

	Hours		Minutes	
	1		1	
		6	4	5
+		8	1	5
	1	4	6	0

14 hours 60 minutes

14 hours + 60 minutes

14 hours + 1 hour

15 hours

d.

	Minutes		Seconds	
	2	0	1	4
+		7	0	2
	2	7	1	6

Therefore, 27 minutes 16 seconds.

e.

	Minutes		Seconds	
	1		1	
	1	8	4	5
+	1	4	3	5
	3	2	8	0

32 minutes 80 seconds

32 minutes + 60 seconds + 20 seconds

32 minutes + 1 minutes + 20 seconds

33 minutes 20 seconds

e.

	Hours		Minutes		Seconds	
					1	
		5	2	0	3	5
+		6	3	6	2	5
	1	1	5	6	6	0

11 hours 56 minutes 60 seconds

11 hours + 56 minutes + 1 minutes

11 hours + 57 minutes

2. Subtract the following.

a.

	Hours		Minutes	
			8	10
		7	~~9~~	~~0~~
		~~8~~	~~3~~	~~0~~
–		4	3	3
		3	5	7

(60 + 30)

3 Hours 57 minutes.

b.

	Hours		Minutes	
	0	13	6	14
	~~1~~	~~3~~	~~7~~	~~4~~
	~~1~~	~~4~~	~~1~~	~~4~~
–		9	3	6
		4	3	8

(60 + 40)

4 Hours 38 minutes.

c.

	Hours		Minutes	
	0	16	8	10
	~~1~~	~~6~~	~~9~~	~~0~~
	~~1~~	~~7~~	~~3~~	~~0~~
–		8	5	8
		8	3	2

(60 + 30)

8 Hours 32 minutes.

d.

	Minutes		Seconds	
			6	12
		7	~~7~~	~~2~~
		~~8~~	~~1~~	~~2~~
–		6	4	4
		1	2	8

(60 + 12)

1 Minutes 28 seconds.

e.

	Minutes		Seconds	
	0	16		
	~~1~~	~~6~~		
	~~1~~	~~7~~	0	0
–		8	3	0
		8	3	0

8 Minutes 30 seconds.

f.

	Minutes		Seconds	
			5	10
		6	~~6~~	~~0~~
		7	~~0~~	~~0~~
–		6	1	5
		0	4	5

Therefore, 45 minutes

Exercise 13 G

1. How many hours have been passed from:

a. 1:00 a.m. $\xrightarrow{1\text{ hour}}$ 2:00 a.m. $\xrightarrow{1\text{ hour}}$ 3:00 a.m. $\xrightarrow{1\text{ hour}}$ 4:00 a.m. $\xrightarrow{1\text{ hour}}$ 5:00 a.m.

1 hour + 1 hour + 1 hour + 1 hour = 4 hours

b. 6:00 p.m. $\xrightarrow{1\text{ hour}}$ 7:00 p.m. $\xrightarrow{1\text{ hour}}$ 8:00 p.m. $\xrightarrow{1\text{ minutes}}$ 8:30 p.m. $\xrightarrow{1\text{ hour}}$ 5:00 a.m.

1 hour + 1 hour + 30 minutes = 2 hours 30 minutes

c. 10:00 a.m. $\xrightarrow{1\text{ hour}}$ 11:00 a.m. $\xrightarrow{1\text{ hour}}$ 12:00 p.m. $\xrightarrow{15\text{ minutes}}$ 12:15 p.m.

1 hour + 1 hour + 15 minutes = 2 hours 15 minutes

d. 8:20 p.m. $\xrightarrow{1\text{ hour}}$ 9:20 p.m. $\xrightarrow{1\text{ minutes}}$ 9:30 p.m.

1 hour + 10 minutes = 1 hour 10 minutes

e. 12:00 p.m. $\xrightarrow{1\text{ hour}}$ 1:00 p.m. $\xrightarrow{1\text{ hour}}$ 2:00 p.m. $\xrightarrow{30\text{ minutes}}$ 2:30 p.m.

1 hour + 1 hour + 30 minutes = 2 hours 30 minutes

f. 4:45 p.m. $\xrightarrow{1\text{ hour}}$ 5:45 a.m. $\xrightarrow{30\text{ minutes}}$ 6:15 a.m.

1 hour + 30 minutes = 1 hours 30 minutes

2. 12:15 p.m. $\xrightarrow{1\text{ hour}}$ 1:15 p.m. $\xrightarrow{1\text{ hour}}$ 2:15 p.m. $\xrightarrow{15\text{ minutes}}$ 2:30 p.m.

1 hour + 1 hour + 15 minutes = 2 hours 15 minutes

Therefore, Duration of Aeroplane was 2 hours 15 minutes.

3. 5:15 p.m. $\xrightarrow{1\text{ hour}}$ 6:15 p.m. $\xrightarrow{30\text{ minutes}}$ 6:45 p.m.

1 hour + 30 minutes = 1 hours 30 minutes

Therefore, Duration of homework was 1 hours 30 minutes.

