



Vista
Books

Based on the Syllabus prescribed by National Council
of Educational Research and Training (NCERT)



Maths



Teacher's Manual (Class 3-4)

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1 Numbers beyond 999

Exercise 1.1

1. Write the numbers :

a.

Th	H	T	O
3	0	2	5

b.

Th	H	T	O
5	3	5	0

c.

Th	H	T	O
3	7	0	6

d.

Th	H	T	O
1	3	6	2

e.

Th	H	T	O
1	2	3	7

2. Count the beads and write the number and number name :

a.

Th	H	T	O
5	6	0	1

five thousands six hundreds one.

b.

Th	H	T	O
7	3	8	5

seven thousands three hundreds eighty five.

c.

Th	H	T	O
9	4	6	3

nine thousands four hundreds sixty three.

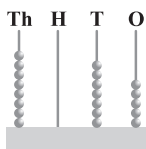
d.

Th	H	T	O
5	6	1	3

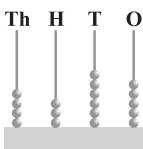
five thousands six hundreds thirteen.

3. Represent the number on the abacus.

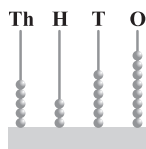
a. 8075



b. 4365



c. 5368



4. Write the number names.

a. 3009

Three thousands nine.

b. 3750

Three thousands seven.

c. 8309

Eight thousands three hundred nine.

d. 4325

Four thousands three.

e. 2156

Two thousands one hundred fifty six.

f. 4196

Four thousands one hundred ninety six.

g. 9460

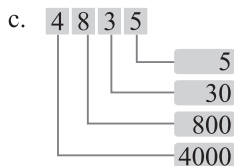
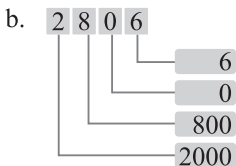
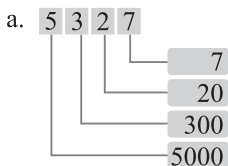
Nine thousands four hundreds sixty.

g. 9460

Nine thousands four hundreds sixty.

Exercise 1.2

1. Write the place values of each digit :



2. Write the place value of the coloured digit :

a. 6149	40	b. 9142	100
c. 3892	3000	d. 1455	5
e. 4695	600	f. 4368	4000
g. 2615	600	h. 8712	8000
i. 8216	200	h. 4501	0

3. Write the following numbers in expanded form.

- a. 4680 = 4000 + 600 + 80
 b. 3210 = 3000 + 200 + 10
 c. 7690 = 7000 + 600 + 90
 d. 5687 = 5000 + 600 + 80 + 7
 e. 9080 = 9000 + 0 + 80
 f. 2167 = 2000 + 100 + 60 + 7

4. Box the correct numeral.

- a. 6340 6403 **6043** b. **403** 430 4003
 c. 5060 **5006** 5600 d. **7090** 7009 7900
 e. 800 **8000** 80 f. 3080 **3800** 3008
 g. **9590** 9905 9095

Exercise 1.3

1. Compare each pair of numbers, Put > or < in the

- a. 1573 2451 b. 5401 6400 c. 3795 4379
 d. 2716 2716 e. 4995 4997 f. 113 1120
 g. 4375 4376 h. 7830 7730 i. 9003 9008
 j. 8592 9582 k. 2618 84 l. 6129 6058

2. Rewrite the numbers in increasing or ascending order.

- a. **1216** **1234** **1243** **3106**
 b. **2929** **9191** **9292** **9993**

c. 2506	9432	9377	9237
d. 4586	5586	6658	7586

3. Rewrite the numbers in decreasing or descending order.

a. 9675	7265	5625	2175
b. 5430	4350	3450	345
c. 9732	9432	9377	9237
d. 6592	2859	2759	2659

Mental Maths

A. Fill in the blanks :

- 10 hundreds = **1** thousand
- 1** hundred = 100 ones
- 1000 ones = **1** thousand
- 1000, 150, **200**, 250, **300**, **350**.
- If we add **1** to the greatest three digit number, we get the smallest four-digit number.
- If we subtract one from the smallest three-digit number, we get the **greatest** two-digit number.

Exercise 1.4

1. Form the smallest and greatest numbers using the given digits.

	Digits	Greatest Number	Smallest Number
a.	1,8,3,0	8310	1038
b.	9,3,5,4	9543	3459
c.	1,6,3,5	6531	1365
d.	1,5,9,7	9751	1579
e.	0,9,3,2	9320	2039

2. Round off to the nearest ten.

a. 90	b. 60	c. 80	d. 60
e. 20	f. 40	g. 50	h. 60
i. 100	j. 20	k. 30	l. 20

3. Separate and write the even and odd numbers into their respected boxes.

Even numbers
2054, 2866, 856, 9876, 7178 328, 2156, 51, 3198, 2466, 664, 198

Odd numbers
579, 5649, 2001, 3431, 4075

4. Match the following.

Number	Rounded off to nearest 10
a. 94	i. 50
b. 11	ii. 100
c. 46	iii. 70
d. 68	iv. 10
e. 95	v. 90

5. Write True or False.

- a. False b. True c. True
d. False e. False f. True

6. Write five numbers backward from the given numbers.

- a. 5642, 5641, 5640, 5639, 5638
b. 9288, 9287, 9286, 9285, 9284

7. Ans. Two thousand fifteen students.

8. Ans. $1986 > 1896$ So, school \times has more students.

9. Ans. 160 people rounded off to nearest 10.

10. Ans. The greatest number is 8653 using digit.

Fun with Maths

Write the place value of the coloured digit.

- Ans. 1. 6 tens 2. 8 hundreds 3. 5 ones
4. 4 tens 5. 1000 hundreds

Multiple Choice Questions

Tick (✓) the correct choice :

- Ans. 1. c. 9000 2. c. 3109 3. c. 9567 4. b. 3712

2

Roman Numerals

Exercise 2.1

1. Match the columns :

Column 1	Column 2
19	XXX
15	XVIII
12	XX
8	XXVII
20	XIX
18	XV
30	XII
27	VIII

2. Write the number name for each of the following. Also write the corresponding Hindu. Arabic numeral.

b. Sixteen	7	c. thirty four	34
d. fourteen	14	e. thirty nine	39
f. thirty five	35	g. nineteen	19
h. thirty one	31	i. thirty	30
j. eighteen	18		

3. Write True or False.

- a. False b. True c. False
d. True

4. Write the answers about yourself in Roman numerals.
Do it yourself.

Mental Maths

Write the time shown in the clocks.

Ans.



8 o'clock



6 o'clock



11 o'clock

Multiple Choice Questions

Tick (✓) the correct choice :

- Ans. 1. c. XXVIII 2. a. zero 3. a. 34 4. c. X

Fun with Maths

Read the message by decoding the Roman numeral.

Ans.

XIII	XXVI	XX	VIII	XIX
M	A	T	H	S
IX	XIX			
I	S			
VI	XXI	XIV		
F	U	N		

Ans. = Maths is fun.

3

Addition

Look Back

Read the statements and solve the questions.

1. Ans. 59 times.

7	4
+ 3	4
3	9

2. Ans. Total weight of both is 43 kg

2	2	kg
+ 2	1	kg
4	3	kg

3. Ans. Total runs scored by them by them are 80 runs.

4	8	runs
+ 3	2	runs
8	0	runs

Mental Maths

Fill in the blanks using addition facts.

Ans. 1. $875 + 0 = 875$

2. $154 + 0 = 154$

3. $9231 + 0 = 9231$

4. $5349 + 1 = 5350$

5. $2321 + 1427 = 1427 + 2321$

6. $1110 + 1230 = 1230 + 1110$

Exercise 3.1

1. Fill in the blanks :

Ans. a. $0 + 454 = 454$

b. $8708 + 0 = 8708$

c. $956 + 3794 = 3794 + 956$

b. $8691 + 1 = 8692$

2. Add :

Ans.

a.

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

b.

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

c.

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

d.

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

e.

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

f.

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

g.

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

h.

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

i.

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

j.

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

k.

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

l.

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

3. Arrange the following in columns and add.

Ans. a. $3316 + 2150 = 5466$

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

b. $3067 + 4222 + 1000 = 5466$

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

c. $5217 + 1431 = 6648$

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

d. $5143 + 3534 = 8677$

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

e. $8000 + 1000 = 9000$

Th	H	T	O
8	0	0	0
+1	0	0	0
9	0	0	0

f. $2364 + 7123 = 9487$

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

g. $3567 + 4222 + 1000 = 10000$ h. $3251 + 1403 + 4162 = 9487$

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

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

i. $3726 + 2152 + 1011 = 6889$ j. $4302 + 3024 + 2430 = 9756$

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

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

Exercise 3.2

1. Add :

Ans. a.

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

b.

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

c.

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

d.

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

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

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

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

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

2. Solve in your notebooks :

Ans. a. $6175 + 3250 = 9425$

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

b. $7354 + 1487 = 8841$

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

c. $5897 + 4033 = 9930$

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

d. $4645 + 5276 = 9921$

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

e. $1095 + 2345 = 3440$

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

f. $5593 + 2330 = 7923$

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

g. $4235 + 4583 = 8818$

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

h. $1999 + 6399 = 8398$

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

i. $2740 + 3887 = 6627$

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

j. $5110 + 3987 = 9097$

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

k. $8029 + 1375 = 9404$

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

l. $6998 + 2238 = 9233$

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

m. $6374 + 2518 = 8892$

Th	H	T	O
		①	
6	3	7	4
+	2	5	1
8	8	9	2

n. $1999 + 6399 = 8398$

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

4. Add the following numbers :

a. $9237 + 1085 + 4827 = 15149$

Th	H	T	O
	①	①	①
9	2	3	7
	1	0	8
+	4	8	2
15	1	4	9

b. $1326 + 2108 + 9046 = 12480$

Th	H	T	O
		②	
1	3	2	6
	2	1	0
+	9	0	4
12	4	8	0

c. $2658 + 2196 + 1929 = 6783$

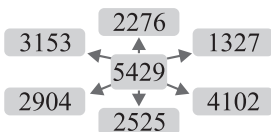
Th	H	T	O
	①	①	②
2	6	5	8
	2	1	9
+	1	9	2
6	7	8	3

d. $3013 + 1580 + 2607 = 7200$

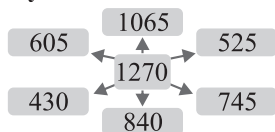
Th	H	T	O
	①	①	①
3	0	1	3
	1	5	8
+	2	6	0
7	2	0	0

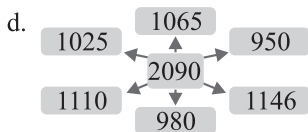
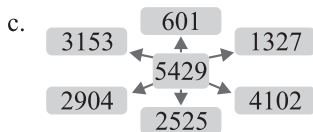
5. Complete the boxes by writing the number given in centre as the sum of two numbers in different ways.

Ans. a.



b.





Exercise 3.3

1. First find the actual sum and then estimated sum :

Ans. a.

4	7	→	4	7		
+	1	3	→	+	1	3
<hr/>			<hr/>			
6	0		6	0		

b.

3	5	→	3	5		
+	4	5	→	+	4	5
<hr/>			<hr/>			
8	0		9	0		

c.

2	4	3	→	2	4	0		
+	6	9	1	→	+	6	9	0
<hr/>				<hr/>				
9	3	4		9	3	0		

d.

3	6	6	→	3	7	0		
+	5	9	2	→	+	5	9	0
<hr/>				<hr/>				
9	5	8		9	6	0		

2. Estimate the sum to the nearest 10's by first rounding off the numbers. :

Ans. a. Rounding off the numbers to the nearest 10's

$$348 \rightarrow 350$$

$$472 \rightarrow 470$$

Ans : 820

Actual sum = 830

Estimated sum = **820**

b. Rounding off the numbers to the nearest 10's

$$2651 \rightarrow 2650$$

$$1279 \rightarrow 1280$$

Ans : 3930

Actual sum = 3930

Estimated sum = **3930**

c. Rounding off the numbers to the nearest 10's

$$1295 \rightarrow 1300$$

$$2365 \rightarrow 2370$$

Ans : 3670

Actual sum = 3660

Estimated sum = **3670**

Hots

Ans. Hariti has 3565 stamps, Noni has 3740 stamps and Mohan has 3740 stamps and Mohan has 3575 stamps.

Exercise 3.4

1. **Ans.** 5792 clocks produced in both days.

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

2. **Ans.** There are 8002 people in all in the village.

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

3. **Ans.** There were 1643 students in school in 2017.

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

4. **Ans.** Both boths contain 3025/ milk.

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

5. **Ans.** There were 1643 students in school in 2017.

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

6. **Ans.** Both boths contain 3025/ milk.

H	T	O
1	2	6
+ 1	1	2
2	3	3

7. **Ans.** There are 947 packets of milk in the dairy.

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

8. **Ans.** There are 1437 students in present in the school.

H	T	O
1	2	6
+ 1	1	2
2	3	3

9. **Ans.** There were 2237 pencils in all.

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

10. **Ans.** The library bought books in all.

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

11. Ans. There are 1159 flowers in the garden.

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

12. Ans. 4571 people visit in the Science Museum.

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

13. Ans. Sanya has 2386 marbles now.

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

Multiple Choice Questions

Tick (✓) the correct choice :

Ans. 1. b. 1185 2. b. number itself 3. a. 1577

Mental Maths

Complete the addition towers.

Ans. 1.

		612	
	274	338	
	110	164	174
24	86	78	96

2.

		412	
	218	194	
	129	89	109
56	73	16	89

Fun with Maths

In a magic square, the four numbers in each row, column and diagonal add up to the same total.

Ans. a.

1	15	14	4
12	6	7	9
8	10	11	5
13	3	2	16

b.

4	14	15	1
9	7	6	12
5	11	10	8
16	2	3	13

4

Subtraction

Look Back

Find :

1. Ans. 47 hens.

5	6
-	9
4	7

2. Ans. 53 sheep are more than cows.

9	3
-	4
5	3

3. Ans. 40 Animals will not get food eat.

1	8	9
+	1	4
4	0	

Exercise 4.1

1. Fill in the blanks :

a. $4569 - 4569 = 0$

b. $358 - 1 = 357$

c. $2974 - 2974 = 0$

d. $7414 - 0 = 7414$

2. Find the difference in each of the following :

a.

Th	H	T	O
6	8	9	8
-	4	2	4
2	6	5	1

b.

Th	H	T	O
4	6	7	5
-	2	4	2
2	2	5	3

c.

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

d.

Th	H	T	O
3	4	4	4
-	1	2	1
2	2	3	2

e.

Th	H	T	O
6	13	4	16
7	3	5	6
-	2	4	2
4	9	2	7

f.

Th	H	T	O
7	14	5	15
8	4	6	5
-	5	6	2
2	8	3	7

g.

Th	H	T	O
2	12	6	12
3	2	7	2
-	2	6	5
0	6	1	9

h.

Th	H	T	O
6	13	12	
5	7	4	2
-	2	3	5
3	3	8	8

i.

Th	H	T	O
6	13	12	
5	7	4	2
-	2	2	5
3	4	8	8

j.

Th	H	T	O
7	17	8	11
5	7	9	1
-	4	8	5
0	9	3	4

k.

Th	H	T	O
7	13	11	16
8	4	2	6
-	6	7	5
1	6	6	8

l.

Th	H	T	O
8	15	12	
9	9	6	3
-	7	7	6
2	1	9	9

m.

Th	H	T	O
6	13	4	16
7	2	4	2
-	6	4	7
0	7	6	9

n.

Th	H	T	O
7	13	10	16
8	4	1	6
-	3	7	4
4	6	6	8

o.

Th	H	T	O
1	10		
6	7	2	0
-	5	6	1
1	1	0	7

p.

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

3. Write the numbers in the columns and subtract.

Ans. a. $5346 - 4142 = 1204$

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

b. $9658 - 7247 = 2411$

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

c. $6746 - 1623 = 5123$

Th	H	T	O
6	7	4	6
-	1	6	2
5	1	2	3

d. $8798 - 5167 = 3631$

Th	H	T	O
8	7	9	8
-	5	1	6
3	6	3	1

e. $7864 - 2416 = 5448$

Th	H	T	O
		5	14
7	8	6	4
-	2	4	1
5	4	4	8

f. $8543 - 8423 = 120$

Th	H	T	O
8	5	4	3
-	8	4	2
	1	2	0

Exercise 4.2

1. Find the difference :

a. $4569 - 4569 = 0$

b. $358 - 1 = 357$

c. $2974 - 2974 = 0$

d. $7414 - 0 = 7414$

2. Find the difference in each of the following :

a.

Th	H	T	O
4	15	15	
5	6	5	6
-	4	8	9
0	7	6	4

b.

Th	H	T	O
6	11	6	12
7	7	7	2
-	3	4	2
3	7	4	9

c.

Th	H	T	O
7	13	13	13
8	4	4	3
-	3	6	5
4	7	8	8

d.

Th	H	T	O
	5	11	11
7	6	2	7
-	1	0	3
6	5	8	7

e.

Th	H	T	O
6	13	4	16
8	7	4	5
-	4	1	8
4	5	6	3

f.

Th	H	T	O
7	14	5	15
9	8	1	3
-	2	3	5
7	4	5	6

2. Find the difference in each of the following :

a.

H	T	O
5	9	14
6	0	4
-	9	5
5	0	4

b.

H	T	O
8	9	10
9	0	0
-	5	0
3	9	5

c.

H	T	O
6	11	15
7	2	0
-	2	7
4	4	6

d.

Th	H	T	O
8	10	9	10
9	1	0	0
-6	2	3	9
2	8	6	1

e.

Th	H	T	O
7	9	9	10
8	0	0	0
-7	1	8	6
0	8	1	4

f.

Th	H	T	O
4	9	9	10
5	0	0	0
-3	7	9	9
1	2	0	1

3. User shortcut to subtract.

a.

Th	H	T	O
6	11	15	
7	2	6	3
-4	2	7	1
2	9	9	2

b.

Th	H	T	O
		6	13
8	5	7	3
-3	4	6	6
5	1	0	7

c.

Th	H	T	O
	3	11	
5	4	1	5
-2	3	7	4
3	0	4	1

d.

Th	H	T	O
3	12	13	12
4	3	4	2
-2	3	4	3
1	9	9	9

e. $7000 - 6459 = 541$

Subtract 1 from both sides

$7000 - 1 =$

$6459 - 1 =$

Th	H	T	O
6	9	9	9
-6	5	5	8
5	4	1	

f. $9000 - 7864 = 1136$

Subtract 1 from both sides

$9000 - 1 =$

$7864 - 1 =$

Th	H	T	O
8	9	9	9
-7	8	6	3
1	1	3	6

g. $8000 - 6927 = 1073$

Subtract 1 from both sides

$9000 - 1 =$

$6927 - 1 =$

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

h. $4000 - 2125 = 1875$

Subtract 1 from both sides

$4000 - 1 =$

$2125 - 1 =$

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

i. $3000 - 1050 = 1950$

Subtract 1 from both sides

$3000 - 1 =$

$1050 - 1 =$

Th	H	T	O
2	9	9	9
-1	0	4	9
1	9	5	0

Exercise 4.3

Subtract each of the following and check the answers by addition.

Ans. 1.

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

→

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

2.

H	T	O
6	9	10
7	0	0
-6	3	1
6	9	

→

Check		
H	T	O
1		
	6	9
+6	3	1
7	0	0

3.

Th	H	T	O
2	15	10	
5	3	6	0
-3	1	6	8
<hr/>			
2	1	9	2

 →

Check			
Th	H	T	O
1	1		
2	1	9	2
+3	1	6	8
<hr/>			
5	3	6	0

4.

Th	H	T	O
3	9	10	
8	4	0	0
-4	1	1	6
<hr/>			
4	2	8	4

 →

Check			
Th	H	T	O
1	1		
4	2	8	4
+4	1	1	6
<hr/>			
8	4	0	0

5.

Th	H	T	O
7	9	12	
6	8	0	2
-5	4	9	8
<hr/>			
1	3	0	4

 →

Check			
Th	H	T	O
1	1		
1	3	0	4
+5	4	9	8
<hr/>			
6	8	0	2

6.

Th	H	T	O
4	9	10	
6	5	0	0
-4	3	8	9
<hr/>			
2	1	1	1

 →

Check			
Th	H	T	O
1	1		
2	1	1	1
+4	3	8	9
<hr/>			
6	5	0	0

Exercise 4.4

1. Solve the following.

Ans. a. $394 + 683 - 472 = 4142$

Th	H	T	O
1	1		
3	4	9	
+	6	8	3
<hr/>			
1	0	3	2

Th	H	T	O
0	9	13	
1	0	3	2
-	4	7	2
<hr/>			
5	6	0	

b. $1594 + 2061 - 1998 = 2411$

Th	H	T	O	
1	1			
1	5	9	4	
+	2	0	6	1
<hr/>				
3	6	5	5	

Th	H	T	O	
0	9	13		
3	6	5	5	
-	1	9	9	8
<hr/>				
1	6	5	7	

c. $4645 - 3878 + 1750 = 2517$

Th	H	T	O	
1				
4	6	4	5	
+	1	7	5	0
<hr/>				
6	3	9	5	

Th	H	T	O	
5	13	8	15	
6	3	9	5	
-	3	8	7	8
<hr/>				
2	5	1	7	

d. $3165 + 350 - 2173 = 1342$

Th	H	T	O
1			
3	1	6	5
+	3	5	0
<hr/>			
3	5	1	5

Th	H	T	O	
4	11			
3	5	1	5	
-	2	1	7	3
<hr/>				
1	3	4	2	

2. Estimate the answer by rounding off the numbers. solve to check your answer.

Ans. a.

Th	H	T	O
1	12	10	
8	3	1	
-	2	6	5
<hr/>			
5	6	6	

 → rounds to 10's →

Th	H	T	O
2	13		
8	3	0	
-	2	7	0
<hr/>			
5	6	0	

b.

Th	H	T	O
8	9	13	
9	0	3	
-	4	5	9
<hr/>			
4	4	4	

 → rounds to 10's →

Th	H	T	O
2	13		
9	0	0	
-	4	6	0
<hr/>			
4	4	0	

c.

Th	H	T	O
7	16		
5	8	6	
-	3	7	8
<hr/>			
2	0	8	

 → rounds to 10's →

Th	H	T	O
5	9		
5	8	0	
-	3	8	0
<hr/>			
2	1	0	

d.

Th	H	T	O
6	13	10	
7	4	0	
-	3	7	5
<hr/>			
3	6	5	

 → rounds to 10's →

Th	H	T	O
6	14		
7	4	0	
-	3	8	0
<hr/>			
3	6	0	

Hots

A shopkeeper had 135 eggs out of them 78 eggs he sold.
How many eggs are left with him now?

1	3	5	eggs
-	7	8	eggs
			eggs

Exercise 4.5

Subtract and do the following sums.

- Ans. 1.** Total passengers at railway station =
Boarded passengers from railway station =
passengers from railway station =

Th	H	T	O
1	15	17	
2	6	7	9
-	1	6	8
	9	9	4

Ans. 994 passengers are still waiting.

- 2.** Total people = 5926
Men = 1065
Children = + 2205
Total of man and children = 3270
∴ Number of women = 5926 - 3270
= 2656

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

Ans. The cost of T.V. set is ₹408 more.

- 3.** 9000 > 8592 =
Cost of T.V. set is more =
Cost of T.V. = - 8592
Cost of working machine = ₹ 408

Th	H	T	O
1	15	17	
9	0	0	0
-	8	5	9
	4	0	8

Ans. The cost of T.V. set is 408 more than washing machine

- 4.** Total savings in both months = ₹(3563 + 4218)
= ₹ 7781
Total expenditure = - ₹ 6010
Money is still left with Vineet = ₹ 1771

Ans. ₹1771 are still left with Vineet.

- 5.** A man has sweets = 4000
Total distribute sweets = (1356 + 2000)
= 3356
Sweets are left = 4000 - 3356
= 644

Th	H	T	O
3	9	9	10
4	0	0	0
-	3	3	5
	6	4	4

Ans. 644 sweets are left with the man.

- 6.** The cost of shoes =
Anita has =
She needs more money to buy the shoes =

Th	H	T	O
₹	2	5	4
-	₹	2	1
	₹	3	5

Ans. Amita needs ₹350 to buy the shoes.

	Th	H	T	O
7. Rahul has	0	9	9	10
Given away books	1	0	0	0
Books will have left with Rahul	—	4	5	6
		5	4	4

	Th	H	T	O
8. Total of red and yellow roses	3	14	9	10
Only yellow roses	4	5	0	0
∴ Number of red roses	—2	6	7	8
	1	8	2	2

Ans : There are 1822 red roses in the garden.

9. Team A made	= 274 runs
Team B will need to win	= 275 runs
Team b had made	= 183 runs
Tea B will need more runs	= 275 – 183
	= 92 runs

Ans : Tea b will need 92 more runs. to win.

10. Total children	=	Th	H	T	O
Number of children below the age of fifteen	=	8	4	5	0
Number of children above the age of fifteen	=	—4	1	6	5
		4	2	8	5

Ans. 4285 children were above the age of fifteen.

Multiple Choice Questions

Tick (✓) the correct choice :

Ans. 1. a. add 2. b. 766 3. a. 385 4. a. 4473

Fun with Maths

Colour the clouds red if the answer is a 1-digit number, green if it is a 2-digit number and yellow if it is a 3-digit number. One has been done for you.

Ans.

3	6	6
—3	2	6
0	4	0
Green		

4	3	3
—2	2	2
2	1	1
Yellow		

4	3	5
—4	3	4
0	0	1
Red		

5	1	5	4
—4	3	7	4
7	8	0	
Yellow			

9	9	9
—2	2	2
7	7	7
Yellow		

1	7	9	6
—1	7	8	7
0	0	0	9
Red			

6	5	4	4
—6	5	2	4
0	0	2	0
Green			

4	8	7	3
—4	4	0	6
4	6	7	
Yellow			

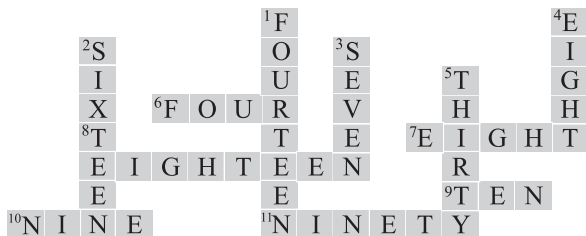
6	1	8	9
—6	1	8	2
0	0	0	7
Red			

5

Multiplication

Look Back

- Fill in the blanks in the given clues. Then complete the crossword by writing the answer in words. We have filled some blanks to guide you.



Across

- Four sevens = 28
- $8 \times 8 = 64$
- 3 times 6 = 18
- $5 \times 4 = 2 \times 10$
- $9 \times 5 = 45$
- $10 \times 9 = 90$

Down

- Double of 7 = 14
- Successor of 5 times 3
 $= 15 + 1 = 16$
- $7 \times 9 = 63$
- $5 \times 8 = 40$
- 6 fives = 30

Exercise 5.1

- Fill in the blanks :

- | | |
|--------------------------------|--|
| a. $0 \times 6394 = 0$ | b. $92 \times 57 = 57 \times 92$ |
| c. $119 \times 1 = 119$ | d. $424 \times 0 = 0$ |
| e. $0 \times 639 = 0$ | f. $1 \times 370 = 370$ |
| g. $16 \times 27 \times 0 = 0$ | h. $17 \times 15 \times 9 = 15 \times 9 \times 17$ |
| i. $4914 \times 1 = 4914$ | j. $190 \times 457 = 457 \times 190$ |

- Write the multiplication fact :

- | | |
|---|---------------------------------|
| a. $6 + 6 + 6 = 18$ | $\rightarrow 3 \times 6 = 18$ |
| b. $20 + 20 + 20 + 20 + 20 = 100$ | $\rightarrow 5 \times 20 = 100$ |
| c. $5 + 5 + 5 + 5 + 5 + 5 + 5 = 35$ | $\rightarrow 7 \times 5 = 35$ |
| d. $3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 = 27$ | $\rightarrow 9 \times 3 = 27$ |

3. Find the product:

a.	$\begin{array}{r} \text{T O} \\ \textcircled{1} \\ 3 \ 5 \\ \times 2 \\ \hline 7 \ 0 \end{array}$	b.	$\begin{array}{r} \text{T O} \\ \textcircled{1} \\ 2 \ 6 \\ \times 3 \\ \hline 7 \ 8 \end{array}$	c.	$\begin{array}{r} \text{T O} \\ \textcircled{3} \\ 1 \ 9 \\ \times 4 \\ \hline 7 \ 6 \end{array}$	d.	$\begin{array}{r} \text{T O} \\ \textcircled{2} \\ 7 \ 4 \\ \times 5 \\ \hline 3 \ 7 \ 0 \end{array}$
e.	$\begin{array}{r} \text{T O} \\ 2 \ 1 \\ \times 3 \\ \hline 6 \ 3 \end{array}$	f.	$\begin{array}{r} \text{T O} \\ 2 \ 2 \\ \times 4 \\ \hline 8 \ 8 \end{array}$	g.	$\begin{array}{r} \text{T O} \\ 3 \ 2 \\ \times 3 \\ \hline 9 \ 6 \end{array}$	h.	$\begin{array}{r} \text{T O} \\ 3 \ 3 \\ \times 2 \\ \hline 6 \ 6 \end{array}$
i.	$\begin{array}{r} \text{T O} \\ 3 \ 4 \\ \times 2 \\ \hline 6 \ 8 \end{array}$	j.	$\begin{array}{r} \text{T O} \\ 5 \ 3 \\ \times 1 \\ \hline 5 \ 3 \end{array}$	k.	$\begin{array}{r} \text{T O} \\ 2 \ 1 \\ \times 4 \\ \hline 8 \ 4 \end{array}$	l.	$\begin{array}{r} \text{T O} \\ 2 \ 3 \\ \times 3 \\ \hline 6 \ 9 \end{array}$
m.	$\begin{array}{r} \text{T O} \\ \textcircled{} \\ 8 \ 4 \\ \times 2 \\ \hline 1 \ 6 \ 8 \end{array}$	n.	$\begin{array}{r} \text{T O} \\ \textcircled{2} \\ 2 \ 4 \\ \times 5 \\ \hline 1 \ 2 \ 0 \end{array}$	o.	$\begin{array}{r} \text{T O} \\ \textcircled{4} \\ 1 \ 9 \\ \times 4 \\ \hline 1 \ 8 \ 2 \end{array}$	p.	$\begin{array}{r} \text{T O} \\ \textcircled{4} \\ 3 \ 5 \\ \times 8 \\ \hline 2 \ 8 \ 0 \end{array}$

Mental Maths

Ans. Monty

Exercise 5.2

1. Complete the grid and find the multiplication facts:

\times	5	8	11	15	10	16	20	18	13
1	5	8	11	15	10	16	20	18	13
2	10	16	22	30	20	32	40	36	26
3	15	24	33	45	30	48	60	54	39
4	20	32	44	60	40	64	80	72	52
5	25	40	55	75	50	80	100	90	65
6	30	48	66	90	60	96	120	108	78
7	35	56	77	105	70	112	140	126	91
8	40	64	88	120	80	128	160	144	104
9	45	72	99	135	90	144	180	162	117
10	50	80	110	150	100	160	200	180	130

8×3

2. Draw a line to match the numbers to the correct multiplication fact:

4×2	8×7	7×7	9×2
4×9	10×2	6×8	6×7
7×9	9×9	5×5	8×8
49	8	56	18
20	42	36	48
25	63	64	81

Exercise 5.3

1. Multiply the following :

a.	<table border="1"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td>7</td><td></td><td></td></tr> <tr><td>2</td><td>8</td><td></td></tr> <tr><td colspan="3">× 9</td></tr> <tr><td>2</td><td>5</td><td>2</td></tr> </tbody> </table>	H	T	O	7			2	8		× 9			2	5	2	b.	<table border="1"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td>3</td><td></td><td></td></tr> <tr><td>4</td><td>5</td><td></td></tr> <tr><td colspan="3">× 6</td></tr> <tr><td>2</td><td>7</td><td>0</td></tr> </tbody> </table>	H	T	O	3			4	5		× 6			2	7	0	c.	<table border="1"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td></td><td></td><td></td></tr> <tr><td>1</td><td>2</td><td>0</td></tr> <tr><td colspan="3">× 4</td></tr> <tr><td>4</td><td>8</td><td>0</td></tr> </tbody> </table>	H	T	O				1	2	0	× 4			4	8	0	d.	<table border="1"> <thead> <tr><th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr><td></td><td></td><td></td></tr> <tr><td>1</td><td>3</td><td>3</td></tr> <tr><td colspan="3">× 3</td></tr> <tr><td>3</td><td>9</td><td>9</td></tr> </tbody> </table>	H	T	O				1	3	3	× 3			3	9	9																				
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5	8	8																																																																																					

i.

Th	H	T	O
1	2		
5	4	7	
		×	3
1	6	4	1

j.

Th	H	T	O
2	2		
7	6	5	
		×	4
3	0	6	0

k.

Th	H	T	O
1	2		
5	3	5	
		×	5
2	6	7	5

l.

Th	H	T	O
1			
3	7	4	
		×	4
	7	4	8

Exercise 5.4

1. Multiply the following :

a.

Th	H	T	O
3	3	1	2
		×	3
9	9	3	6

b.

Th	H	T	O
2	3	2	0
		×	2
4	6	4	0

c.

Th	H	T	O
1	2	2	2
		×	4
4	8	8	8

d.

Th	H	T	O
1	2		
1	2	3	9
		×	6
7	4	3	4

e.

Th	H	T	O
2	2		
1	3	8	4
		×	4
5	5	3	6

f.

Th	H	T	O
1	2		
1	0	1	5
		×	5
5	0	7	5

g.

Th	H	T	O
1	2		
3	0	1	5
		×	2
6	0	3	0

h.

Th	H	T	O
1			
2	5	1	3
		×	3
7	5	3	9

i.

Th	H	T	O
1			
4	6	1	2
		×	2
9	2	2	4

2. Multiply the following and write the answer in the box.:

a.

Th	H	T	O
2	2	3	1
		×	3
6	6	9	3

b.

Th	H	T	O
1	1	0	1
		×	5
5	5	0	5

c.

Th	H	T	O
2	3	1	4
		×	2
4	6	2	8

d.

Th	H	T	O
2	2		
1	9	7	2
		×	3
5	9	1	6

e.

Th	H	T	O
1			
1	0	4	1
		×	4
4	1	6	4

f.

Th	H	T	O
1	1	2	
2	4	3	5
		×	4
9	7	4	0

g.

Th	H	T	O
2	3		
1	4	6	0
		×	6
8	7	6	0

h.

Th	H	T	O
3	1	1	4
		×	2
6	2	2	8

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

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

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

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

Exercise 5.5

1. Multiply the following :

a.		5	6
	×	4	2
		1	1
	+	2	2
		2	3
		5	2

b.		7	3
	×	4	9
		6	5
	+	2	9
		3	5
		7	7

c.		2	7
	×	1	3
		8	1
	+	2	7
		3	5
		1	

d.		2	4
	×	2	8
		1	9
	+	4	8
		6	7
		2	

e.		1	8	9
	×	3	1	
		1	8	9
	+	5	6	7
		5	8	5
		9		

f.		4	3	6
	×	1	4	
		1	7	4
	+	4	3	6
		6	1	0
		4		

g.		2	5	3
	×	2	2	
		5	0	6
	+	5	0	6
		5	5	6
		6		

h.		2	4	2
	×	2	2	
		4	8	4
	+	4	8	4
		5	3	2
		4		

2. Solve in your notebook :

a.		7	4
	×	1	6
		4	4
	+	7	4
		1	1
		8	4

b.		6	5
	×	2	7
		4	5
	+	1	3
		1	7
		5	5

c.		5	1
	×	4	8
		4	0
	+	2	0
		2	4
		4	8

d.		7	3
	×	4	9
		6	5
	+	2	9
		3	5
		7	7

e.		6	9
	×	5	3
		2	0
	+	3	4
		3	6
		5	7

f.		4	8
	×	3	8
		3	8
	+	1	4
		1	8
		2	4

g.		6	0
	×	4	2
		1	2
	+	2	4
		2	5
		2	0

h.		7	2
	×	2	8
		5	7
	+	1	4
		2	0
		1	6

i.		2	4	9
	×	3	4	
		9	9	
	+	7	4	
		8	4	
		6	6	

j.		1	8	6
	×	3	6	
		1	1	
	+	5	5	
		6	6	
		9	6	

k.		1	5	8
	×	5	4	
		6	3	
	+	7	9	
		8	5	
		3	2	

l.		4	9	4
	×	1	8	
		3	9	
	+	4	9	
		8	8	
		9	2	

Exercise 5.6

1. Fill in the boxes :

- | | | | |
|---------|---------|---------|---------|
| a. 990 | b. 160 | c. 30 | d. 5400 |
| e. 960 | f. 4760 | h. 700 | g. 600 |
| i. 270 | j. 5400 | k. 800 | l. 3900 |
| m. 6100 | n. 5610 | o. 1000 | |

Exercise 5.7

1. Each cupboard has = 1055 books
Total number of cupboards = 6

\therefore Total number of book = $1055 \times 6 = 6330$ books

Ans : There are 6330 books in the library.

2. The cost of 1 toy car = ₹48
The cost of 3 toy cars = ₹ (48×3)
= ₹144

Ans : Vicky will pay ₹144.