4. 8:00 p.m. $\xrightarrow{1\text{ hour}}$ 9:00 p.m. $\xrightarrow{1\text{ hour}}$ 10:00 p.m. $\xrightarrow{1\text{ hour}}$ 11:00 p.m. $\xrightarrow{15\text{ minutes}}$ 11:15 p.m.

1 hour + 1 hour + 1 hour + 15 minutes = 3 hours 15 minutes

Therefore, Annual function was 3 hours 15 minutes long.

5. 5:50 p.m. $\xrightarrow{2\text{ hour}}$ 7:50 p.m. $\xrightarrow{15\text{ minutes}}$ 8:05 p.m.

She returned at 8:05 p.m.

6. 9:30 a.m. $\xrightarrow{1\text{ hour}}$ 10:30 a.m. $\xrightarrow{1\text{ hour}}$ 11:30 a.m. $\xrightarrow{1\text{ hour}}$ 12:30 p.m. $\xrightarrow{1\text{ hour}}$ 1:30 p.m. $\xrightarrow{15\text{ minutes}}$ 2:00 p.m.

The train reached to chandigarh at 2:00 p.m.

Exercise 13 H

1. Look at the Calendar of 2020 and fill in the blanks.

a. The months having 31 days are **January**, **March**, **May**, **July**, **August**, **October**, **December**

b. The months having 30 days are **April**, **June**, **September**, **November**.

c. The number of complete weeks in April this year is **3 weeks**.

d. On which day will Independence Day be celebrated in this year? **Saturday**

e. On which day will Republic Day be celebrated in this year? **Sunday**.

f. The first Sunday of the month of May is on the date **3rd May**.

g. Which day is on 6 October, in this year? **Tuesday**

h. On which day the Christmas Day will fall in this year? **Friday**

i. If, 3 November is Sunday. The next Sunday will be on **November**.

j. Your birthday will fall on which day in this year? **[Do yourself]**

2. Write the following dates in day, month, year formate:

a. 6 July, 2010 = 06-07-2010

b. 15 January, 2015 = 15-01-2015

c. 2 October, 2017 = 02-10-2017

d. 6 th day of January, 2009 = 06-01-2009

e. 3 September, 2010 = 03-09-2010

f. 12 August, 2018 = 12-08-2018

3. Check whether the following years are leap years or not.

If the year can be completely divisible by 4, it is a leap year.

a. 1975 ÷ 4 = 493.75

1975, is not completely divisible by 4. So, It is not a leap year.

b. 1784 ÷ 4 = 446

1784, is completely divisible by 4. So, It is a leap year.

c. 2000 ÷ 4 = 500

2000, is completely divisible by 4. So, It is a leap year.

d. 2012 ÷ 4 ÷ 4= 503

2012, is completely divisible by 4. So, It is a leap year.

e. 2001 ÷ 4 = 500.25

2001, is not completely divisible by 4. So, It is not a leap year.

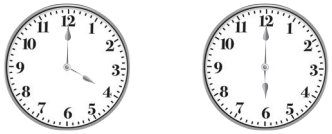
f. 1999 ÷ 4 = 499.75

1999, is not completely divisible by 4. So, It is not a leap year.

HOTS

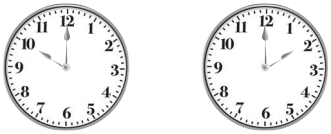
1. Draw the hands on the clock face according to the number of hours passed. Also, write 'a.m' or 'p.m.' accordingly.

a.



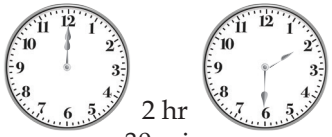
4:00 a.m. $\xrightarrow{2\text{ hr}}$ 6:00 a.m.

b.



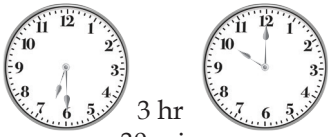
10:00 a.m. $\xrightarrow{4\text{ hr}}$ 2:00 p.m.

c.



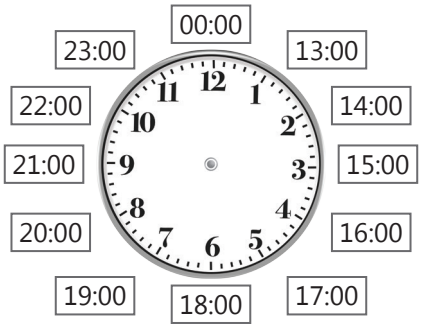
12:00 noon $\xrightarrow{2\text{ hr }30\text{ min}}$ 2:30 p.m.

d.



6:30 p.m. $\xrightarrow{3\text{ hr }30\text{ min}}$ 10:00 p.m.

2. Fill in the missing p.m. hours to complete the following 24-hour clock.



3. Rajat was born on 25 August, 1982 and Rohit was born on 26 August, 1981. Who is older? By how much?

25 August 1982 – $\xrightarrow{1\text{year}}$ 25 August 1981 – $\xrightarrow{\text{day}}$ 26 August 1981

Rohit 1 year 1 day older than Rajat

4. If May 7 in 1989 was the first Sunday of the month. What will be the date on the third Sunday of the month May?

May 7 is first Sunday of the month.

May 7 $\xrightarrow{7\text{ days}}$ May 14 $\xrightarrow{7\text{ days}}$ May 21

First Sunday — Second Sunday — Third Sunday

May 21, 1989 will the date on the third Sunday.

Chapter
14

Money

Exercise 14 A

1. Write the amounts in words.

a. Rupees fourteen and twenty five paise.

b. Rupees sixty five and fifty paise.

c. Rupees twenty five paise.

d. Rupees ninety paise.

e. Rupees fifty two and twenty eight paise.

f. Rupees one hundred sixty five and twenty five paise.

g. Rupees thirty five and fifty paise.

h. Rupees one hundred seven ans twenty five paise.

2. Write the amounts in figures.

a. ₹ 0.50 **b.** ₹ 0.25 **c.** ₹ 400.60 **d.** ₹ 38.10

e. ₹ 96.14 **f.** ₹ 600.09 **g.** ₹ 30.45 **h.** ₹ 107.70

Exercise 14 B

1. Convert the following rupees into paise.

a. 1 rupees = 100 paise

₹ 5 = 5 × 100 paise = 500 paise

b. ₹ 10 = 10 × 100 paise = 1000 paise

c. ₹ 25 = 25 × 100 paise = 2500 paise

d. ₹ 33 = 33 × 100 paise = 3300 paise

e. ₹ 102 = 102 × 100 paise = 10200 paise

f. ₹ 235 = 235 × 100 paise = 23500 paise

g. ₹ 115 = 115 × 100 paise = 11500 paise

h. ₹ 860 = 860 × 100 paise = 86000 paise

2. Convert the following rupees and paise into paise.

a. ₹ 14 = 14 × 100 paise = 1400 paise

14 rupees 65 paise = 1400 paise + 65 paise = 1465 paise

b. ₹ 65 = 65 × 100 paise = 6500 paise

65 rupees 50 paise = 6500 paise + 50 paise = 6550 paise

c. ₹ 50 = 50 × 100 paise = 5000 paise

50 rupees 25 paise = 5000 paise + 25 paise = 5025 paise

d. ₹ 105 = 105 × 100 paise = 10500 paise

105 rupees 25 paise = 10500 paise + 50 paise = 10550 paise

e. ₹ 650 = 650 × 100 paise = 65000 paise

650 rupees 25 paise = 65000 paise + 25 paise = 65025 paise

f. ₹ 455 = 455 × 100 paise = 45500 paise

455 rupees 25 paise = 45500 paise + 25 paise = 65025 paise

g. ₹ 235 = 235 × 100 paise = 23500 paise

235 rupees 70 paise = 23500 paise + 70 paise = 23570 paise

h. ₹ 117 = 117 × 100 paise = 11700 paise

117 rupees 50 paise = 11700 paise + 50 paise = 11750 paise

3. Convert the following paise into rupees.

a. 50 paise = ₹ (50 ÷ 100) = ₹ 0.50

b. 135 paise = ₹ 100 ÷ 100 + 35 paise = ₹ 1.35

c. 760 paise = ₹ 700 ÷ 100 + 60 paise = ₹ 7.60

d. 1890 paise = ₹ 1800 ÷ 100 + 90 paise = ₹ 18.90

e. 4561 paise = ₹ 4500 ÷ 100 + 61 paise = ₹45.61

f. 3451 paise = ₹ 3400 ÷ 100 + 51 paise = ₹ 34.51

g. 6575 paise = ₹ 6500 ÷ 100 + 75 paise = ₹ 65.75

h. 8850 paise = ₹ 8800 ÷ 100 + 50 paise = ₹ 88.50

Exercise 14 C

1. Add the following amounts.

a.

	₹			p	
				1	
	7	2	6	2	5
+	1	1	3	2	5
	8	3	9	5	0

₹ 839.50

b.

	₹			p	
	1				
	8	7	1	5	0
+	1	5	5	2	5
	10	2	6	7	5

₹ 1026.75

c.

	₹			p	
	1		1		
	2	3	2	5	0
+	1	8	2	5	0
	4	1	5	0	0

₹ 415.00

d.

	₹			p	
	1				
	3	5	2	2	5
+	1	6	6	5	0
	5	1	8	7	5

₹ 518.75

e.

	₹			p	
			1	1	
	4	3	5	7	5
+		4	0	8	6
	4	7	6	6	1

₹ 476.61

f.

	₹			p	
		1	1		
	9	2	6	7	0
+	2	2	6	3	5
	11	5	3	0	5

₹ 1153.05

g.

	₹			p	
	4	3	1	0	2
+	3	5	1	0	5
	7	8	2	0	7

₹ 782.07

h.

	₹			p	
	1			1	
	8	8	4	0	6
+		3	4	0	5
	9	1	8	1	1

₹ 918.11

2. Subtract the following amounts.

a.

	₹			p
			9	
		X	X	12
	4	2	0	2	5
–	2	1	5	5	0
	2	0	4	7	5

₹ 204.75

b.