3. The cost of 1 book = ₹48
The cost of 4 books = (295×4)
= ₹1180.

Ans : Rajat will get ₹1180.

4. The weight of 1 book = 1260 g
Weight of 7 books = 1260×7 g
= 1260×7 g
= 8820 g
= 8 kg 820 g.

\therefore Total weight of 7 books are 8 kg 820 g.

5. 1 news paper has pages = 28
45 news paper have = 28×45 pages
= 1260 pages

$$\begin{array}{r}
 28 \\
 \times 40 \\
 \hline
 1120 \\
 + 1120 \\
 \hline
 1200
 \end{array}$$

6. A truck has 96 bags of rice
Each bag of rice has wt. = 32 kg
 \therefore 86 bags of rice have wt = 32×86 kg
= 2756 kg.
 \therefore The total weight of rice is 3275 kg in the truck.
7. 1 Child paid at the entrance = ₹72
 \therefore 25 children paid at the entrance = ₹ (75×25)
= ₹1875




\therefore ₹1875 were paid at the entrance.

8. 1 bouquet has flowers = 43
 \therefore 8 bouquets have flowers = 43×8
 = 344 flowers
 \therefore 344 flowers use for making 8 bouquets.
9. 1 Section has = 32 students
 Number of sections = 5
 \therefore Total students = 32×5
 = 160 students.
 There are 160 students in class 3.
10. 1 class has been given = 35 balloons
 \therefore 8 classes have been given = 35×8
 = 280 balloons
 \therefore 280 balloons used for decoration.

6

Division

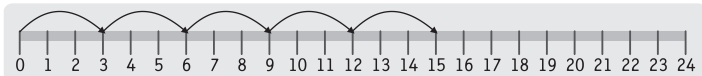
Exercise 6.1

1. Find out how many children will get the apples.
- a. Each child gets 12 apples.
 24  in equal groups of 12 = 2 groups.
 $24 \div 12 = 2$; 2 children will get 12 apples each.
- b. Each child gets 4 apples.
 24  in equal groups of 4 = 6 groups
 $24 \div 4 = 6$; 6 children will get 4 apples each.
- c. Each child gets 3 apples.
 24  in equal groups of 3 = 8 groups
 $24 \div 3 = 8$; 8 children will get 3 apples each.
 When we make equal groups, we know how many are in each group.
2. Now, divided the following using the repeated subtraction method.
- a. $25 \div 5$
- | | |
|---------------|---------|
| $25 - 5 = 20$ | 1 time |
| $25 - 5 = 15$ | 2 times |
| $15 - 5 = 10$ | 3 times |
| $10 - 5 = 5$ | 4 times |
| $5 - 5 = 0$ | 5 times |
- b. $16 \div 4$
- | | |
|---------------|---------|
| $16 - 4 = 12$ | 1 time |
| $12 - 4 = 8$ | 2 times |
| $8 - 4 = 4$ | 3 times |
| $4 - 4 = 0$ | 4 times |
- c. $12 \div 4$
- | | |
|--------------|---------|
| $12 - 4 = 8$ | 1 time |
| $8 - 4 = 4$ | 2 times |
| $4 - 4 = 0$ | 3 times |

Exercise 6.2

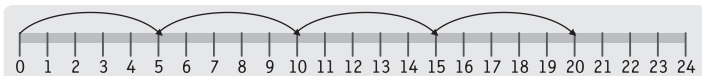
1. Now, solve the following on the number line.

a. $15 \div 3$



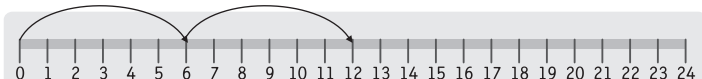
$$15 \div 3 = 5$$

b. $20 \div 5$



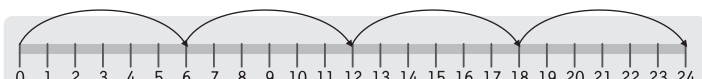
$$20 \div 5 = 4$$

c. $12 \div 6$



$$12 \div 6 = 2$$

d. $24 \div 6$



$$24 \div 6 = 4$$

Exercise 6.3

1. Now, complete the following table. One has been done for you.

Ans.

S.No.	Equation	Dividend	Divisor	Quotient
a	$2 \overline{) 18}$	18	2	9
b	$3 \overline{) 18}$	18	3	6
c	$5 \overline{) 15}$	15	5	3
d	$4 \overline{) 20}$	20	4	5
e	$9 \overline{) 18}$	18	9	2

e	$\begin{array}{r} 3 \\ 7 \overline{) 21} \end{array}$	21	7	3
f	$\begin{array}{r} 5 \\ 9 \overline{) 45} \end{array}$	45	9	5
g	$\begin{array}{r} 6 \\ 8 \overline{) 48} \end{array}$	48	8	6

2. Fill in the blanks :

- Ans. a. $15 \div 1 = 15$ b. $21 \div 1 = 21$ c. $12 \div 12 = 1$
d. $0 \div 7 = 0$ e. $7 \div 1 = 7$ f. $0 \div 20 = 0$
g. $18 \div 18 = 1$ h. $9 \div 0 = \text{meaningless}$
i. $42 \div 42 = 1$

3. Match the columns.

Ans.	QUOTIENT	QUESTION	REMAINDER
a.	6	$4 \overline{) 36}$	1
b.	5	$8 \overline{) 65}$	3
c.	9	$7 \overline{) 45}$	4
d.	4	$6 \overline{) 26}$	0
e.	8	$9 \overline{) 49}$	2

Exercise 6.4

1. Write two division facts for each multiplication fact :

- | | | |
|----------------------|-----------------|-----------------|
| a. $6 \times 4 = 24$ | $24 \div 4 = 6$ | $6 \div 6 = 1$ |
| b. $3 \times 4 = 12$ | $12 \div 3 = 4$ | $12 \div 4 = 3$ |
| c. $5 \times 3 = 15$ | $15 \div 3 = 5$ | $15 \div 5 = 3$ |
| d. $5 \times 6 = 30$ | $30 \div 6 = 5$ | $30 \div 5 = 6$ |
| e. $4 \times 5 = 20$ | $20 \div 5 = 4$ | $20 \div 4 = 5$ |
| f. $7 \times 8 = 56$ | $56 \div 8 = 7$ | $56 \div 7 = 8$ |
| g. $6 \times 3 = 18$ | $18 \div 3 = 6$ | $18 \div 6 = 3$ |
| h. $5 \times 2 = 10$ | $10 \div 2 = 5$ | $10 \div 5 = 2$ |

Hots

Ans. 72 chocolates.

Exercise 6.5

1. Now, solve the following in your notebook.

- | | | | | |
|--|--|--|--|--|
| a. $\begin{array}{r} 9 \\ 9 \overline{) 81} \\ - 81 \\ \hline 0 \end{array}$ | b. $\begin{array}{r} 9 \\ 5 \overline{) 45} \\ - 45 \\ \hline 0 \end{array}$ | c. $\begin{array}{r} 9 \\ 4 \overline{) 36} \\ - 36 \\ \hline 0 \end{array}$ | d. $\begin{array}{r} 9 \\ 3 \overline{) 27} \\ - 27 \\ \hline 0 \end{array}$ | e. $\begin{array}{r} 3 \\ 8 \overline{) 24} \\ - 24 \\ \hline 0 \end{array}$ |
| $81 \div 9 = 9$ | $45 \div 5 = 9$ | $36 \div 4 = 9$ | $27 \div 3 = 9$ | $24 \div 8 = 3$ |

$$\begin{array}{r} 5 \\ 5 \overline{) 25} \\ - 25 \\ \hline 0 \end{array}$$

$$25 \div 5 = 5$$

$$\begin{array}{r} 13 \\ 3 \overline{) 39} \\ - 39 \\ \hline 0 \end{array}$$

$$39 \div 3 = 13$$

$$\begin{array}{r} 5 \\ 7 \overline{) 35} \\ - 35 \\ \hline 0 \end{array}$$

$$35 \div 7 = 5$$

$$\begin{array}{r} 9 \\ 5 \overline{) 30} \\ - 30 \\ \hline 0 \end{array}$$

$$30 \div 5 = 6$$

$$\begin{array}{r} 6 \\ 6 \overline{) 36} \\ - 36 \\ \hline 0 \end{array}$$

$$36 \div 6 = 6$$

$$\begin{array}{r} 15 \\ 4 \overline{) 60} \\ - 40 \\ \hline 20 \\ - 20 \\ \hline 0 \end{array}$$

$$60 \div 4 = 15$$

$$\begin{array}{r} 9 \\ 2 \overline{) 18} \\ - 18 \\ \hline 0 \end{array}$$

$$18 \div 2 = 9$$

$$\begin{array}{r} 8 \\ 2 \overline{) 16} \\ - 16 \\ \hline 0 \end{array}$$

$$16 \div 2 = 8$$

$$\begin{array}{r} 8 \\ 8 \overline{) 64} \\ - 64 \\ \hline 0 \end{array}$$

$$64 \div 8 = 8$$

$$\begin{array}{r} 5 \\ 9 \overline{) 45} \\ - 45 \\ \hline 0 \end{array}$$

$$45 \div 9 = 5$$

$$\begin{array}{r} 6 \\ 7 \overline{) 42} \\ - 42 \\ \hline 0 \end{array}$$

$$42 \div 7 = 6$$

$$\begin{array}{r} 9 \\ 4 \overline{) 16} \\ - 16 \\ \hline 0 \end{array}$$

$$16 \div 4 = 4$$

$$\begin{array}{r} 2 \\ 6 \overline{) 12} \\ - 12 \\ \hline 0 \end{array}$$

$$12 \div 6 = 2$$

$$\begin{array}{r} 7 \\ 6 \overline{) 42} \\ - 42 \\ \hline 0 \end{array}$$

$$42 \div 6 = 7$$

$$\begin{array}{r} 6 \\ 8 \overline{) 48} \\ - 48 \\ \hline 0 \end{array}$$

$$48 \div 8 = 6$$

Exercise 6.6

1. Divide the following.

$$\begin{array}{r} 213 \\ 3 \overline{) 639} \\ - 639 \\ \hline 0 \end{array}$$

$$639 \div 3 = 213$$

$$\begin{array}{r} 211 \\ 4 \overline{) 844} \\ - 844 \\ \hline 0 \end{array}$$

$$844 \div 4 = 211$$

$$\begin{array}{r} 111 \\ 5 \overline{) 555} \\ - 555 \\ \hline 0 \end{array}$$

$$555 \div 5 = 111$$

$$\begin{array}{r} 412 \\ 2 \overline{) 824} \\ - 824 \\ \hline 0 \end{array}$$

$$824 \div 2 = 412$$

$$\begin{array}{r} 112 \\ 4 \overline{) 448} \\ - 448 \\ \hline 0 \end{array}$$

$$448 \div 4 = 112$$

$$\begin{array}{r} 204 \\ 2 \overline{) 408} \\ - 408 \\ \hline 0 \end{array}$$

$$408 \div 2 = 204$$

$$\begin{array}{r} 200 \\ 4 \overline{) 800} \\ - 800 \\ \hline 0 \end{array}$$

$$800 \div 4 = 200$$

$$\begin{array}{r} 211 \\ 4 \overline{) 633} \\ - 633 \\ \hline 0 \end{array}$$

$$633 \div 3 = 211$$

Exercise 6.7

1. Divide the following and find the quotient and remainder.

<p>a.</p> $\begin{array}{r} 11 \\ 5 \overline{) 55} \\ \underline{- 5} \\ 00 \\ \underline{- 5} \\ 0 \end{array}$ <p>Q = 8 R = 5</p>	<p>b.</p> $\begin{array}{r} 6 \\ 4 \overline{) 27} \\ \underline{- 24} \\ 03 \end{array}$ <p>Q = 8 R = 5</p>	<p>c.</p> $\begin{array}{r} 5 \\ 9 \overline{) 47} \\ \underline{- 45} \\ 2 \end{array}$ <p>Q = 8 R = 5</p>	<p>d.</p> $\begin{array}{r} 7 \\ 5 \overline{) 36} \\ \underline{- 35} \\ 1 \end{array}$ <p>Q = 7 R = 1</p>
<p>e.</p> $\begin{array}{r} 8 \\ 6 \overline{) 53} \\ \underline{- 48} \\ 5 \end{array}$ <p>Q = 8 R = 5</p>	<p>f.</p> $\begin{array}{r} 9 \\ 7 \overline{) 69} \\ \underline{- 63} \\ 6 \end{array}$ <p>Q = 9 R = 6</p>	<p>g.</p> $\begin{array}{r} 7 \\ 8 \overline{) 58} \\ \underline{- 56} \\ 2 \end{array}$ <p>Q = 7 R = 2</p>	<p>h.</p> $\begin{array}{r} 6 \\ 3 \overline{) 18} \\ \underline{- 18} \\ 0 \end{array}$ <p>Q = 6 R = 0</p>

Exercise 6.8

1. Now, divide the following :

<p>a.</p> $\begin{array}{r} 11 \\ 3 \overline{) 34} \\ \underline{- 3} \downarrow \\ 04 \\ \underline{- 3} \\ 1 \end{array}$ <p>Q = 54, R = 0</p>	<p>b.</p> $\begin{array}{r} 11 \\ 5 \overline{) 23} \\ \underline{- 20} \\ 3 \end{array}$ <p>Q = 4, R = 3</p>	<p>c.</p> $\begin{array}{r} 111 \\ 3 \overline{) 894} \\ \underline{- 8} \downarrow \\ 09 \\ \underline{- 8} \\ 18 \\ \underline{- 6} \end{array}$ <p>Q = 117, R = 6</p>	<p>d.</p> $\begin{array}{r} 163 \\ 3 \overline{) 652} \\ \underline{- 4} \downarrow \\ 25 \\ \underline{- 24} \\ 12 \\ \underline{- 12} \\ 8 \end{array}$ <p>Q = 163, R = 0</p>
---	---	--	---

2. Divide :

<p>a.</p> $\begin{array}{r} 19 \\ 3 \overline{) 58} \\ \underline{- 3} \downarrow \\ 28 \\ \underline{- 27} \\ 1 \end{array}$ <p>Q = 19 R = 1</p>	<p>b.</p> $\begin{array}{r} 10 \\ 3 \overline{) 72} \\ \underline{- 7} \downarrow \\ 02 \\ \underline{- 0} \\ 2 \end{array}$ <p>Q = 10 R = 2</p>	<p>c.</p> $\begin{array}{r} 12 \\ 8 \overline{) 99} \\ \underline{- 8} \downarrow \\ 19 \\ \underline{- 16} \\ 3 \end{array}$ <p>Q = 12 R = 3</p>	<p>d.</p> $\begin{array}{r} 11 \\ 6 \overline{) 69} \\ \underline{- 6} \downarrow \\ 09 \\ \underline{- 6} \\ 3 \end{array}$ <p>Q = 11 R = 3</p>
---	--	---	--

$$\begin{array}{r} 15 \\ 4 \overline{)61} \\ \underline{-4\downarrow} \\ 21 \\ \underline{-20} \\ 1 \end{array}$$

Q = 15
R = 1

$$\begin{array}{r} 6 \\ 5 \overline{)31} \\ \underline{-30} \\ 1 \end{array}$$

Q = 6
R = 1

$$\begin{array}{r} 5 \\ 9 \overline{)52} \\ \underline{-45} \\ 7 \end{array}$$

Q = 5
R = 7

$$\begin{array}{r} 22 \\ 2 \overline{)44} \\ \underline{-4\downarrow} \\ 04 \\ \underline{-4} \\ 0 \end{array}$$

Q = 22
R = 0

3. Divide and find the quotient and remainder.

$$\begin{array}{r} 120 \\ 3 \overline{)362} \\ \underline{-3\downarrow} \\ 06 \\ \underline{-6\downarrow} \\ 02 \\ \underline{-0} \\ 2 \end{array}$$

Q = 120
R = 3

$$\begin{array}{r} 111 \\ 4 \overline{)445} \\ \underline{-4\downarrow} \\ 04 \\ \underline{-4\downarrow} \\ 05 \\ \underline{-4} \\ 1 \end{array}$$

Q = 111
R = 1

$$\begin{array}{r} 173 \\ 2 \overline{)347} \\ \underline{-2\downarrow} \\ 14 \\ \underline{-14\downarrow} \\ 07 \\ \underline{-6} \\ 1 \end{array}$$

Q = 173
R = 1

$$\begin{array}{r} 18 \\ 6 \overline{)108} \\ \underline{-6\downarrow} \\ 48 \\ \underline{-48\downarrow} \\ 0 \end{array}$$

Q = 18
R = 0

$$\begin{array}{r} 141 \\ 4 \overline{)564} \\ \underline{-4\downarrow} \\ 16 \\ \underline{-16\downarrow} \\ 4 \\ \underline{-4} \\ 0 \end{array}$$

Q = 141
R = 0

$$\begin{array}{r} 179 \\ 2 \overline{)358} \\ \underline{-2\downarrow} \\ 15 \\ \underline{-14\downarrow} \\ 18 \\ \underline{-18} \\ 0 \end{array}$$

Q = 179
R = 0

$$\begin{array}{r} 128 \\ 5 \overline{)640} \\ \underline{-5\downarrow} \\ 14 \\ \underline{-10\downarrow} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

Q = 128
R = 0

$$\begin{array}{r} 148 \\ 3 \overline{)445} \\ \underline{-3\downarrow} \\ 14 \\ \underline{-12\downarrow} \\ 1 \end{array}$$

Q = 148
R = 1

Mental Maths

Ans. 19 balloons.

Exercise 6.9

1. Find the quotient and remainder :

a. Q = 61, R = 0

b. Q = 7, R = 8

c. Q = 6, R = 8

d. Q = 10, R = 0

e. Q = 54, R = 0

f. Q = 95, R = 0

g. Q = 61, R = 5

h. Q = 20, R = 5

Exercise 6.10

1. 10 buses carry = 950 people
1 bus carries = $950 \div 10$
= 95 people
 \therefore 95 people can travel by each bus.

$$\begin{array}{r} 95 \\ 10 \overline{)950} \\ \underline{-90} \\ 50 \\ \underline{-50} \\ 0 \end{array}$$

2. 9 necklaces have = 270 beads
1 necklace has = $270 \div 9$
= 30 beads.
 \therefore There are 30 beads in each necklace.

$$\begin{array}{r} 30 \\ 10 \overline{)270} \\ \underline{-27} \\ 00 \\ \underline{-0} \\ 0 \end{array}$$

3. 8 friends will get stickers = 96
1 friend will get stickers = $96 \div 8$
= 12
 \therefore 12 stickers will get each one.

$$\begin{array}{r} 30 \\ 10 \overline{)270} \\ \underline{-27} \\ 00 \\ \underline{-0} \\ 0 \end{array}$$

4. 2 baskets have = 242 apples
1 basket has = $242 \div 2$
= 121 apples
 \therefore 121 apples should be packed in each basket.

$$\begin{array}{r} 121 \\ 10 \overline{)242} \\ \underline{-2} \\ 04 \\ \underline{-4} \\ 02 \\ \underline{-2} \\ 0 \end{array}$$

5. Tanvi has a 180 cm long rope.
She wants to divide it to 9 parts.
Length of 1 part = $180 \div 9 = 20$ cm

$$\begin{array}{r} 20 \\ 9 \overline{)180} \\ \underline{-18} \\ 00 \\ \underline{-0} \\ 0 \end{array}$$

\therefore 20 cm will be the length of each rope.