	₹			p
				14	
			3	4	10
	3	6	4	5	0
–	1	2	3	7	5
	2	4	0	7	5

₹ 240.75

c.

	₹			p
	4	7	9	2	5
–	2	5	4	2	5
	2	4	5	0	0

₹ 225.00

d.

	₹			p
			6	15	
	4	5	7	5	5	0
–	2	1	6	8	5	0
	2	4	0	7	0	0

₹ 2407.00

e.

	₹			p
	3	5	7	7	5
–	2	5	5	3	5
	1	2	0	4	0

₹ 120.40

f.

	₹			p
	9	5	5	8	6
–	8	4	0	2	6
	1	1	5	6	0

₹ 115.60

g.

	₹			p
				15	
	8	13	4	5	13
	9	3	5	6	3
–	7	8	1	6	7
	1	5	3	9	6

₹ 153.96

h.

	₹			p
		9			
	7	10	10		
	8	0	0	0	0
–	7	3	1	0	0
	0	6	9	0	0

₹ 69.00

Exercise 14 D

1. Multiply the following :

a.

	₹			p
		4		
	1	0	5	0
×				8
	8	4	0	0

₹ 84.00

b.

	₹			p
		4	6	4	
		1	5	8	5
×					8
	1	2	6	8	0

₹ 126.80

c.

	₹			p
		2	2		
		5	5	5	0
×					5
	2	7	7	5	0

₹ 277.50

d.

	₹			p
		1	1		
		4	4	4	0
×					4
	1	7	7	6	0

₹ 177.60

e.

	₹			p
	1	1		
	2	7	5	0
×				2
	5	5	0	0

₹ 55.00

f.

	₹				p
		2	2	1	
		8	7	7	5
×					3
	2	6	3	2	5

₹ 263.25

g.

	₹					p
		5	5	4	6	
		2	7	7	5	9
×						7
	1	9	4	3	1	3

₹ 1943.13

h.

	₹			p
		5	2	2	
		2	9	3	4
×					6
	1	7	6	0	4

₹ 176.04

2. Subtract the following amounts.

a.

$$6\overline{)5250}\,875$$

48
45
42
30
30
0

₹ 8.75

b.

$$5\overline{)8475}\,1695$$

5
34
30
47
45
25
25
0

₹ 16.95

c.

$$5\overline{)5050}\,1010$$

5
5
5
0

₹ 10.10

d.
$$5\overline{)2525}\,505$$
25
25
25
0

₹ 5.05

e.
$$10\overline{)6070}\,607$$
60
70
70
0

₹ 6.07

f.
$$7\overline{)5656}\,808$$
56
56
56
0

₹ 8.08

Word Problems

1. Solve the following word problems using proper statements.

a. Total money Swati have = ₹ 220
She gave to brothers = ₹ 55.25
Swati have ₹ 164.75 left.

	₹			p	
		11	9	9	
	1	X	10	10	10
	2	2	0	0	0
–		5	5	2	5
	1	6	4	7	5

	₹			p	
		9	9	10	
	4	10	10	10	
	5	0	0	0	0
–	2	2	5	5	0
	2	7	4	5	0

b. Total money he gave to the shopkeeper = ₹ 500
Cost of lunch box = ₹ 225.50
Shopkeeper will return ₹ 275.50 to Ritwik.

c. Cost of cricket bat = ₹ 1450.50
Cost of cricket ball = ₹ 250.75
Rishabh spend ₹ 1701.25 in all.

	₹			p	
		1		1	
	1	4	5	0	5	0
+		2	5	0	7	5
	1	7	0	1	2	5

	₹			p	
		9	9	10	
	2	10	10	10	
	3	0	0	0	0
–	2	0	5	5	0
	0	9	4	5	0

d. ₹ 94.50 should be added to 205.50 to make ₹ 300.

e. Total money = ₹ 200

Spend on buying a drawing book = ₹ 111.50
Spend on buying a marker pen = +₹ 25.75
Total money the spend = 137.25
₹ 62.75 has left from ₹ 200

	₹			p	
		9	9	9	
	1	10	10	10	10
	2	0	0	0	0
–	1	3	7	2	5
	0	6	2	7	5

	₹			p
	1	2		
	1	2	5	0
×				4
	5	0	0	0

f. Cost of a packet of chips = ₹ 12.50
Cost of 4 packet of chips = 4×₹ 12.50
Cost of 4 packet chips is ₹ 50.000

g. Cost of 6m cloth = ₹ 236.40
Cost of 1m cloth = ₹ 236.40÷6
Cost of 1m cloth is ₹ 39.40

```
6)23640(3940
 -18
  56
 -54
  24
 -24
   0
```

	₹		p	
		4		
		2	5	0
×				8
	2	0	0	0

h. Cost of 1 pencil = ₹ 2.50
Cost of 8 pencil = 8×2.50
Cost of 8 pencil is ₹ 20.00

i. Cost of 8 water bottles = ₹ 856
Cost of 1 water bottles = ₹ 856÷8
Cost of 1 water bottles is ₹ 107.

```
8)856(107
 -8
  56
 - 56
   0
```

```
15)23550(1570
 -15
  85
 - 75
  105
 -105
   0
```

j. Cost of 15 notebooks = ₹ 235.50
Cost of 1 notebooks = ₹ 235.50÷15
Cost of 1 notebooks is ₹ 15.70

k. Pocket money for a week = ₹ 143.50
Pocket money of a day = ₹ 143.50÷7
Soham get ₹ 20.50 daily.

```
7)14350(2050
 -14
  35
 - 35
   0
```

				₹				p	
		1	1			1	1		
		1	5	5	0	0	7	5	
×							1	2	
		3	1	0	0	1	5	0	
+	1	5	5	0	0	7	5	×	
	1	8	6	0	0	9	0	0	

l. Salary of a month = ₹ 15,500.75
Salary of a year = ₹ 15.500.75×12
Annual salary of Mohit is ₹ 186009.00

HOTS

With a coins of ₹ 10 and 1 coins of ₹ 5 will make the maximum amount he can have with the coins, that is ₹ 95.

MENTAL MATHS

1. ₹ 100 = 1000 p

2. 100 p = ₹ 1

3. ₹ 10.10 = 1010 p

4. Ten notes of ₹ 10 each = 20 notes of ₹ 5 each

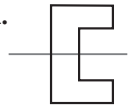
5. One note of ₹ 500 = 4 notes of ₹ 100 each + 2 notes of ₹ 50 each.

Chapter
15

Symmetry

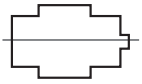
Exercise 15 A

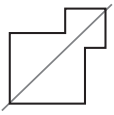
1. Draw a line of symmetry (horizontal, vertical or slanting) that divides the given shapes in two similar halves.

a. 

b. 

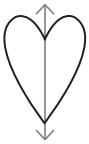
c. 

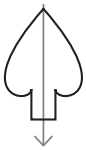
d. 

e. 

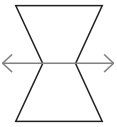
f. 

2. Draw the second half of each symmetrical shape.

a. 

b. 

c. 

d. 

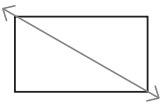
e. 

f. 

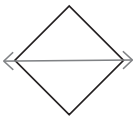
3. Is the dotted line on each shape a line of symmetry? Write Yes or No.

a. 

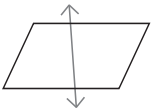
Yes

b. 

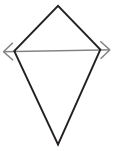
Yes

c. 

Yes

d. 

No

e. 

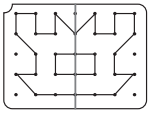
No

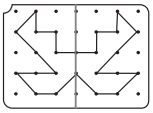
f. 

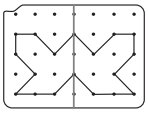
No

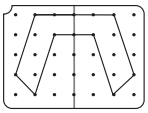
Exercise 15 B

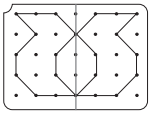
1. **Join the dots and draw the remaining half of the image along the line of symmetry. One has been done for you.**

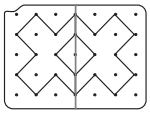
a. 

b. 

c. 

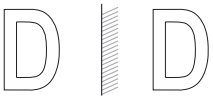
d. 

e. 

f. 

2. **Circle those letters in which the reflection is appropriate for the given letters.**

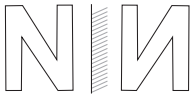
a. 

b. 

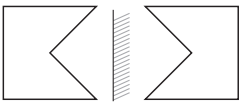
c. 

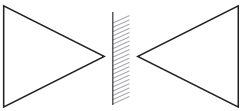
d. 

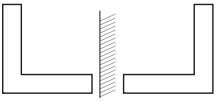
e. 

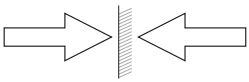
f. 

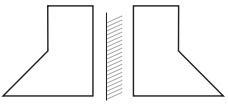
3. **Draw the reflections of the given images.**

a. 

b. 

c. 

d. 

e. 

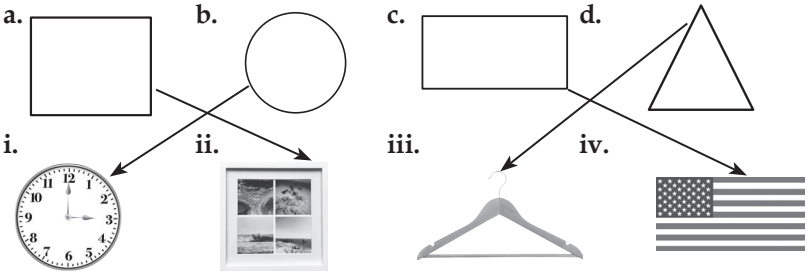
f. 