6. Total days = 847 day
 Days in a week = 7 days
 \therefore Number of weeks = $847 \div 7$
 = 121 weeks.

$$\begin{array}{r} 121 \\ 9 \overline{)847} \\ \underline{-7} \\ 14 \\ \underline{-14} \\ 07 \\ \underline{-7} \\ 0 \end{array}$$

Multiple Choice Questions

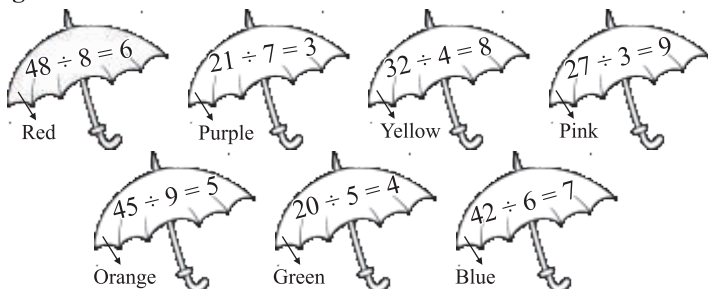
Tick (✓) the correct choice :

- Ans. 1. a. 123 2. c. 1 3. b. not possible
 4. b. 0

Fun with Maths

Colour the question umbrella to match the colours of the answer rectangle.

Ans.



7

Fraction

Exercise 7.1

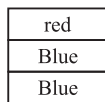
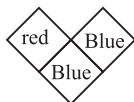
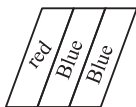
1. Shade or colour one-half.

Ans.



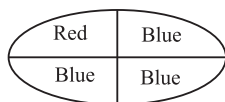
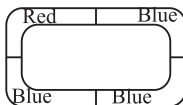
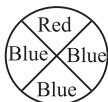
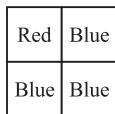
2. Colour to show one-third in red and two-thirds in blue.

Ans.



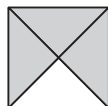
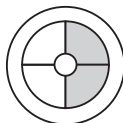
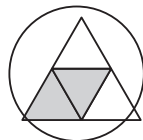
3. Colour to show one-fourth in red and three-fourths in blue.

Ans.



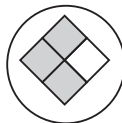
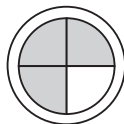
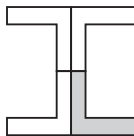
4. Ring the shapes where is $\frac{2}{4}$ green.

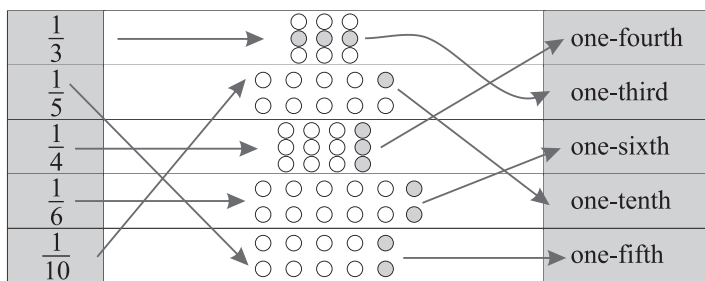
Ans.



5. Ring the shapes where $\frac{3}{4}$ is orange.

Ans.





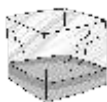
Mental Maths

1. Choose a fraction to show the amount of liquid in each container.

Ans.



$$\frac{3}{4} \quad \frac{1}{2} \quad \frac{2}{3} \quad \checkmark$$



$$\frac{1}{4} \quad \frac{1}{2} \quad \frac{3}{4} \quad \checkmark$$



$$\frac{1}{3} \quad \frac{1}{2} \quad \frac{3}{4} \quad \checkmark$$



$$\frac{1}{4} \quad \frac{1}{3} \quad \frac{2}{3} \quad \checkmark$$

Hots

Ans. 1. $\frac{4}{11}$

2. $\frac{7}{11}$

3. $\frac{2}{11}$

4. $\frac{4}{11}$

Exercise 7.2

1. Circle one-half.

Ans. a.



b. $14 \div 2 = 7$
 $\frac{1}{2}$ of 14 = 7



c.



Exercise 7.2

1. Circle one-third.

Ans. a.



b.

$$\frac{12 \div 3 = 4}{\frac{1}{3} \text{ of } 12 = 4}$$



c.



3. Circle one-fourth.

Ans. a.



b.

$$\frac{16 \div 4 = 4}{\frac{1}{4} \text{ of } 16 = 4}$$



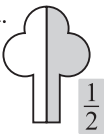
c.



Exercise 7.3

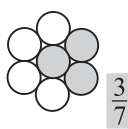
1. First write the fraction for shaded part then find the numerator and denominator.

Ans. a.



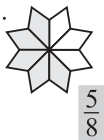
Numerator = $\frac{1}{2}$
Denominator = $\frac{2}{2}$

b.



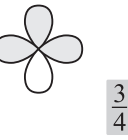
Numerator = $\frac{3}{7}$
Denominator = $\frac{7}{7}$

c.

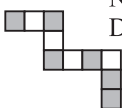






Numerator = $\frac{5}{8}$
Denominator = $\frac{8}{8}$

d.



Numerator = $\frac{3}{4}$
Denominator = $\frac{4}{4}$

- e.  Numerator = $\frac{6}{10}$
Denominator = $\frac{6}{10}$
- f.  Numerator = $\frac{3}{6}$
Denominator = $\frac{3}{6}$
- g.  Numerator = $\frac{7}{8}$
Denominator = $\frac{7}{8}$
- h.  Numerator = $\frac{3}{8}$
Denominator = $\frac{3}{8}$
- i.  Numerator = $\frac{1}{4}$
Denominator = $\frac{1}{4}$

2. Write the fraction with.

- a. Numerator 2, Denominator 5 $\frac{2}{5}$
- b. Numerator 4, Denominator 10 $\frac{4}{15}$
- c. Numerator 3, Denominator 7 $\frac{3}{7}$
- d. Numerator 1, Denominator 6 $\frac{1}{6}$
- e. Numerator 4, Denominator 8 $\frac{4}{8}$

3. Write the fraction for the following word problems.

- a. $\frac{11}{15}$ b. $\frac{15}{24}$ c. $\frac{3}{5}$ d. $\frac{4}{12}$ e. $\frac{5}{11}$
- f. $\frac{1}{5}$ g. 3 h. $\frac{5}{8}$ $\frac{5}{11}$

Life skills


















First colour the flag with 3 different colours (e.g. green orange and blue) and then answer the following questions.

What is the fraction of :

- Ans. 1. $\frac{1}{3}$ 2. $\frac{1}{3}$ 3. $\frac{1}{3}$ 4. $\frac{2}{3}$ 5. $\frac{2}{3}$

Fun with Maths

Match the following :

one-fifth					$\frac{3}{4}$
one-fourth					$\frac{1}{3}$
one-half					$\frac{1}{4}$
three-fourth					$\frac{1}{5}$
one-third					$\frac{1}{2}$

Multiple Choice Questions

Tick (✓) the correct choice :

Ans. 1. a. one-third 2. c. three-fourths 3. c. 7

8

Geometrical shapes

Look Back

1. Now, write the name of the object having the shape as :

Ans.

Cube	Cuboid	Cylinder	Cone	Sphere
b., f, i	h	c, l	a, g, j	d

2. Look at the following picture and write the number of :

a. 2 b. 8 c. 2 d. 4

Exercise 7.1

1. Name the line segments in each of these figures.

- Line segment = PQ, QR, RS, SP
- Line segment = AB, BC, CD, DE, EA

2. Only one line segment can draw passing through these points.

A ————— B

3. Fill in the blanks :

Ans. a. one b. two c. definite d. position
e. \overleftrightarrow{MN}

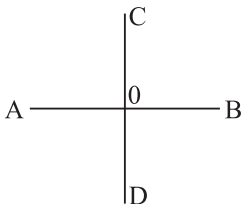
Exercise 7.1

1. Measure each of the following line-segments.

Ans. a. do it yourself.

2. Do the following :

Ans. a. do these yourself.
b. do these yourself.
c. Horizontal line segment is AB
Vertical line segment is CD
Point of intersection is O



Exercise 7.1

1. Fill in the blanks :

Ans. a. 4, 4 b. equal c. 3, 3 d. no
e. equal

2. Name the shape that you will get if you trace the outline of :

a. Rectangle b. Circle c. Rectangle d. Square

3. Yes 4. Yes 5. Yes 6. 4

7. 3

8. Measure the lengths of sides of following figures :

Ans. Do it yourself.

Mental Maths

Count the number of rectangles in each case.

Ans. a. 3 b. 16 c. 12

Exercise 8.4

1. Tick (✓) the correct word in each sentence.

- a. The watermelon has a (plane/curved) surface. ✓
b. The football has a (plane/curved) surface. ✓
c. The top of your teacher's table has a (plane/curved) surface. ✓
d. The ball of wool has a (plane/curved) surface. ✓

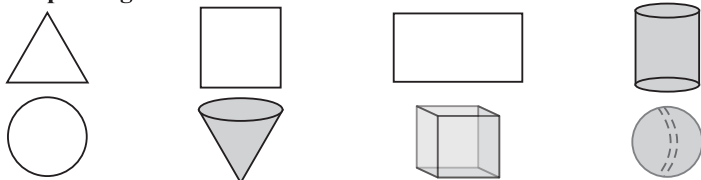
2. **Strike off the wrong answer.**

- a. Yes b. No c. No d. Yes
e. Yes f. No

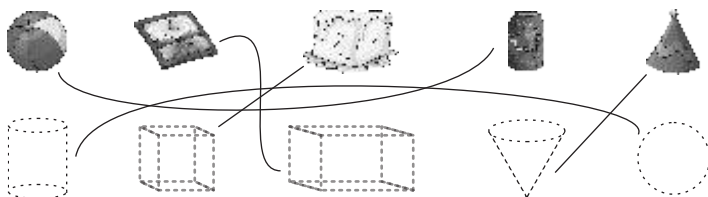
3. **Answer True or False :**

- a. True b. False c. True d. True
e. False f. True g. True

4. **Look at the plane and solid shapes. Colour only the solid shapes in green.**



5. **Match these objects with their appropriate solid-shape. Draw on the dotted lines and.**



Multiple Choice Questions

Tick (✓) the correct choice :

Ans. 1. b. four 2. a. six 3. b. twelve 4. a. no

Fun with Maths

Look at the pictures given below. Tick (✓) the shape in the table.

Ans.

Objects	Rectangle	Circle	Square	Triangle
CD		✓		
Book	✓			
Ball		✓		

Mirror			✓	
Clock		✓		
Table	✓			

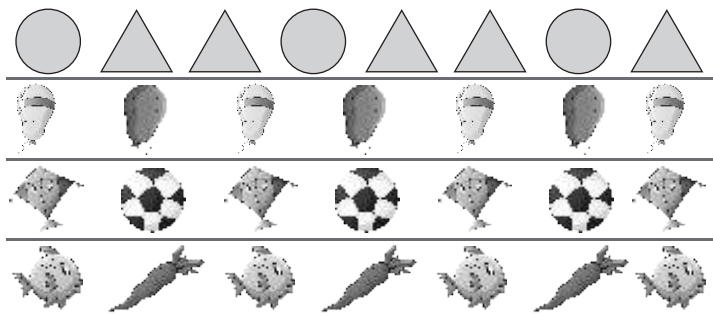
9

Patterns and Symmetry

Look Back

Try to draw the next shape/figure in the following patterns :

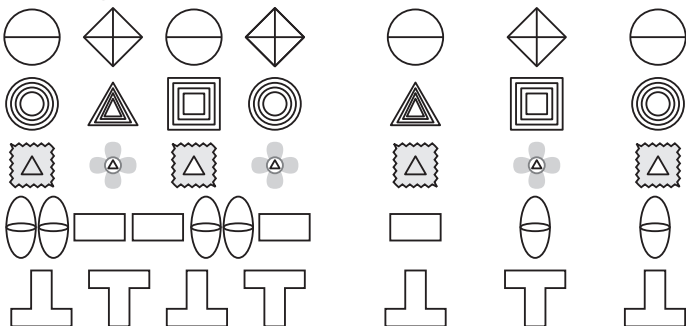
Ans.



Exercise 9.1

1. Look for the pattern and complete the series for each of the following :

Ans.

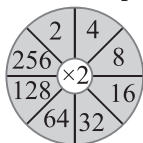


2. Look for the pattern and write next 3 terms.

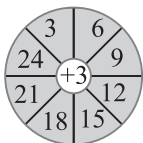
- Ans. a. 45, 55, 65 b. 110, 160, 220
c. 16, 19, 22 d. 80, 110, 145

3. Look for the pattern and write next 3 terms.

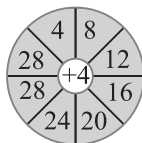
Ans. a.



b.



c.



Exercise 9.2

1. Complete the tiling patterns and colour them accordingly.

Ans. Do it yourself.

2. Colour the tiles to make patterns.

Ans. Do it yourself.

3. Create your own patterns and colour them.

Ans. Do it yourself.

Exercise 9.3

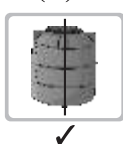
Try to make these shapes by joining pieces of the tangram. Practice more using your tangram puzzles.

Ans. Do it yourself.

Exercise 9.4

1. Tick (✓) the images which are symmetrical.

Ans. a.



b.

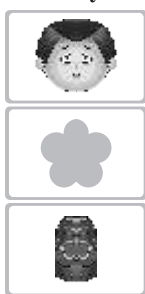


d.

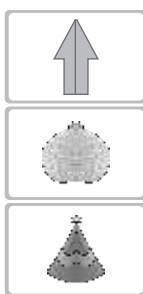


2. Complete the following pictures so that the right and the left side look symmetrical.

Ans. a.



b.



c.



2. Title the house shown below using tiles of different colours and shapes. Also circle the given shape that can be used to tile the house.

Ans. Do it yourself.

10 Measurement

Look Back

Try to draw the next shape/figure in the following patterns :

Ans.

- a. The weight of a pumpkin.



L Kg m

- b. The amount of medicine in a bottle



mL cm g

- c. The length of a train.



L Kg m

- d. The weight of a rice sack.



L Kg m

- e. The amount of water in the water tank.



L Kg m

- f. The length of a spoon.



cm g mL

Exercise 10.1

1. Change into cm :

- | | |
|--------------------------------|--------------------------|
| a. 12 m = 1200 cm | b. 7 m = 700 cm |
| c. 6 m 18 cm = 618 cm | d. 25 m = 2500 cm |
| e. 17 m 28 cm = 1728 cm | f. 42 m = 4200 cm |

2. Change into m :

a. 7 km = **7000** m

c. 3 km = **3000** m

e. 6 km 218 m = **6218** m

b. 5 km = **5000** m

d. 4 km 15 m = **4015** m

f. 9 km = **9000** m

3. Change into m and cm :

a. 893 cm = **8** m **93** cm

b. 736 cm = **7** m **36** cm

c. 438 cm = **4** m **38** cm

d. 1829 cm = **18** m **29** cm

e. 6128 cm = **61** m **28** cm

f. 3856 cm = **38** m **56** cm

4. Change into km and m :

a. 2815 m = **2** km **815** m

b. 8345 m = **8** km **348** m

c. 7603 m = **7** km **603** m

d. 1230 m = **1** km **230** m

e. 9987 m = **9** km **987** m

f. 6300 m = **6** km **300** m

Exercise 10.2

1. Add :

Ans.

a.

m	cm
47	52
+ 22	17
69	69

b.

m	cm
① 68	60
+ 55	32
123	92

c.

m	cm
① 23	48
+ 54	73
78	21

d.

m	cm
①① 33	① 93
+ 26	39
60	32

a.

km	m
① 64	① 250
+ 26	570
90	820

b.

km	m
①① 78	① 750
+ 24	250
128	150

c.

km	m
56	317
+ 83	470
139	787

d.

km	m
① 28	① 239
+ 59	741
87	980

2. Add :

Ans. a. 203 m 56 cm + 16 m
= 219 m 68 cm

m	cm
47	52
+ 22	17
69	69

b. 140 m 23 cm + 79 m 56 cm
= 219 m 79 cm

m	cm
140	23
+ 79	56
219	79

c. $320 \text{ m } 30 \text{ cm} + 140 \text{ m}$
 $4 \text{ cm} + 160 \text{ m } 8 \text{ cm}$
 $= 219 \text{ m } 68 \text{ cm}$

m	cm
①	
320	30
140	04
+160	08
620	42

d. $45 \text{ km } 709 \text{ m} + 78 \text{ km}$
 $125 \text{ m} + 142 \text{ km } 42 \text{ m}$
 $= 265 \text{ km } 876 \text{ m}$

km	m
①	① ①
45	709
78	125
+142	042
265	876

e. $38 \text{ m } 656 \text{ m} + 79 \text{ km}$
 $484 \text{ m} = 118 \text{ m } 140 \text{ cm}$

km	m
① ① ① ①	
38	656
+79	494
118	820

f. $34 \text{ km } 684 \text{ m} + 189 \text{ km}$
 $590 \text{ m} = 224 \text{ km } 274 \text{ m}$

km	m
① ① ① ①	
34	684
+189	590
224	274

3. Subtract :

Ans. a.

m	cm
38	38
-16	20
22	18

b.

m	cm
84	72
-52	51
32	31

c.

m	cm
④ ⑤	⑬ ⑱
56	48
-27	69
28	79

d.

m	cm
①	①
24	02
+15	68
08	34

e.

km	m
⑥ ⑱	② ⑭ ⑩
78	350
-59	275
19	075

f.

km	m
93	300
+62	100
31	200

g.

km	m
⑥ ⑫	① ⑭ ⑯
72	256
+66	067
06	189

h.