Chapter
16

Basic Geometrical Concepts

Exercise 16 A

1. Match the shape with the object.



2. Name each of the 3D shapes given below.

Sphere Cylinder Cone Cube Cuboid

3. Complete the following table.

	Shape	Number of faces	Number of edges	Number of vertices
a.	Cube	6	12	8
b.	Cuboid	6	12	8
c.	Cylinder	2	0	0
d.	Cone	1	0	0
e.	Sphere	0	0	0

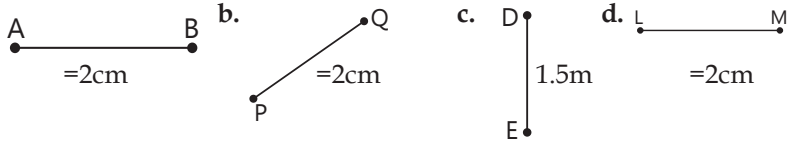
Exercise 16 B

1. Fill in the blanks.

a. A line has no end points. **b.** A line segment has 2 end points.

c. A ray has no end points. **d.** A line has a definite length.

2. Use the ruler to measure the length of the following line segments to the nearest centimetre.



3. Construct the line segments of the given lengths in your notebook.

a. AB = 6cm

b. PQ = 5cm

c. X4 = 8cm

d. EF = 3.6cm

e. AB = 2.5cm

f. PQ = 7.2cm

Exercise 16 C

1. Fill in the blanks.

a. In a rectangle, the pairs of opposite sides are equal.

b. A point where two sides of a polygon meet is called its vertex.

c. Every square is a rectangle but every rectangle is not a square.

d. A polygon is a figure formed by more than two line segments.

e. A triangle has three vertices.

2. State whether each of the following statements is True or False.

a. All quadrilaterals are rectangles. False

b. Every square is a rectangle. True

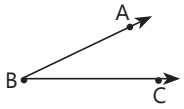
c. The opposite sides of a quadrilateral may have a common vertex. False

d. The adjacent sides of a quadrilateral have a common vertex. True

Exercise 16 D

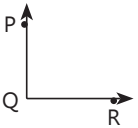
1. Name the given angles.

a.



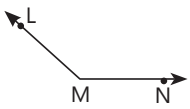
∠**ABC**

b.



∠PQR

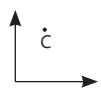
c.



∠LMN

2. State whether the given points are in interior, in exterior or on the angle.

a.

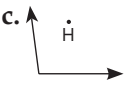


Interior

b.

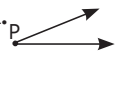
Exterior

c.



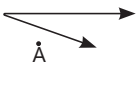
Interior

d.



On the angle

e.



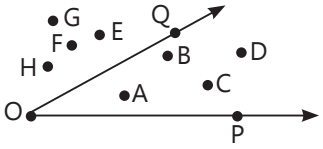
Exterior

3. Look at the angle and name all the points lying:

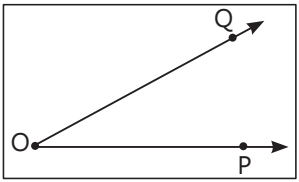
a. in the exterior of the angle E,F,G,H

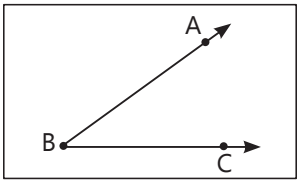
b. in the interior of the angle A,B,C,D

c. on the angle O,P,Q



4. Draw an angle having the exterior point N.

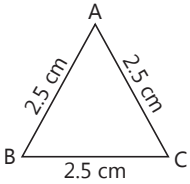




Exercise 16 E

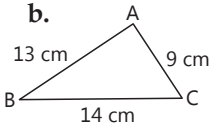
1. Identify each of the following triangle based on the length of the sides.

a.



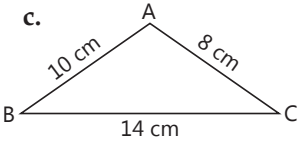
Equilateral triangle

b.



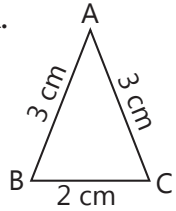
Scalene triangle

c.



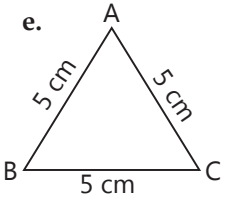
Scalene triangle

d.



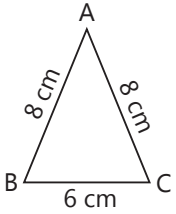
Isosceles triangle

e.



Equilateral triangle

f.



Isosceles triangle

Exercise 16 F

1. Fill in the blanks.

a. All the radii of a circle are equal.

b. A diameter of a circle always passes through the Centre of the circle.

c. Diameter of a circle is twice its radius.

d. A diameter is the longest chord of a circle.

e. The length of the boundary of a circle is called its arc.