km	m
① ⑨ ⑨	⑮
200	500
+100	800
099	700

4. Subtract :

Ans. a. $33 \text{ m } 50 \text{ cm} - 17 \text{ m } 69 \text{ cm}$
 $= 15 \text{ m } 81 \text{ cm}$

km	m
② ⑫	⑨ ⑮
33	50
-17	69
15	81

b. $45 \text{ m } 79 \text{ cm} - 28 \text{ m } 98 \text{ cm}$
 $= 16 \text{ m } 81 \text{ cm}$

km	m
③ ⑭	⑮
45	79
-28	98
16	81

c. $352\text{ m } 61\text{ cm} - 27\text{ km}$
 $73\text{ cm} =$

m	cm
4 11	15 11
3 5 2	6 1
- 2 7	7 3
3 2 4	8 8

d. $262\text{ m } 28\text{ cm} - 217\text{ m } 67\text{ cm}$
 $= 44\text{ m } 61\text{ cm}$

m	cm
5 11	12
2 6 2	2 8
- 2 1 7	6 7
4 4	6 1

e. $175\text{ m } 100\text{ cm} - 27\text{ km}$
 $135\text{ m} = 147\text{ km } 965\text{ m}$

km	m
6 14	10 9 11
1 7 5	1 0 0
- 2 7	1 3 5
1 4 7	9 6 5

f. $80\text{ m } 532\text{ cm} - 17\text{ km } 636\text{ m}$
 $= 62\text{ km } 896\text{ m}$

km	m
7 9	14 12 12
8 0	5 3 2
- 1 7	6 3 6
4 4	8 9 6

g. $350\text{ km } 105\text{ m} - 27\text{ km}$
 $66\text{ m} = 325\text{ km } 36\text{ m}$

km	m
4 10	9 15
3 5 0	1 0 5
- 2 7	6 6
3 2 3	3 9

h. $600\text{ km } 399\text{ m} - 99\text{ km } 476\text{ m}$
 $= 540\text{ km } 917\text{ m}$

km	m
5 9 9	13 8 15
6 0 0	3 9 5
- 5 9	4 7 8
5 4 0	9 1 7

i. $300\text{ km } 218\text{ m} - 139\text{ km}$
 $578\text{ m} = 160\text{ km } 646\text{ m}$

km	m
4 10	9 15
3 0 0	5 8 5
- 1 3 9	3 6 5
1 6 0	9 5 0

j. $50\text{ km } 40\text{ m} - 20\text{ km } 460\text{ m}$
 $= 29\text{ km } 944\text{ m}$

km	m
4 9	13 10
5 0	4 0 4
- 2 0	4 6 0
2 9	9 4 4

Exercise 10.3

1. Change into grams.

a. $6\text{ kg} = \mathbf{6000\text{ g}}$

b. $18\text{ kg} = \mathbf{18000\text{ g}}$

c. $8\text{ kg } 295\text{ g} = \mathbf{8295\text{ g}}$

d. $3\text{ kg } 25\text{ g} = \mathbf{3025\text{ g}}$

2. Change into kilograms and grams :

a. $1006\text{ g} = \mathbf{1\text{ kg } 6\text{ g}}$

b. $4030\text{ g} = \mathbf{4\text{ kg } 30\text{ g}}$

c. $2546\text{ g} = \mathbf{2\text{ kg } 546\text{ g}}$

d. $8490\text{ g} = \mathbf{8\text{ kg } 490\text{ g}}$

e. $5042\text{ g} = \mathbf{5\text{ kg } 42\text{ g}}$

f. $7676\text{ g} = \mathbf{7\text{ kg } 676\text{ g}}$

Exercise 10.4

1. Add :

<p>a.</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>30</td><td>345</td></tr> <tr><td colspan="2">+ 42 98</td></tr> <tr><td>72</td><td>443</td></tr> </table>	kg	g	30	345	+ 42 98		72	443	<p>b.</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>42</td><td>760</td></tr> <tr><td colspan="2">+ 26 396</td></tr> <tr><td>69</td><td>156</td></tr> </table>	kg	g	42	760	+ 26 396		69	156	<p>c.</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>34</td><td>946</td></tr> <tr><td colspan="2">+ 26 758</td></tr> <tr><td>61</td><td>704</td></tr> </table>	kg	g	34	946	+ 26 758		61	704	<p>d.</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>58</td><td>309</td></tr> <tr><td colspan="2">+ 34 76</td></tr> <tr><td>92</td><td>385</td></tr> </table>	kg	g	58	309	+ 34 76		92	385
kg	g																																		
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92	385																																		
<p>e.</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>36</td><td>674</td></tr> <tr><td colspan="2">+ 1 230</td></tr> <tr><td>117</td><td>101</td></tr> </table>	kg	g	36	674	+ 1 230		117	101	<p>f.</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>18</td><td>459</td></tr> <tr><td colspan="2">+ 3 101</td></tr> <tr><td>46</td><td>006</td></tr> </table>	kg	g	18	459	+ 3 101		46	006	<p>g.</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>29</td><td>345</td></tr> <tr><td colspan="2">+ 6 99</td></tr> <tr><td>88</td><td>020</td></tr> </table>	kg	g	29	345	+ 6 99		88	020	<p>h.</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>43</td><td>666</td></tr> <tr><td colspan="2">+ 86 86</td></tr> <tr><td>226</td><td>030</td></tr> </table>	kg	g	43	666	+ 86 86		226	030
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+ 86 86																																			
226	030																																		

2. Add :

<p>a. 84 kg 585 g + 26 kg 365 g = 110 kg 950 g</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>84</td><td>585</td></tr> <tr><td colspan="2">+ 26 365</td></tr> <tr><td>110</td><td>950</td></tr> </table>	kg	g	84	585	+ 26 365		110	950	<p>b. 34 kg 994 g + 94 kg 66 g = 129 kg 60 g</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>34</td><td>994</td></tr> <tr><td colspan="2">+ 94 066</td></tr> <tr><td>129</td><td>060</td></tr> </table>	kg	g	34	994	+ 94 066		129	060		
kg	g																		
84	585																		
+ 26 365																			
110	950																		
kg	g																		
34	994																		
+ 94 066																			
129	060																		
<p>c. 41 kg 689 g + 275 kg 588 g = 317 kg 277 g</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>41</td><td>689</td></tr> <tr><td colspan="2">+ 275 588</td></tr> <tr><td>317</td><td>277</td></tr> </table>	kg	g	41	689	+ 275 588		317	277	<p>d. 69 kg 293 g + 368 g + 18 kg 645 g = 117 kg 306 g</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>69</td><td>293</td></tr> <tr><td colspan="2">+ 29 368</td></tr> <tr><td colspan="2">+ 28 645</td></tr> <tr><td>117</td><td>306</td></tr> </table>	kg	g	69	293	+ 29 368		+ 28 645		117	306
kg	g																		
41	689																		
+ 275 588																			
317	277																		
kg	g																		
69	293																		
+ 29 368																			
+ 28 645																			
117	306																		
<p>e. 56 kg 794 g + 79 kg 187 g = 135 kg 981 g</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>56</td><td>794</td></tr> <tr><td colspan="2">+ 79 187</td></tr> <tr><td>135</td><td>981</td></tr> </table>	kg	g	56	794	+ 79 187		135	981	<p>f. 59 kg 486 g + 224 kg 257 g + 330 kg 330 g = 614 kg 73 g</p> <table style="margin-left: 40px;"> <tr><th>kg</th><th>g</th></tr> <tr><td>59</td><td>486</td></tr> <tr><td colspan="2">+ 224 257</td></tr> <tr><td colspan="2">+ 330 330</td></tr> <tr><td>614</td><td>073</td></tr> </table>	kg	g	59	486	+ 224 257		+ 330 330		614	073
kg	g																		
56	794																		
+ 79 187																			
135	981																		
kg	g																		
59	486																		
+ 224 257																			
+ 330 330																			
614	073																		

g. $5 \text{ kg } 263 \text{ g} + 75 \text{ kg } 7 \text{ g} + 39 \text{ kg } 730 \text{ g} = 120 \text{ kg}$

kg	g
11	21
5	293
75	007
+ 39	730
120	000

h. $756 \text{ kg } 214 \text{ g} - 327 \text{ kg } 988 \text{ g} = 428 \text{ kg } 228 \text{ g}$

kg	g
11	21
43	167
27	459
+ 10	500
81	131

3. Subtract :

a.

kg	g
11	11
72	108
- 47	798
24	310

b.

kg	g
412	11014
53	214
- 17	895
35	319

c.

kg	g
69	111311
70	241
- 59	779
10	462

d.

kg	g
11	11
76	341
- 28	768
47	573

a.

kg	g
213	1010
34	084
- 16	796
17	288

b.

kg	g
311	10616
42	076
- 17	349
24	727

c.

kg	g
410	910
51	006
- 46	724
4	282

d.

kg	g
213	91414
34	054
- 17	196
16	858

4. Subtract :

a. $243 \text{ kg } 108 \text{ g} - 18 \text{ kg } 799 \text{ g} = 224 \text{ kg } 309 \text{ g}$

kg	g
11	10918
243	108
- 18	799
224	309

b. $34 \text{ kg } 994 \text{ g} + 94 \text{ kg } 66 \text{ g} = 129 \text{ kg } 60 \text{ g}$

kg	g
610	10918
74	223
- 49	985
21	238

c. $46 \text{ kg } 74 \text{ g} - 27 \text{ kg } 396 \text{ g} = 18 \text{ kg } 678 \text{ g}$

kg	g
315	91614
46	074
- 27	396
18	678

d. $34 \text{ kg } 500 \text{ g} - 76 \text{ kg } 72 \text{ g} = 17 \text{ kg } 771 \text{ g}$

kg	g
610	10918
74	223
- 49	985
21	238

e. $260 \text{ kg } 7 \text{ g} - 142 \text{ kg}$
 $= 117 \text{ kg } 879 \text{ g}$

kg	g
260	007
-142	128
117	879

f. $464 \text{ kg } 362 \text{ g} - 427 \text{ kg } 498 \text{ g}$
 $= 36 \text{ kg } 864 \text{ g}$

kg	g
464	362
-427	498
36	864

g. $362 \text{ kg } 146 \text{ g} - 149 \text{ kg } 779 \text{ g}$
 $= 212 \text{ kg } 367 \text{ g}$

kg	g
362	146
-149	779
212	367

h. $756 \text{ kg } 214 \text{ g} - 327 \text{ kg } 986 \text{ g}$
 $= 428 \text{ kg } 228 \text{ g}$

kg	g
756	214
-327	986
428	228

Exercise 10.5

1. Change into ml :

a. $9 \text{ l} = 6000 \text{ ml}$

b. $7 \text{ l} = 18000 \text{ ml}$

c. $8 \text{ l } 750 \text{ ml} = 8295 \text{ ml}$

d. $6 \text{ l } 265 \text{ ml} = 6265 \text{ ml}$

e. $4 \text{ l } 404 \text{ ml} = 4404 \text{ ml}$

f. $5 \text{ l } 175 \text{ ml} = 5175 \text{ ml}$

g. $4 \text{ l } 750 \text{ ml} = 4750 \text{ ml}$

h. $3 \text{ l } 330 \text{ ml} = 3330 \text{ ml}$

2. Change into l and ml :

a. $1005 \text{ ml} = 1 \text{ l } 5 \text{ ml}$

b. $7878 \text{ ml} = 7 \text{ l } 878 \text{ ml}$

c. $4338 \text{ ml} = 4 \text{ l } 338 \text{ ml}$

d. $3477 \text{ ml} = 3 \text{ l } 477 \text{ ml}$

e. $9356 \text{ ml} = 9 \text{ l } 356 \text{ ml}$

f. $2222 \text{ ml} = 2 \text{ l } 222 \text{ ml}$

g. $6556 \text{ ml} = 6 \text{ l } 556 \text{ ml}$

h. $3540 \text{ ml} = 3 \text{ l } 540 \text{ ml}$

Exercise 10.6

1. Add :

a.

l	ml
49	497
+78	743
128	240

b.

l	ml
62	043
+49	969
112	012

c.

l	ml
65	650
+58	193
123	843

d.

l	ml
78	070
+23	288
101	358

e.

kg	g
262	475
18	325
+345	85
625	885

f.

kg	g
334	476
128	894
+146	325
609	695

g.

kg	g
63	648
89	293
+4	008
156	949

h.

kg	g
728	370
134	556
+22	220
885	146

2. Add :

a. $37\text{ l } 348\text{ ml} + 28\text{ l } 290\text{ ml}$
 $= 65\text{ l } 638\text{ ml}$

l		ml	
①		①	
3	7	3	48
+	28	2	90
65		638	

b. $253\text{ l } 597\text{ ml} + 357\text{ l } 684\text{ ml}$
 $= 611\text{ l } 281\text{ ml}$

l		ml	
①①		①①	
2	53	6	84
+	357	9	69
611		281	

c. $729\text{ l } 678\text{ ml} + 137\text{ l } 298\text{ ml}$
 $= 866\text{ l } 976\text{ ml}$

l		ml	
①		①①	
7	29	6	78
+	137	2	98
866		976	

d. $50\text{ l } 594\text{ ml} + 246\text{ l } 47\text{ ml}$
 $= 296\text{ l } 641\text{ ml}$

l		ml	
①		①①	
5	0	5	94
+	246	0	47
296		641	

e. $65\text{ l } 465\text{ ml} + 59\text{ l } 278\text{ ml}$
 $= 124\text{ l } 743\text{ ml}$

l		ml	
①		①①	
6	5	4	65
+	59	2	78
124		743	

f. $117\text{ l } 998\text{ ml} + 66\text{ l } 47\text{ ml} + 6\text{ l } 296\text{ ml}$
 $= 296\text{ l } 641\text{ ml}$

l		ml	
①		①①	
5	0	5	94
+	246	0	47
296		641	

g. $413\text{ kg } 866\text{ g} + 438\text{ kg } 176\text{ g}$
 $= 852\text{ kg } 277\text{ g}$

kg		g	
①①		①①	
4	13	8	66
+	438	1	76
852		277	

h. $172\text{ l } 949\text{ ml} + 248\text{ l } 90\text{ ml}$
 $= 421\text{ l } 039\text{ ml}$

l		ml	
①①①	①		
1	72	9	49
+	248	0	90
421		039	

3. Subtract :

a. $72\text{ l } 710\text{ ml} - 18\text{ l } 756\text{ ml}$
 $= 53\text{ l } 524\text{ ml}$

b. $518\text{ kg } 1614\text{ g} - 29\text{ kg } 296\text{ g}$
 $= 39\text{ kg } 078\text{ g}$

c. $59\text{ l } 1321\text{ ml} - 20\text{ l } 574\text{ ml}$
 $= 20\text{ l } 857\text{ ml}$

d. $513\text{ kg } 1813\text{ g} - 29\text{ kg } 785\text{ g}$
 $= 34\text{ kg } 408\text{ g}$

e.	$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{611} \quad \text{12710} \\ \text{552} \quad \text{046} \\ -219 \quad 378 \\ \hline 332 \quad 668 \end{array}$	f.	$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{518} \quad \text{21614} \\ \text{843} \quad \text{088} \\ -628 \quad 297 \\ \hline 214 \quad 791 \end{array}$	g.	$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{59} \quad \text{13121} \\ \text{60} \quad \text{431} \\ -39 \quad 574 \\ \hline 20 \quad 857 \end{array}$	h.	$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{513} \quad \text{11813} \\ \text{64} \quad \text{193} \\ -29 \quad 785 \\ \hline 34 \quad 408 \end{array}$
----	---	----	---	----	---	----	--

4. Subtract :

a. $87 \text{ l } 106 \text{ ml} - 49 \text{ l } 937 \text{ ml}$
 $= 37 \text{ l } 169 \text{ ml}$

$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{716} \quad \text{10916} \\ \text{87} \quad \text{106} \\ -49 \quad 937 \\ \hline 37 \quad 169 \end{array}$
--

b. $87 \text{ l } 106 \text{ ml} - 49 \text{ l } 937 \text{ ml}$
 $= 114 \text{ l } 246 \text{ ml}$

$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{812} \quad \text{111212} \\ \text{193} \quad \text{232} \\ -78 \quad 986 \\ \hline 37 \quad 246 \end{array}$
--

c. $46 \text{ l } 34 \text{ ml} - 28 \text{ l } 798 \text{ ml}$
 $= 17 \text{ l } 236 \text{ ml}$

$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{315} \quad \text{10916} \\ \text{46} \quad \text{034} \\ -28 \quad 798 \\ \hline 17 \quad 236 \end{array}$
--

d. $34 \text{ l } 6 \text{ ml} - 18 \text{ l } 757 \text{ ml}$
 $= 15 \text{ l } 249 \text{ ml}$

$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{213} \quad \text{9916} \\ \text{34} \quad \text{000} \\ -18 \quad 757 \\ \hline 15 \quad 249 \end{array}$

e. $328 \text{ l } 5 \text{ ml} - 16 \text{ l } 798 \text{ ml}$
 $= 311 \text{ l } 207 \text{ ml}$

$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{7} \quad \text{9915} \\ \text{328} \quad \text{005} \\ -16 \quad 798 \\ \hline 311 \quad 207 \end{array}$

f. $374 \text{ l } 220 \text{ ml} - 138 \text{ l } 798 \text{ ml}$
 $= 235 \text{ l } 422 \text{ ml}$

$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{613} \quad \text{11110} \\ \text{374} \quad \text{220} \\ -138 \quad 798 \\ \hline 235 \quad 422 \end{array}$

g. $456 \text{ l } 3 \text{ ml} - 139 \text{ l } 198 \text{ ml}$
 $= 316 \text{ l } 805 \text{ ml}$

$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{47} \quad \text{9913} \\ \text{456} \quad \text{003} \\ -139 \quad 198 \\ \hline 316 \quad 805 \end{array}$

h. $276 \text{ l } 341 \text{ ml} - 58 \text{ l } 798 \text{ ml}$
 $= 217 \text{ l } 543 \text{ ml}$

$\begin{array}{r} \text{l} \quad \text{m/} \\ \text{615} \quad \text{121311} \\ \text{276} \quad \text{341} \\ -58 \quad 798 \\ \hline 217 \quad 543 \end{array}$

Exercise 10.7

1. Petrol was sold to Ist car owner = 20 l 540 ml
 Petrol was sold to IInd car owner = 25 l 330 ml
 Petrol was sold to IIIrd car owner = + 30 l 050 ml
 total quantity of petrol was sold = 75 l 920 ml

l	ml
20	540
25	330
+ 30	050
75	920

2. Vishakha jogs = 20 l 540 ml
 Jatin jogs = 7 km 50 m
 7 km 50 m > 5 km 650
 \therefore Jatin jogs more than Vishakha.
 Jatin jogs more = 7 km 50 m - 5 km 650 m
 = 1 km 400 m.

km	m
7	050
- 5	650
1	400

Jatin jogs 1 km 400 m more than Vishakha.

3. Weight of potatoes = 5 kg 500 g.
 Weight of tomatoes = 1 kg 225 g
 Total weight = 5 kg 500 g
 + 1 kg 225 g
 = 6 kg 725 g.

kg	m
5	500
+ 1	225
6	725

So, Mr Kashyap bought 6 kg 725 g vegetables.