2. State whether each of the following statements is True or False.

a. A circle has no sides. True

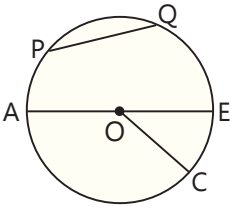
vb. A circle has no vertex. True

c. A circle has only one diameter. False

d. A circle is a polygon. False

e. Every chord is the diameter of the circle. False

3. In the given circle, identify the



a. Centre O

b. Radii OE, OA, OC

c. Diameter AE

d. Chord PQ,AE

4. Find the diameter of the circle whose:

a. Diameter = 2 × radius
Diameter = 2 × 4cm
= 8cm

b. Diameter = 2 × radius
Diameter = 2 × 2.5cm
= 5.0cm

c. Diameter = 2 × radius
Diameter = 2 × 6cm
= 12cm

d. Diameter = 2 × radius
Diameter = 2 × 7.5cm
= 15.0cm

5. Find the radius of the circle whose:

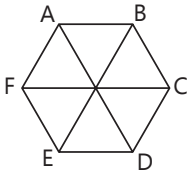
a. Radius = $\frac{1}{2}$ × diameter
Radius = $\frac{1}{2}$ × 18cm
Radius = 9cm

b. Radius = $\frac{1}{2}$ × diameter
Radius = $\frac{1}{2}$ × 12cm
Radius = 6cm

c. Radius = $\frac{1}{2}$ × diameter
Radius = $\frac{1}{2}$ × 34cm
Radius = 17cm

d. Radius = $\frac{1}{2}$ × diameter
Radius = $\frac{1}{2}$ × 22cm
Radius = 11cm

HOTS

1. Only one line or line segment can be drawn between two points A and B.
2. Infinite number of lines can pass through the point P.
3. Light coming from the torch is an example of ray.
4. 

$\overline{AB}$
$\overline{BC}$ $\overline{EF}$
$\overline{CD}$ $\overline{FA}$
$\overline{DE}$ $\overline{AB}$

5. A triangle has zero diagonals. A diagonals connects any two non – consecutive vertices of a polygon.

Chapter
17

Data Handling

Exercise 17 A

1. The sales of umbrellas in a shop is as under:

First week 50, second week 40, third week 45, fourth week 30.

Draw a pictograph to show the above data. One  represents 5 umbrellas.

Title of the pictograph : Sale of umbrella

Week	Number of Umbrellas
First	
Second	
Third	
Fourth	

2. The following table shows the various objects in a park.

Object	Tally marks	Number of Object
Bench	𝍸 𝍸	14
Swing	𝍸 𝍸 |||	13
Tree	𝍸 𝍸 𝍸	15
Gate	𝍸 |||	8

3. The following bar graph shows the favourite subjects of students.

Object	Tally marks	Number of Object
Computer	𝍸 𝍸 ||||	10
Printer	𝍸 𝍸 |||	14
Projector	𝍸 𝍸 |	11
Chairs	𝍸 𝍸 𝍸 𝍸	20

4. The following pictograph shows the number of pet animals sold in a month in a pet shop.

Animals in a pet shop	Number of animals sold in a month
Dog	
Cat	
Fish	
Parrot	
Rabbit	

Each symbol represents 1 pet.

Read the pictograph and answer the following questions :

a. How many dogs were sold in one month? **4**

b. Which pet was sold the most? **Parrot**

c. Which pet was sold the least? **Cat**

d. How many more fish were sold as compared to the rabbits? **1**

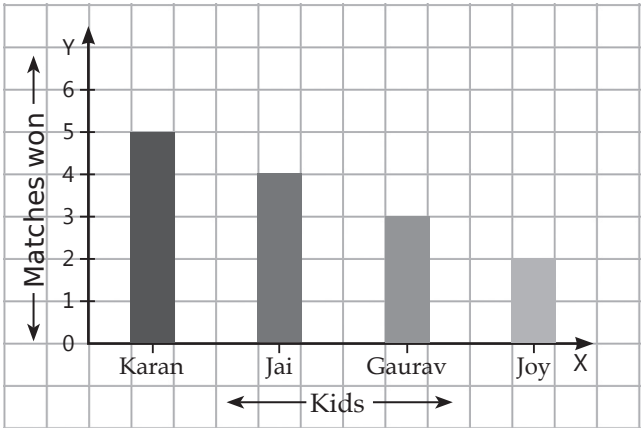
e. How many parrots were sold in the month? **8**