4. Laddoos were bought = 2 kg 500 g
 Laddoos were distributed = 1 kg 200 g
 Laddoos has left with sagar = 2 kg 500 g
 - 1 kg 200 g
 = 1 kg 300 g

kg	g
2	500
- 1	200
1	300

5. Weight of Ist child = 21 kg 250 g
 Weight of IInd child = 32 kg 059 g
 Total weight of both children = 21 kg 250 g
 + 32 kg 059 g
 = 53 kg 309 g

kg	g
21	250
+ 32	059
53	309

So, the total weight of both children is 53 kg 309 g

6. Kavita got petrol = 24 l 500 ml
 She used petrol = 15 l 780 ml
 So, 8 l 720 ml petrol is left in Kavita's car.
7. Length of Ist Ribbon = 6 m 75 cm
 Length of IInd ribbon = + 4 m 25 cm
 Total length of both ribbons = 11 m 00 cm

kg	g
24	500
- 15	780
9	720

So, 11 m is the total length of both ribbons.

m	cm
6	75
+ 4	25
11	00

8. Length of Ist ribbon = 6 m 75 cm
 Length of IInd ribbon = + 4 m 25 cm
 Total length of both ribbons = 11 m 00 cm

So, 11 m is the total length of both ribbons.

9. Total length of thread = 500 m
 Used thread = 242 m 5 cm
 Thread is left with tailor = 500 m – 242 m 5 cm
 = 257 m 95 cm

So, 257 m 95 cm thread is left with tailor.

10. Weight of sold apples to one customer = 5 kg 625 g
 Weight of sold apples to another customer = 7 kg 205 g
 Total weight of sold apples = + 5 kg 625 g
 7 kg 205 g
 = 12 kg 830 g

The fruit seller had apples = 50 kg

So, the weight of apples are left
 with fruit seller = 50 kg – 12 kg 830 g
 = 37 kg 170 g

So, 37 kg 170 g apples are left with fruit seller.

$$\begin{array}{r} \text{I} \quad \text{m/} \\ \text{8} \text{ } \text{12} \quad \text{11} \text{ } \text{12} \text{ } \text{12} \\ \text{193} \quad \text{232} \\ - \quad \text{78} \quad \text{986} \\ \hline \text{37} \quad \text{246} \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ \text{5} \quad \text{625} \\ - \quad \text{7} \quad \text{205} \\ \hline \text{12} \quad \text{830} \end{array}$$

Mental Maths

Tick (✓) the correct box :

		Less than 1 km	Equal to 1 km	More than 1 km
1.	250 m + 850 m			✓
2.	625 m + 275 m	✓		
3.	600 m + 500 m – 250 m	✓		
4.	300 m – 250 m + 450 m	✓		
5.	450 m + 50 m + 500 m		✓	

Multiple Choice Questions

Tick (✓) the correct choice :

Ans. 1. b. 1000 m 2. b. 1 m 3. c. 10 cm 4. b. 100

Hots

- Ans. 1. Because light things are not weighted in kilograms.
 2. We require a smaller unit to weigh light things.
 3. (a) 500 grams (b) 250 grams
 4. Bag of Rice, bag of Sugar, Bag of Wheat


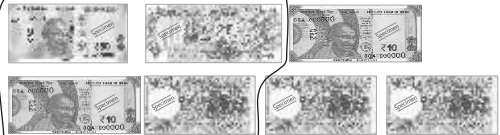


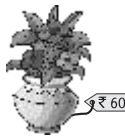
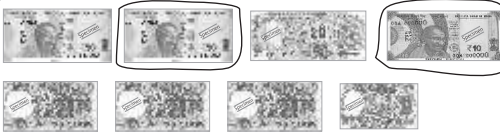


11

Money

Look Back

1. Circle the correct amount of money to buy these things.

Ans.

Exercise 11.1

1. Write the given amount in short form.

- Ans. a. ₹ 39.30 b. ₹ 45.65 c. ₹ 182.10
d. ₹ 535 e. ₹ 0.97 f. ₹ 3.05

2. Write the given amount in long form (in words).

- Ans. a. Forty-five rupees and five paise
b. Eighteen rupees and thirty paise
c. Fifty-three rupees and seventy eight paise
d. Ninety three rupees and eighty five paise

- e. One hundred forty nine rupees and eight paise
f. Six hundred seventy five rupees and twelve paise

Life Skills

Do it yourself.

Exercise 11.2

- Change paise to rupees.**
a. ₹4.28 b. ₹1.20 c. ₹3.20 d. ₹3.20
- Change rupees and paise to paise.**
a. 875 paise b. 450 paise c. 575 paise d. 828 paise
e. 750 paise f. 650 paise
- Put >, < or = sign in the box.**
a. = b. > c. > d. =
- Tick (✓) the correct statements. Correct the incorrect statements.**
c. ✓
- Let us go shopping!**

Sonam buys	John buys	Rohit buys
18.00	135.00	90.00
5.00	10.00	140.00
10.00	140.00	210.00
33.00	285.00	₹ 336

Project

Ans. Do it yourself.

Exercise 11.3

- Add the following :**

- a.
$$\begin{array}{r} \text{₹} \quad \text{p} \\ 11.43 \\ + 20.32 \\ \hline 31.75 \end{array}$$
 Ans : ₹31.75
- b.
$$\begin{array}{r} \text{₹} \quad \text{p} \\ \textcircled{1} \\ 47.75 \\ + 34.00 \\ \hline 81.75 \end{array}$$
 Ans : ₹81.75
- c.
$$\begin{array}{r} \text{₹} \quad \text{p} \\ 65.20 \\ + 11.50 \\ \hline 76.70 \end{array}$$
 Ans : ₹76.70
- d.
$$\begin{array}{r} \text{₹} \quad \text{p} \\ 25.00 \\ + 43.50 \\ \hline 68.50 \end{array}$$
 Ans : ₹68.50
- e.
$$\begin{array}{r} \text{₹} \quad \text{p} \\ \textcircled{1} \\ 12.25 \\ + 20.25 \\ \hline 32.50 \end{array}$$
 Ans : ₹32.50
- f.
$$\begin{array}{r} \text{₹} \quad \text{p} \\ \textcircled{1} \\ 27.25 \\ + 14.10 \\ \hline 41.35 \end{array}$$
 Ans : ₹41.35
- g.
$$\begin{array}{r} \text{₹} \quad \text{p} \\ \textcircled{1} \\ 15.25 \\ + 13.25 \\ \hline 28.50 \end{array}$$
 Ans : ₹28.90
- h.
$$\begin{array}{r} \text{₹} \quad \text{p} \\ 23.75 \\ + 43.00 \\ \hline 66.75 \end{array}$$
 Ans : ₹66.75

2. Add in the second way :

a. Add ₹ 26.45, ₹ 110.75

₹	p
26	45
+ 110	75
137	20

Ans : ₹137.20

b. Add ₹ 36.45, ₹ 428.75

₹	p
36	45
+ 428	75
465	20

Ans : ₹465.20

c. Add ₹ 117.50, ₹ 205.10, ₹ 175.70

₹	p
117	50
+ 205	10
+ 175	70
498	30

Ans : ₹498.30

d. Add ₹ 85.50, ₹ 95.75, ₹ 175.85

₹	p
85	50
+ 95	75
+ 175	85
357	10

Ans : ₹357.10

3. Add the following :

a.

₹	p
22	50
- 10	00
12	50

b.

₹	p
89	25
- 45	50
43	75

c.

₹	p
56	00
- 46	50
9	50

d.

₹	p
35	00
- 12	50
22	50

a.

₹	p
62	50
- 10	00
52	50

b.

₹	p
123	25
- 72	00
51	25

c.

₹	p
56	00
- 45	50
10	50

d.

₹	p
78	00
- 45	50
32	50

4. Subtract in second way :

a. Subtract ₹ 46.65 from ₹ 120.00

₹	p
120	00
- 46	65
73	35

Ans : ₹73.35

b. Subtract ₹ 374.20 from ₹ 500.05

₹	p
500	05
- 374	20
125	85

Ans : ₹125.85

c. Subtract ₹ 52.83 from ₹ 100.00

	₹	p
	8	9
	9	1
	1	10
	1	0
	0	0
	0	0
-	5	2
	8	3
	4	7
	1	7

Ans : ₹48.17

d. Subtract ₹ 183.75 from ₹ 220.65

	₹	p
	0	11
	1	1
	16	
	2	2
	0	6
	6	5
-	1	8
	3	7
	0	3
	6	9
	0	0

Ans : ₹36.90

Exercise 11.4

1. Multiply the following :

a.

	₹	p
	2	3
	5	0
		×
		9
	₹	2
	1	4
	2	0

b.

	₹	p
	2	4
	1	8
		×
		9
	₹	2
	1	7
	6	2

c.

	₹	p
	4	9
	1	2
		×
		5
	₹	2
	4	5
	6	0

d.

	₹	p
	1	7
	3	8
		×
		8
	₹	1
	3	9
	0	4

e.

	₹	p
	3	5
	2	3
		×
		6
	₹	2
	1	1
	3	8

f.

	₹	p
	1	9
	1	5
		×
		4
	₹	7
	6	6
	0	0

g.

	₹	p
	4	5
	3	2
		×
		5
	₹	2
	2	6
	6	0

h.

	₹	p
	1	2
	2	5
		×
		5
	₹	6
	1	2
	5	0

2. Divide the following :

a. ₹ 95 ÷ 5 = ₹19.00

	₹19.00
4)	₹95.00
	— 5
	45
	— 45
	00
	— 0
	00
	— 0
	0
	— 0
	0

b. ₹320 ÷ 4 = ₹80.00

	₹80.00
4)	₹320.00
	— 32
	00
	— 0
	00
	— 0
	00
	— 0
	0
	— 0
	0

c. ₹ 102 ÷ 6 = ₹17.00

$$\begin{array}{r} \text{₹}17.00 \\ 6 \overline{) \text{₹}102.00} \\ \underline{-6} \\ 42 \\ \underline{42} \\ 00 \\ \underline{-0} \\ 00 \\ \underline{-0} \\ 0 \end{array}$$

d. ₹65 ÷ 5 = ₹13.00

$$\begin{array}{r} \text{₹}13.00 \\ 4 \overline{) \text{₹}65.00} \\ \underline{-5} \\ 15 \\ \underline{15} \\ 00 \\ \underline{-0} \\ 00 \\ \underline{-0} \\ 0 \end{array}$$

e. ₹ 45 ÷ 3 = ₹15.00

$$\begin{array}{r} \text{₹}15.00 \\ 4 \overline{) \text{₹}45.00} \\ \underline{-3} \\ 15 \\ \underline{15} \\ 00 \\ \underline{-0} \\ 00 \\ \underline{-0} \\ 0 \end{array}$$

d. ₹120 ÷ 3 = ₹40.00

$$\begin{array}{r} \text{₹}40.00 \\ 4 \overline{) \text{₹}120.00} \\ \underline{-12} \\ 00 \\ \underline{0} \\ 00 \\ \underline{-0} \\ 00 \\ \underline{-0} \\ 0 \end{array}$$

Exercise 11.5

- The cost of 1 chocolate = ₹14.50
The cost of 2 chocolate = ₹ 14.50 × 2
= ₹29.00
∴ Rajni will pay ₹29.00 for them.
- The cost of a glue stick = ₹6.00
The cost of picture books = + ₹16.90
Total amount that Gautami spent = ₹22.00
So, Manjeet spent ₹ 22.90 in all.
- The cost of Hindi story book = ₹43.50
The cost of English story book = + ₹36.90
Total amount that Gautami spent = ₹80.00
- The cost of 1 toy = ₹112.50
∴ The cost of 4 such toys = ₹112.50 × 4
= ₹450.00
∴ Sunanda will pay ₹450 for them.

5. The cost of 1 biscuit packet = ₹112.50
 \therefore The cost of 8 biscuit packets = ₹112.50 \times 4
 = ₹450.00
6. The cost of 8 kg guavas = ₹85.20
 The cost of 1 kg guavas = ₹85.20 \div 8
 = ₹10.65
- So, the cost of 1 kg guavas is ₹10.65.
7. ₹ The cost of 1 banana = ₹3.50
 ₹ The cost of 12 bananas = ₹3.50 \times 12
 = ₹42.00
- \therefore The cost of 1 apple = ₹8.25
 = ₹66.00
 = 66 $>$ 42 = ₹66.00
- \therefore Ramu paid more for apples and bananas.
 Difference in the cost of apples and bananas
 = ₹66.00 – ₹42.00
 = ₹24.00

Exercise 11.6

1. Guddy went to a toy shop. She bought 2 cars for ₹15.00 each, 3 notebooks for ₹10.50 each, 1 doll for ₹55.00, 5 balls for ₹30.00 each. Prepare a bill for Guddy's items.

Ans. Guddy's Bill

S.No.	Item	Quantity	Rate per item	₹	P
1.	Car	2	₹ 15.00	30	00
2.	Note book	3	₹ 10.50	31	50
3.	Doll	1	₹ 55.00	55	00
4.	Balls	5	₹ 30.00	150	00
			Total =	266	50

2. Seema's Bill

Coffee Shop				Bill No. 214
				Date :
S. No.	Items	Quantity	Price (in ₹)	Amount ₹ p
1.	Hot coffee	1	12.50	12.50
2.	Club sandwich	2	30.25	60.50
3.	French fries	1	25.00	25.00
4.	Cold coffee	1	18.50	18.50
5.	Coleslaw sandwich	3	32.25	96.75
			Total	213.25

3. a. Sanya's Bill

S.No.	Item	Quantity	Rate per item	₹	P
1.	Note book	3	₹ 18.65	55	95
2.	Pencil	2	₹ 35.50	71	00
3.	Colour box	1	₹ 52.25	52	25
			Total =	179	20

b. Shivam's Bill

S.No.	Item	Quantity	Rate per item	₹	P
1.	Pencil	6	₹ 5.00	30	00
2.	Eraser	4	₹ 3.00	12	00
3.	Sharp ener	4	₹ 8.00	32	00
4.	Fevicol Stick	1	₹ 12.50	12	50
			Total =	86	50

He will get back ₹13.50

Hots

Ans. The shopkeeper should return to Deepak ₹33.60

Multiple Choice Questions

Tick (✓) the correct choice :

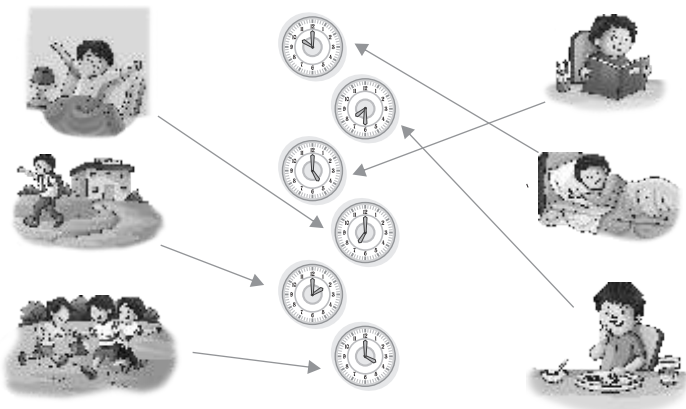
- Ans.** 1. c. ₹16.05 2. c. ₹2.50 3. b. ₹6.00 4. a. ₹30
5. c. ₹135 6. c. ₹2450 7. c. 20 week 8. a. 45p

12 Time and Calendar

Look Back

1. Match the activity with the time :

Ans.



2. Fill in the blanks and enjoy this poem.

- Ans.** M for **Monday**, turn around,
T for **Tuesday**, touch the ground,
W for **Wednesday**, jump so high,
T for **Thursday**, touch the sky,
F for **Friday**, say hooray!
S for **Saturday**, time to play,
S for **Sunday**, clap your hands,
It's time to start all over again!

Exercise 12.1

1. Draw hands on the clocks to show the time written below.

Ans. a.



1 o'clock

b.



quarter past 6.

c.



quarter to 4

d.



9:30

2. Look at the following table. All the four boxes in a row convey the same meaning. Now, complete the following table by filling in the blank boxes.

b.



10:45

Quarter to 11

15 minutes to 11

c.



3:45

Quarter to 4

15 minutes to 11

d.



3:15

Quarter past 3

15 minutes past 3

Exercise 12.2

1. Look at the clocks shown here and write the time in two ways. One has been done for you.

Ans.

a. 10:10, 10 minutes past 10

b. 11:30, Half past 11

c. 12:50, 100 minutes to 1

d. 2:20, 20 minutes past 2

e. 12:35, 25 minutes to 1

f. 6:55, 5 minutes to 7

g. 7:40, 20 minutes to 8

h. 6:50, 10 minutes to 7

2. Draw the hour hand and the minute hand to show the given time in the clocks.

Ans. a.



9:20

b.



10 minutes to 7

c.



25 minutes past 2

d.



11:05

3. Match the columns.

- | | | |
|------------|---|-----------------------|
| a. 5 : 15 | → | ii. 20 minutes past 7 |
| b. 8 : 40 | → | iv. half past 9 |
| c. 9 : 30 | → | v. quarter past 5 |
| d. 7 : 20 | → | iii. quarter to 11 |
| e. 10 : 45 | → | i. 20 minutes to 9 |

Exercise 12.3

1. Rewrite the time using am or pm for the following :

- a. 8:00 am b. 10:15 pm c. 12:40 pm

2. Write the time

a.

Time now	Time after 3 hours
1:00 pm	4:00 pm
9:30 am	12:30 pm
7:50 pm	10:50 pm
11:25 pm	2:25 am

b.