f. Give the suitable title for the pictograph. **Pet animals sold in a month.**

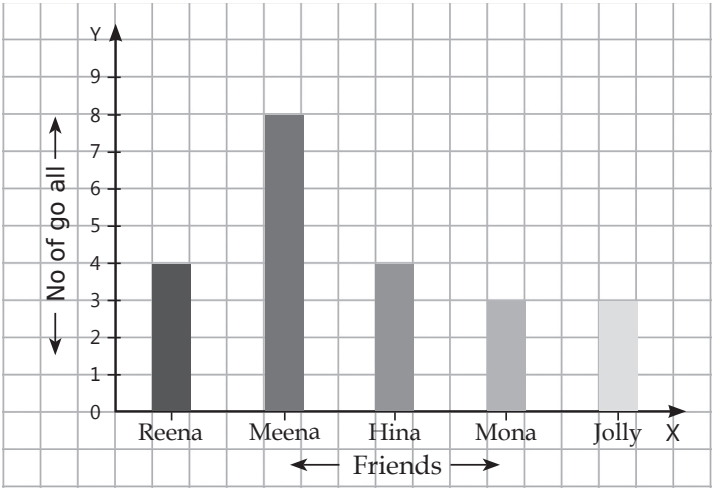
Exercise 17 B

1. Make vertical and horizontal bar graphs for the following data.

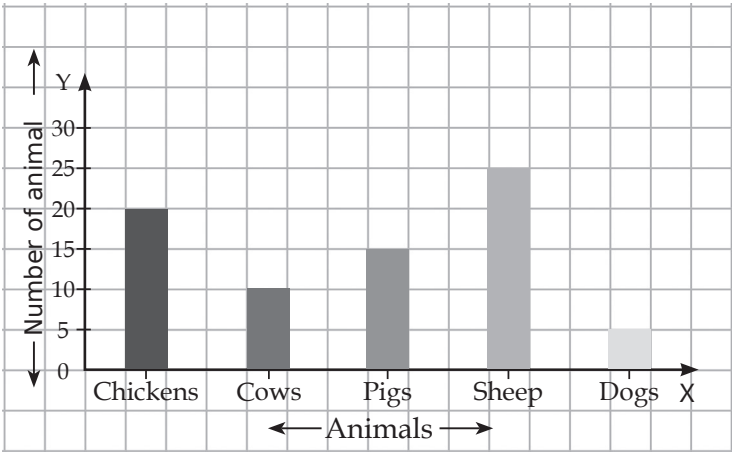
a. Four kids are playing Ludo. The following data shows the number of matches won by each of them.



b. Five friends are playing football. The following data shows the number of goals made by each player.



2. The following data shows the type and number of animals on a farmer's land.



3. The following bar graph shows the favourite subjects of students.

a. Others **b.** English **c.** Maths and Science

Chapter
18 Vedic Mathematics

Exercise 18 A

Subtraction using vedic method.

a.

	Th	H	T	O
	9	9	9	10
–	5	5	4	3
	4	4	5	7

b.

	H	T	O
	9	9	10
–	0	6	7
	9	3	3

c.

	T Th	Th	H	T	O
	9	9	9	9	10
–	0	0	5	7	8
	9	9	4	2	2

d.

	T Th	Th	H	T	O
	9	9	9	9	10
–	0	7	8	5	6
	9	2	1	4	4

e.

	T Th	Th	H	T	O
	9	9	9	9	10
–	4	5	1	2	3
	5	4	8	7	7

Exercise 18 B

Multiply using vedic method.

a. = 765 × (100–1)

= 76500 – 765

= 75735

	T Th	Th	H	T	O
			14	9	
		5	~~4~~	~~10~~	10
	7	~~6~~	~~5~~	~~0~~	~~0~~
–			7	6	5
	7	5	7	3	5

	L	T Th	Th	H	T	O
				9	9	
			5	~~10~~	~~10~~	10
	8	7	~~6~~	~~0~~	~~0~~	~~0~~
–				8	7	6
	8	7	5	1	2	4

b. 876 × 999

= 876 × (100–1)

= 876000 – 876 = 875124

c. 451 × 99

451 × (100 – 1)

= 876000 – 876 = 875124

	T Th	Th	H	T	O
			10	9	
		4	~~0~~	~~10~~	10
	4	~~5~~	~~1~~	~~0~~	~~0~~
–			4	5	1
	4	4	6	4	9

Exercise 18 C

Multiply using vedic method.

a. 2543 × 11

0 2 5 4 3

Add the numbers in each group

We get, 0 + 2 = 2

2 + 5 = 7

5 + 4 = 9

4 + 3 = 7; 3 as is it is.

Thus we get 27973 as the answer.

b. 564 × 11

Add the numbers in each group

We get, 0 + 5 = 5

5 + 6 = 11

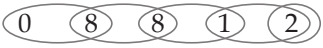
(1 and carry 1, which will be added to number at left position)

6 + 4 = 10; 4 as it is

(0 and carry 1, which will be added to number at left position)

This , we get 6204 as the answer.

c. 8812 × 11



Add the numbers in each group

We get, 0 + 8 = 8

8 + 8 = 16

(6 and carry 1, which will be added to number at left position)

8 + 1 = 9

1 + 2 = 3; 2 as it is

Thus we get 96932 as the answer.

Exercise 18 D

Multiply using vedic method.

a. 95 × 95

5 × 5 = 25

(9 + 1) × 9 = 10 × 9 = 90

We get 9025 as the answer.

b. 105 × 105

5 × 5 =25

(10 + 1) × 10 =11 × 10 =110

We get 11025 as the aswer.

c. 55×55

$5 \times 5 = 25$

$(5 + 1) \times 5 = 6 \times 5 = 30$

We get 3025 as the answer.

d. 25×25

$5 \times 5 = 25$

$(2 + 1) \times 2 = 3 \times 2 = 6$

We get 625 as the answer.