Time now	Time 2 hours before
1:00 pm	4:00 pm
9:30	12:30 pm
7:50 pm	10:50 pm
11:25 pm	2:25 am

3. Tick (✓) the correct choice for the following activities :

- a. I go to school at 7 am/pm ✓
 b. I go to play at 4 am/pm ✓
 c. I take dinner at 8 am/pm ✓
 d. I go to bed at 10 am/pm ✓

Exercise 12.4

1. Convert into minutes :

- Ans.** a. 1 hour = 60 minutes b. 1 hour = 60 minutes
 ∴ 12 hour = 60 × 12 ∴ 13 hours = 60 × 13
 = 720 minutes = 780 minutes

$$\text{c. } 1 \text{ hour} = 60 \text{ minutes}$$

$$\therefore 8 \text{ hour} = 60 \times 8 \\ = 480 \text{ minutes}$$

$$\text{e. } 1 \text{ hour} = 60 \text{ minutes}$$

$$\therefore 17 \text{ hour} = 60 \times 17 \\ = 1020 \text{ minutes}$$

$$\text{g. } 5\frac{1}{2} = \frac{11}{2}$$

$$\therefore 1 \text{ hour} = 60 \text{ minutes}$$

$$\therefore 5\frac{1}{2} \text{ hours} = 60 \times 5\frac{1}{2} = 60 \times \frac{30}{2} \times \frac{11}{2} \\ = 330 \text{ minutes}$$

$$\text{i. } \therefore 1 \text{ hour} = 60 \text{ minutes}$$

$$\therefore 20 \text{ hours} = 60 \times 20 \\ = 1200 \text{ minutes}$$

$$\therefore 20 \text{ hours } 25 \text{ minutes} \\ = 1200 + 25 \\ = 1225 \text{ minutes}$$

$$\text{d. } 1 \text{ hour} = 60 \text{ minutes}$$

$$\therefore 3 \text{ hours} = 60 \times 3 \\ = 780 \text{ minutes}$$

$$\text{f. } 1 \text{ hour} = 60 \text{ minutes}$$

$$\therefore 6 \text{ hours} = 60 \times 6 \\ = 360 \text{ minutes}$$

$$\text{h. } 1 \text{ hour} = 60 \text{ minutes}$$

$$\therefore 7 \text{ hours} = 60 \times 7 \\ = 420 \text{ minutes}$$

$$7 \text{ hours } 15 \text{ minutes} \\ = 420 + 15 \\ = 435 \text{ minutes}$$

Exercise 12.4

2. Convert into hours and minutes :

Ans. a. 60 minutes = 1 hours
 $\therefore 120 \text{ minutes} = 120 \div 60 \text{ hours} = 2 \text{ hours}$

$$\begin{array}{r} 2 \\ 60 \overline{)120} \\ - 120 \\ \hline 0 \end{array}$$

b. 60 minutes = 1 hours
 $\therefore 240 \text{ minutes} = 240 \div 60 = 4 \text{ hours}$
 = 4 hours

$$\begin{array}{r} 4 \\ 60 \overline{)240} \\ - 240 \\ \hline 0 \end{array}$$

c. 60 minutes = 1 hours
 $\therefore 120 \text{ minutes} = 120 \div 60 \text{ hours} = 2 \text{ hours}$

$$\begin{array}{r} 3 \\ 60 \overline{)120} \\ - 120 \\ \hline 0 \end{array}$$

d. 60 minutes = 1 hours
 $\therefore 240 \text{ minutes} = 240 \div 60 = 4 \text{ hours}$
 = 4 hours

$$\begin{array}{r} 9 \\ 60 \overline{)540} \\ - 540 \\ \hline 0 \end{array}$$

- e. 60 minutes = 1 hours
 $\therefore 185 \text{ minutes} = 185 \div 60$
 = 3 hours 5 minutes
- f. 60 minutes = 1 hours
 $\therefore 315 \text{ minutes} = 315 \div 60 \text{ hours}$
 = 5 hours 15 minutes

$$\begin{array}{r} 3 \\ 60 \overline{)185} \\ - 180 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 5 \\ 60 \overline{)315} \\ - 300 \\ \hline 15 \end{array}$$

Exercise 12.5

1. Look at the calendar of present year and answer the following questions :

Ans. Do it yourself.

2. Fill in the blanks :

- The September month has **30** days.
- There are **12** months in a year.
- There are **52** weeks in a year.
- The January month has **31** days.
- There are **7** days in a week.
- There are **365** days in a year.

Exercise 12.6

Look at the month of June in the shown calendar and answer the following questions.

- Ans. a. 30 b. 5 June c. Do it yourself
 d. Do it yourself

Mental Maths

Ans. Do it yourself.

Multiple Choice Questions




Tick (✓) the correct choice :

- Ans. 1. b. 12 2. b. 11:10 3. a. 215 4. a. 20 minutes

13 Data Handling

Look Back

1. Match the activity with the time :

Ans. Apple	
Mango	
Banana	

Now, observe the table and answer the question.

a. 3



















b. Mango

c. 8

Exercise 13.1



























- Students of class III were asked to name their favourite games. Use the pictograph to answer the following answers.
 - Badminton
 - $2 \times 6 = 12$ students
 - $2 \times 20 = 40$ students
- Look carefully at the pictograph given below and answer the questions.
 - Class 5
 - Class 3
 - $5 \times 32 = 160$ students
 - Class 1 and Class 4
 - $5 \times 2 = 10$ student
- Draw a pictograph showing the different types of flowers in a garden.


Ans.

Flowers	Numbers of flowers
Rose	    
marigold	     
Tulip	   
Sunflower	  

Key : Use  = 2 animals  = 1 animal

- Draw a pictograph showing different animals and their number.

Flowers	Numbers of flowers
Zebra	      
Tiger	   
Deer	      
Elephant	    
Giraffe	  

Key : Use  = 2 animals  = 1 animal

Exercise 13.2

1. Study this bar graph which shows the mode of transport used by children to go to school. Answer the question that follow.

a. Bus b. 8 c. car d. 9

2. a. yellow and brown

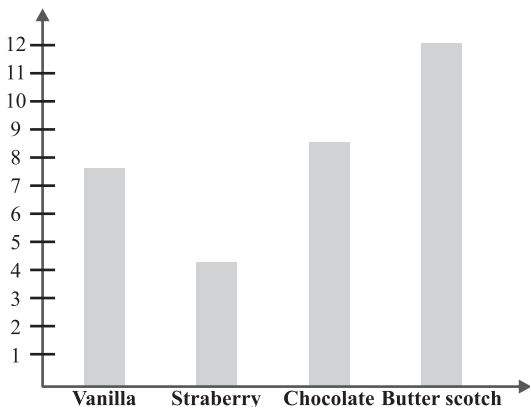
b. Orange, yellow, Brown and Blue

c. 15 m d. 18 m e. Blue

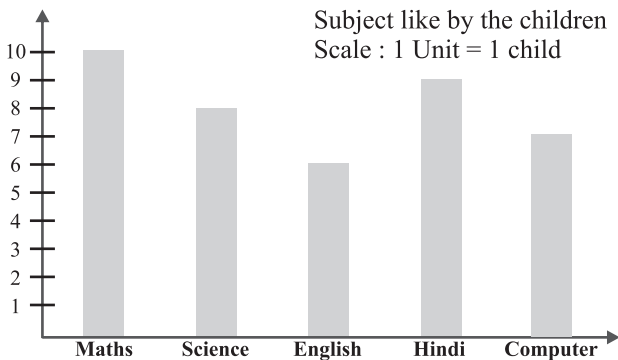
3. Favourite Ice-cream flavour of 32 students is given below. Represent this information using a bar graph.

Ice-cream flavour like by the students

Scale : 1 unit - 1 student

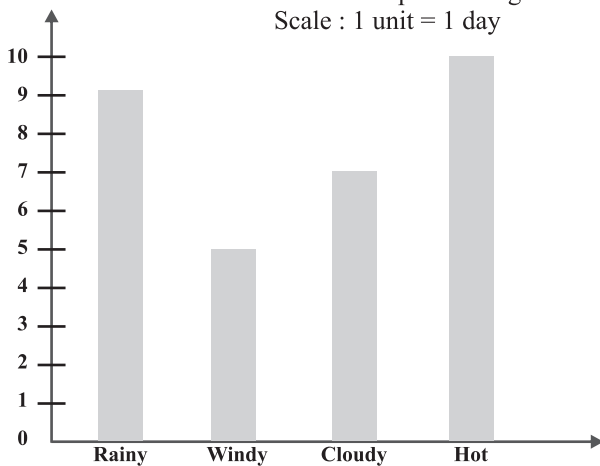


4. Draw a bar graph using the information given in the table for favourite subject of children.



Fun with Maths

Weather Report of August month
Scale : 1 unit = 1 day



1 Large Numbers

Look Back

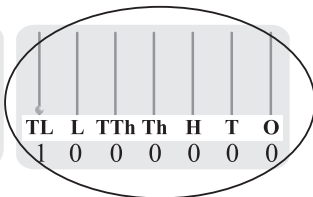
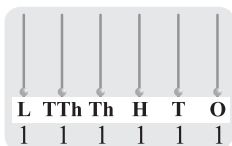
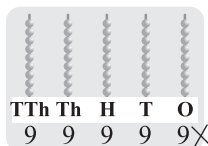
Look at the performance of these Indian cricketers and answer the following questions.

- Ans. a. Virat Kohli b. Suresh Raina c. 175
d. Rohit Sharma

Mental Maths

Circle the greatest number and cross the smallest number.

Ans.

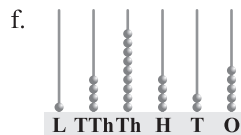
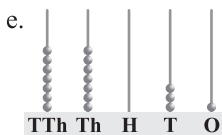
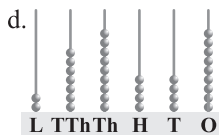
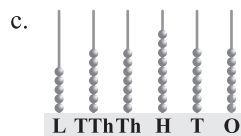
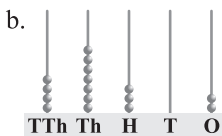
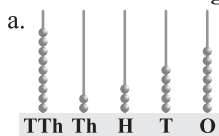


Exercise 1.1

1. Read the abacus and write the number.

- a. 66,049
Sixty-six thousand forty-nine.
b. 5,2,506
Five lakh ninety-two thousand five hundred six.
c. 36,12,613
Thirty-six lakh twelve thousand six hundred thirteen.

2. Show the following numbers on the abacus.



3. Write in figures.

- Nine lakh two hundred thirty-two **9,00,232**.
- Forty-eight thousand nine hundred eighty-four **48,984**.
- Sixty thousand six **60,006**.
- Eight lakh forty-three thousand five hundred fifteen **8,43,515**.

4. Write the number names in Indian system.

- 23,125 Twenty-three thousand one hundred twenty-five.
- 2,87,819 Two lakh, eighty-seven thousand eight hundred nineteen.
- 9,27,471 Nine lakh twenty-seven thousand four hundred seventy-one.
- 37,17,215 Thirty-seven lakh seventeen thousand two hundred fifteen.
- 49,85,110 Forty-nine lakh eighty-five thousand one hundred ten.

Exercise 1.2

1.	Numbers Place	Value of underlined digit	face value of underlined digit.
a.	457941	7,000	7
b.	51,212	50,000	5
c.	9,791	700	7
d.	24,713	20,000	2
e.	67,425	60,000	6
f.	4,59,518	8	8
g.	9,29,918	10	1
h.	4,37,518	500	5
i.	3,56,658	3,00,000	3

2. Write the expanded form of the following numbers.

- 25,805 = 20,000 + 5000 + 800 + 5
- 49,125 = 40,000 + 9000 + 100 + 20 + 5
- 92,234 = 90,000 + 2000 + 200 + 30 + 4
- 3,47,785 = 3,00,000 + 40,000 + 7,000 + 700 + 80 + 5
- 9,37,357 = 9,00,000 + 30,000 + 7000 + 300 + 50 + 7
- 6,75,173 = 6,00,000 + 70,000 + 5000 + 100 + 70 + 3

3. Write the short form of the following numbers.

- 10,723 b. 32,176 c. 65,487
- 3,06,074 e. 3,06,074 f. 4,00,444

4. Fill in the table.

S.No.	Predecessor	Number	Successor
a.	3,79,439	379440	3,79,441
b.	9,73,000	9,73,01	9,73,002
c.	8,79,048	8,79,049	879050
d.	4,37,927	4,37,928	437929
e.	8,99,999	900000	9,00,001

Exercise 1.3

1. Compare each pair of numbers. Put $>$, $<$ or $=$ in the \square .

- a. $<$ b. $<$ c. $<$ d. $=$
e. $<$ f. $>$

2. Arrange the following numbers in ascending order.

- a. $57,028 < 67,082 < 67,280 < 67,820$
b. $32,728 < 36,128 < 37,185 < 39,571$
c. $4,28,312 < 6,28,470 < 7,17,617 < 8,17,518$
d. $4,06,219 < 5,31,325 < 6,15,104 < 61,25,041$

3. Arrange the following numbers in descending order.

- a. $63,007 > 62,590 > 62,950 > 62,509$
b. $93,234 > 92,345 > 90,148 > 90,418$
c. $9,17,338 > 9,43,126 > 9,71,823 > 9,17,238$
d. $9,51,121 > 9,01,246 > 8,13,306 > 8,31,415$

4. Write the smallest and greatest number using each of the following digits only once.

S.No.	Digits	Smallest	Greatest
a.	8, 0, 7, 0, 4	40,078	87,400
b.	3, 1, 5, 9, 7	13,579	97,531
c.	9, 7, 4, 2, 8, 0	2,04,789	9,87,420
d.	7, 0, 1, 3, 2, 9	1,02,379	9,73,210
e.	0, 1, 5, 6, 2, 8	1,02,568	8,65,210

5. 1,03,576

6. 91,000; 92,000; 93,000; 94,000; 95,000; 96,000; 96,000; 97,000; 98,000; 99,000 and 100,000.

7. 10,529; 10,531; 10,533; 10,533; 10,537; 10,539 and 10,541.

8. 20,499; 20,519; 20,539; 20,539; 20,559; 20,579; 20,599 and 20,619.

9. 10,000; 9,995; 9,990; 9,985 and 9,980.

Exercise 1.4

1. Round off to the nearest tens.

Ans. a. 49 rounded off to the nearest tens is 50.

- b. 193 rounded off to the nearest tens is 190.
 c. 3756 rounded off to the nearest tens is 3760.
 d. 77475 rounded off to the nearest tens is 77,480.
 e. 35876 rounded off to the nearest tens is 35,880.
 f. 98334 rounded off to the nearest tens is 98,330.
- 2. Round off to the nearest hundreds.**
 a. 446 rounded off to the nearest hundreds is 400.
 b. 719 rounded off to the nearest hundreds is 700.
 c. 983 rounded off to the nearest hundreds is 1000.
 d. 8899 rounded off to the nearest hundreds is 8,900.
 e. 16253 rounded off to the nearest hundreds is 16,300.
 f. 18997 rounded off to the nearest hundreds is 19,000.
- 3. Round off the numbers to the nearest 1000.**
 a. 3251 rounded off to the nearest 1000 is 3000.
 b. 6938 rounded off to the nearest 1000 is 7000.
 c. 20518 rounded off to the nearest 1000 is 21,000.
 d. 10734 rounded off to the nearest 1000 is 11,000.
 e. 19731 rounded off to the nearest 1000 is 20,000.
 f. 23126 rounded off to the nearest 1000 is 23,000.

Multiple Choice Questions

Tick (✓) the correct choice :

Ans. 1. a. 8254 2. b. 5703 3. b. 90502

2

Roman Numerals

Look Back

Complete the crossword with Hindu-Arabic numerals.

Ans.

1. 2	0		2. 1		
5			3. 5	0	
				4. 3	5. 4
		6. 1	9		0
		7		7. 3	8. 2
9. 4	4				9

Exercise 2.1

1. Match the following by colouring alike.

Ans.

32	LX XXIX
29	XLVI
46	CD XXXIV
89	XX XII
434	XXIX

2. Write the following in Roman numerals.

- | | |
|---------------------|-----------------|
| a. 36 = XXXVI | b. 19 = XIX |
| c. 39 = XXXIX | d. 47 = XLVII |
| e. 66 = LXVI | f. 375 = CCLXXV |
| g. 499 = CDXCIX | h. 996 = CMXCVI |
| i. 140 = CXL | k. 555 = DLV |
| j. 288 = CCLXXXVIII | l. 107 = CVII |

3. Write the following in Hindu-Arabic numerals.

- | | |
|-----------------|------------------|
| a. XCV = 95 | b. LXI = 61 |
| c. XXVI = 26 | d. XXIX = 29 |
| e. DCCI = 701 | f. XLVI = 46 |
| g. LXXXIII = 83 | h. CMLXXVI = 976 |
| i. XCIII = 93 | j. CCCXXI = 331 |
| k. CDII = 402 | l. DCL = 650 |

4. Write Roman numerals that is.

- | | | | |
|-----------|------|---------|-------|
| a. XV | XIV | b. XXX | XXIX |
| c. XXII | XXVI | d. VIII | III |
| e. XIV | XXIV | f. X | VII |
| g. XXVIII | XXI | h. XXI | XXIII |

Life Skills

Change Number into Roman Numerals

- Ans.
- There are **XXVII** students in my class.
 - I am **IX** years old.
 - My birthday is on **XVI** of June.
 - Our Independence day is celebrated on **XV** August.

Multiple Choice Questions

Tick (✓) the correct choice :

- Ans. 1. a. 34 2. c. IIV 3. b. XLV 4. c. XXXI

Look Back

Look at the heights of the peaks and answer the following questions.

- Ans. 1. 113 m 2. 2,371 m 3. 1,129 m
4. 7,785 m

Exercise 3.1

1. Add :

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

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

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

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

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

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

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

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

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

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

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

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

$$\begin{array}{r} \textcircled{1}\textcircled{2}\textcircled{2} \\ 5\ 1\ 9\ 8\ 9 \\ 2\ 5\ 0\ 7\ 4 \\ + 3\ 2\ 0\ 4\ 7 \\ \hline 10\ 9\ 1\ 1\ 0 \end{array}$$

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

2. Find the sum :

$$\begin{array}{r} \text{L TTh Th H T O} \\ 2\ 3\ 2\ 0\ 1 \\ + 3\ 6\ 1\ 2\ 2\ 2 \\ \hline 3\ 8\ 4\ 4\ 2\ 3 \end{array}$$

$$\begin{array}{r} \text{TTh Th H T O} \\ 1\ 2\ 3\ 4\ 2 \\ + 3\ 1\ 2\ 0\ 6 \\ \hline 4\ 3\ 5\ 4\ 8 \end{array}$$

$$\begin{array}{r} \text{L TTh Th H T O} \\ 1\ 2\ 3\ 4\ 5 \\ + 2\ 1\ 4\ 3\ 1\ 2 \\ \hline 2\ 2\ 7\ 6\ 7\ 9 \end{array}$$

d.

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

e.

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

f.

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

3. Find the missing digits :

a.

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

b.

	3	5	9	3	⑧	2
	1	6	⑤	8	2	5
+				4	4	4
	⑤	2	5	6	5	①

c.

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

Exercise 3.2

1. Fill in the blanks :

- $4975 + 3751 = \mathbf{3751} + 4975$
- $4094 + \mathbf{7141} = 7141 + 4094$
- $4333 + \mathbf{1129} = 1129 + 4333$
- $1875 + 2420 + 185 = 2420 + \mathbf{185} + 1875$
- $37945 + \mathbf{0} + 917 = 917 + \mathbf{0} + 37945$
- $149 + 3196 + 99 = 3196 + 149 + \mathbf{99}$
- $1449 + 326 + \mathbf{7110} = 326 + 7110 + 1449$
- $94317 + \mathbf{0} = 94317$
- The sum of the largest 5-digit number and 1 is equal to **1,00,000**.
- $8649 + 98745 = 98745 + \mathbf{4649}$.
- $310 + 981 + 309 = 981 + 309 + \mathbf{310}$.
- The successor of 3899 is **3900**.
- Answer of an addition operation is called **sum**.
- The numbers which are being added are called **addends**.

Exercise 3.3

1. Fill in the blanks :

a.

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

b.

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

c.

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

d.

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

e.

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

f.

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

g.

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

h.

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

2. Find the sum of.

a.

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

b.

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

c.

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

d.

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

e.

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

f.

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

g.

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

h.

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

Exercise 3.4

1. Subtract.

a.

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

b.

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

c.

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

d.

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

e.

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

f.

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

2. Find the difference :

a.

T	Th	H	T	O	
9	7	6	9	9	
-	8	6	5	9	9
1 1 1 0 0					

b.

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

c.

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

d.

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

e.

L	T	Th	H	T	O	
7	6	6	4	3	8	
-	4	4	3	3	2	1
3 2 3 1 1 7						

f.

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

3. Find the difference :

a.

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

b.

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

c.

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

4. Fill in the boxes.

a. $14,172 - 0 = 14,172$

b. $73,408 - 73,408 = 0$

c. $97,233 - 0 = 97,233$

d. $47,235 - 47,235 = 0$

e. $6,14,234 - 0 = 6,14,234$

f. $4,72,999 - 1 = 4,72,998$

Hots

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

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

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

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

8,0,4,3

4,0,4,5

8,2,6,1

3,1,1,7

Exercise 3.5

1. Subtract.

a.

L	T	Th	H	T	O
4	3	2	6	5	
-	1	7	5	3	4
2 5 7 3 1					

b.

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

c.

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

d.
$$\begin{array}{r} 7\ 6\ 0\ 0\ 0\ 0 \\ -3\ 4\ 3\ 2\ 0\ 7 \\ \hline 4\ 1\ 6\ 7\ 9\ 3 \end{array}$$

e.
$$\begin{array}{r} 8\ 5\ 8\ 4\ 7\ 0 \\ -6\ 0\ 1\ 9\ 8\ 3 \\ \hline 2\ 5\ 6\ 4\ 8\ 7 \end{array}$$

f.
$$\begin{array}{r} 7\ 6\ 0\ 0\ 8\ 5 \\ -4\ 2\ 5\ 1\ 7\ 8 \\ \hline 3\ 3\ 4\ 9\ 0\ 7 \end{array}$$

g.
$$\begin{array}{r} 6\ 4\ 3\ 6\ 7\ 3 \\ -3\ 1\ 9\ 5\ 8\ 8 \\ \hline 3\ 2\ 4\ 0\ 8\ 5 \end{array}$$

h.
$$\begin{array}{r} 6\ 8\ 7\ 0\ 0\ 3 \\ -2\ 9\ 9\ 4\ 6\ 5 \\ \hline 3\ 8\ 7\ 5\ 3\ 8 \end{array}$$

i.
$$\begin{array}{r} 6\ 0\ 0\ 6\ 1\ 0 \\ -2\ 9\ 1\ 7\ 8\ 4 \\ \hline 3\ 0\ 7\ 7\ 2\ 6 \end{array}$$

2. Find the difference and check your answer :

a.
$$\begin{array}{r} 8\ 5\ 1\ 0\ 6 \\ -3\ 7\ 2\ 5\ 4 \\ \hline 4\ 7\ 8\ 5\ 2 \end{array}$$

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

b.
$$\begin{array}{r} 7\ 6\ 2\ 3\ 9 \\ -7\ 0\ 2\ 9\ 3 \\ \hline 5\ 9\ 4\ 6 \end{array}$$

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

c.
$$\begin{array}{r} 4\ 8\ 3\ 6\ 9 \\ -1\ 5\ 4\ 6\ 7 \\ \hline 3\ 2\ 9\ 0\ 2 \end{array}$$

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

d.
$$\begin{array}{r} 6\ 1\ 5\ 8\ 2\ 4 \\ -3\ 3\ 7\ 4\ 6\ 9 \\ \hline 2\ 7\ 8\ 3\ 5\ 5 \end{array}$$

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

e.
$$\begin{array}{r} 9\ 6\ 0\ 0\ 8\ 5 \\ -6\ 2\ 5\ 1\ 7\ 8 \\ \hline 3\ 3\ 4\ 9\ 0\ 7 \end{array}$$

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

f.
$$\begin{array}{r} 8\ 0\ 0\ 0\ 0\ 0 \\ -6\ 2\ 5\ 1\ 7\ 8 \\ \hline 4\ 5\ 0\ 2\ 7\ 0 \end{array}$$

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

So, subtraction is correct.

g.
$$\begin{array}{r} 8\ 0\ 6\ 7\ 0\ 4 \\ -2\ 5\ 9\ 3\ 7\ 0 \\ \hline 5\ 4\ 7\ 3\ 3\ 4 \end{array}$$

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

h.
$$\begin{array}{r} 7\ 0\ 0\ 0\ 0\ 0 \\ -5\ 9\ 8\ 7\ 6\ 5 \\ \hline 1\ 0\ 1\ 2\ 3\ 5 \end{array}$$

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

So, subtraction is correct.

i.
$$\begin{array}{r} 8\ 5\ 1\ 2\ 5\ 6 \\ -2\ 1\ 4\ 3\ 2\ 1 \\ \hline 6\ 3\ 6\ 9\ 3\ 5 \end{array}$$

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

So, subtraction is correct.

Exercise 3.6

1. Number of men = 2,3650
 Number of women = 51,173
 Number of children = + 60,850
 Total number of people = 1,35,673
 \therefore Total population of the town 1,35,673.

2. Mr Kumar's annual income = ₹ 4,19,290
 Less annual income = ₹ 5860
 Amar's annual income = ₹ 4,13,430
 \therefore Amar's annual income is ₹ 4,13,430.
3. Number of apples harvested = 55,990
 Number of apples sold = 17897
 Number of apples = 55,990 – 17,8970
 = 38,093

So, 38093 apples are left with Raghu.

4. Mobile produce,
 in February = 14,705
 in March = 26,020
 in April = + 30,750
 Total number of Mobile produced = 71,475

So, 71,475 mobile were produced in three months.

5. Total cost of a plot and motorcycle = ₹ 5,50,000
 Cost of motorcycle = ₹ 83,754
 \therefore Cost of plot of land = 4,66,246

\therefore Mr. Millar paid ₹ 4,66,246 for the plot of land.

6. People visited Shimla,
 in this year = 3,52,469
 in the previous year = + 4,37,218
 Total people visited in both year = 7,89,687

\therefore 7,89,687 people visited Shimla in both years.

7. Quantity of rice = 8,54,090 kg
 Quantity of what = 6,24,479 kg
 Rice was more than wheat = 2,30,611 kg

\therefore 2,30,611 kg rice was more than wheat in the godown.

8. In examination,
 Passed candidate = 89,576
 Failed candidate = + 8,617
 \therefore Total appeared candidate = 98,193

So, 98,193 candidates appeared in the examination.

Exercise 3.7

1. a. Rounded off the numbers to the nearest 10's we get,

Actual value	Estimated value
52	50
27	+ 30
Estimated Sum	= <u>80</u>

- b. After rounded off the numbers nearest 10's

Actual value	Estimated value
80	80
38	40
Estimated difference = $80 - 40 = 40$	

- c. After rounded off the numbers nearest 10's

Actual value	Estimated value
914	910
276	280
Estimated sum = $901 + 280 = 1190$	

- d. After rounded off the numbers nearest 10's

Actual value	Estimated value
206	210
145	150
Estimated difference = $210 - 150 = 60$	

2. a. After rounded off the numbers nearest hundred's

Actual value	Estimated value
686	700
243	200
Estimate sum = $700 + 200 = 900$	

- b. After rounded off the numbers nearest hundred's

Actual value	Estimated value
6174	6200
3318	3300
Estimated difference = $6200 - 3300 = 2900$	

- c. After rounded off the numbers nearest hundred's

Actual value	Estimated value
7521	7500
1687	1700
Estimated sum = $7500 + 1700 = 9200$	

d. After rounded off numbers nearest hundred's

Actual value	Estimated value
--------------	-----------------

4667	4700
------	------

1085	1100
------	------

Estimate difference $4700 - 1100 = 3600$

3. After rounded off numbers nearest 10's

Actual value	Estimated value
--------------	-----------------

₹ 18,759	₹ 18,760
----------	----------

₹ 1,25,699	₹ 1,25,700
------------	------------

Estimated sum = ₹ $(18,760 + 1,25,700) = ₹ 1,44,460$

After rounded off numbers nearest 100's

Actual value	Estimated value
--------------	-----------------

₹ 18759	₹ 18,800
---------	----------

₹ 1,25,699	₹ 1,25,700
------------	------------

Estimated sum = ₹ $(18,800 + 1,25,700) = ₹ 1,44,500$

After rounded off numbers nearest 1000's

Actual value	Estimated value
--------------	-----------------

₹ 18,759	19000
----------	-------

₹ 1,25,699	1,26000
------------	---------

Estimated sum = ₹ $(19000 + 1,26,000) = ₹ 1,45,000$

Ans. ₹ 1,44,460, ₹ 1,44,500, ₹ 1,45,000

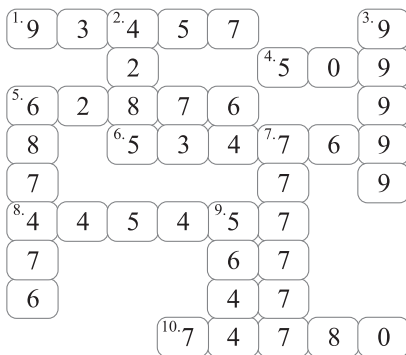
Multiple Choice Questions

Tick (✓) the correct choice :

Ans. 1. c. 5735 2. c. 1,99,99 3. a. minuend 4. b. 12752

Fun with Maths

Solve the crossword.



Down ↓

2. $4286 - 1$
3. successor of 99998
5. $587476 + 100000$
7. $87777 - 10000$
9. $44384 + 564 = \mathbf{564} + 44384$

Across →

1. $93457 + 0$
4. $63056 - 62547$
5. $62776 + 100$
6. $299120 + 235647$
8. $457457 - 1000$
10. $74770 + 10$

4

Multiplication

Look Back

Look at the heights of the peaks and answer the following questions.

Ans.

a.

135

3×25

35×3

(45×3)

23×6

b.

276

10×76

27×6

(12×23)

18×15

c.

490

13×49

(14×35)

12×18

15×14

d.

1800

(30×60)

35×25

15×90

120×20

Fill in the blanks.

Ans.

1. $15 \times 1 = \mathbf{10}$

3. $27 \times \mathbf{1} = 27$

5. $1 \times \mathbf{1} = 1$

7. $14 \times 0 = \mathbf{0}$

9. $1 \times 33 = \mathbf{33}$

11. $15 \times 8 = 8 \times \mathbf{15}$

2. $4 \times \mathbf{0} \times 5 = 0$

4. $1 \times \mathbf{1} = 16$

6. $0 \times 0 = \mathbf{0}$

8. $(3 \times 4) \times 2 = (2 \times 3) \times \mathbf{4}$

10. $16 \times \mathbf{0} = 0$

12. $6 \times 5 \times \mathbf{9} = 9 \times 6 \times 5$

Exercise 4.1

1. **Fill in the blanks :**

a. $111 \times 314 = 314 \times \mathbf{111}$

b. $1945 \times 0 = \mathbf{0}$

c. $361 \times 1 = \mathbf{361}$

d. $569 \times 318 \times 937 = 937 \times 318 \times \mathbf{569}$

e. $9100 \times \mathbf{1} = 9100$

f. $1845 \times \mathbf{0} = 0$

2. Find the product :

Ans. a.

$$\begin{array}{r} \textcircled{1} \textcircled{2} \\ 236 \\ \times 4 \\ \hline 944 \end{array}$$

b.

$$\begin{array}{r} \textcircled{4} \textcircled{4} \\ 167 \\ \times 6 \\ \hline 1002 \end{array}$$

c.

$$\begin{array}{r} \textcircled{5} \\ 308 \\ \times 7 \\ \hline 2156 \end{array}$$

d.

$$\begin{array}{r} \textcircled{4} \textcircled{1} \\ 283 \\ \times 5 \\ \hline 1415 \end{array}$$

e.

$$\begin{array}{r} \textcircled{1} \textcircled{1} \textcircled{1} \\ 2365 \\ \times 3 \\ \hline 7095 \end{array}$$

f.

$$\begin{array}{r} \textcircled{2} \textcircled{2} \textcircled{1} \\ 4653 \\ \times 4 \\ \hline 18612 \end{array}$$

g.

$$\begin{array}{r} \textcircled{1} \textcircled{4} \\ 1308 \\ \times 6 \\ \hline 7848 \end{array}$$

h.

$$\begin{array}{r} \textcircled{1} \textcircled{2} \textcircled{3} \\ 1234 \\ \times 8 \\ \hline 9872 \end{array}$$

Exercise 4.2

1. Find the product :

a.

$$\begin{array}{r} 124 \\ \times 13 \\ \hline 372 \\ + 1240 \\ \hline 1612 \end{array}$$

b.

$$\begin{array}{r} 213 \\ \times 15 \\ \hline 1065 \\ + 2130 \\ \hline 3195 \end{array}$$

c.

$$\begin{array}{r} 1875 \\ \times 35 \\ \hline 9375 \\ + 56250 \\ \hline 65625 \end{array}$$

d.

$$\begin{array}{r} 3794 \\ \times 75 \\ \hline 18970 \\ + 265580 \\ \hline 284550 \end{array}$$

Ans. 1612

Ans. 3195

Ans. 65625

Ans. 284550

2. Find the product :

a. $378 \times 32 = 12,096$

$$\begin{array}{r} 378 \\ \times 32 \\ \hline 756 \\ + 11340 \\ \hline 12096 \end{array}$$

b. $136 \times 49 = 6,664$

$$\begin{array}{r} 139 \\ \times 49 \\ \hline 1224 \\ + 5440 \\ \hline 6664 \end{array}$$

c. $843 \times 18 = 15,174$

$$\begin{array}{r} 843 \\ \times 18 \\ \hline 6744 \\ + 8430 \\ \hline 15174 \end{array}$$

d. $1395 \times 64 = 89,280$

$$\begin{array}{r} 1395 \\ \times 64 \\ \hline 5580 \\ + 83700 \\ \hline 89280 \end{array}$$

e. $2407 \times 35 = 84,45$

$$\begin{array}{r} 2407 \\ \times 35 \\ \hline 12035 \\ + 72210 \\ \hline 84245 \end{array}$$

f. $3087 \times 37 = 1,14,29$

$$\begin{array}{r} 3087 \\ \times 37 \\ \hline 21609 \\ + 92610 \\ \hline 114219 \end{array}$$

g. $1539 \times 26 = 40,014$

$$\begin{array}{r} 1539 \\ \times 26 \\ \hline 9234 \\ + 30780 \\ \hline 40014 \end{array}$$

h. $2056 \times 22 = 45,232$

$$\begin{array}{r} 2056 \\ \times 22 \\ \hline 4112 \\ + 41120 \\ \hline 45232 \end{array}$$

i. $1234 \times 48 = 59,232$

$$\begin{array}{r} 1234 \\ \times 48 \\ \hline 9872 \\ + 49360 \\ \hline 59232 \end{array}$$

Exercise 4.3

1. Find the product :

a. $809 \times 312 = 252408$

$$\begin{array}{r} 809 \\ \times 312 \\ \hline 1618 \\ 8090 \\ + 24200 \\ \hline 252408 \end{array}$$

b. $429 \times 246 = 1,05,534$

$$\begin{array}{r} 429 \\ \times 246 \\ \hline 2574 \\ 17160 \\ + 85800 \\ \hline 105534 \end{array}$$

c. $473 \times 208 = 98,384$

$$\begin{array}{r} 473 \\ \times 208 \\ \hline 3784 \\ + 94600 \\ \hline 98384 \end{array}$$

d. $606 \times 440 = 2,66,640$

$$\begin{array}{r} 606 \\ \times 440 \\ \hline 24240 \\ + 242400 \\ \hline 266640 \end{array}$$

e. $386 \times 302 = 1,16,572$

	3	8	6	
	×	3	8	6
		3	0	2
		7	7	2
		0	0	0
	+	1	1	5
		8	0	0
		1	1	6
		5	7	2

f. $3257 \times 181 = 5,89,517$

	3	2	5	7	
	×	1	8	1	
		3	2	5	7
		2	6	0	5
		6	0	5	6
	+	3	2	5	7
		0	0	0	
		5	8	9	5
		1	7		

g. $1629 \times 214 = 48,606$

	1	6	2	9	
	×	2	1	4	
		6	5	1	6
		1	6	2	9
	+	3	2	5	8
		0	0	0	
		3	4	8	6
		0	6		

h. $1363 \times 543 = 7,40,109$

	1	3	6	3	
	×	5	4	3	
		4	0	8	9
		5	4	5	2
	+	6	8	1	5
		0	0	0	
		7	4	0	1
		0	9		

i. $1318 \times 207 = 2,72,826$

	1	6	2	9	
	×	2	1	4	
		6	5	1	6
		1	6	2	9
	+	3	2	5	8
		0	0	0	
		3	4	8	6
		0	6		

j. $1615 \times 301 =$

	1	6	1	5	
	×	3	0	1	

k. $2795 \times 244 =$

	2	7	9	5	
	×	2	4	4	

l. $516 \times 170 = 87,720$

	5	1	6	
	×	1	7	0
		0	0	0
		3	6	1
		2	0	
		5	1	6
		0	0	
		8	7	7
		2	0	

m. $4070 \times 960 = 39,07,200$

	4	0	7	0	
	×	9	6	0	
		0	0	0	0
		2	4	4	2
		0	0	0	
		3	6	6	3
		0	0	0	
		3	3	0	3
		2	0	0	

n. $8973 \times 602 = 54,01,746$

	8	9	7	3	
	×	6	0	2	
		1	7	9	4
		6	0	0	0
		0	0	0	0
		5	3	8	3
		8	0	0	
		5	4	0	1
		7	4	6	

o. $1596 \times 348 = 5,55,408$

1	5	9	6
×	3	4	8
<hr/>			
1	2	7	6
6	3	8	4
4	7	8	8
5	5	5	4
			0
			8

2. Fill in the blanks :

a. $63 \times 200 = \mathbf{12,600}$

b. $79 \times 1000 = \mathbf{79000}$

c. $128 \times 40 = \mathbf{5120}$

d. $407 \times 5000 = \mathbf{2035000}$

e. $325 \times 90 = \mathbf{29250}$

f. $82 \times 300 = \mathbf{24600}$

Exercise 4.4

1. a. After rounded off the numbers nearest the ten's.

Actual value

Estimated value

82

80

63

60

Estimated product = $80 \times 60 = \mathbf{4800}$

b. After rounded off the numbers nearest ten's

Actual value

Estimated value

75

80

46

50

Estimated product = $80 \times 50 = \mathbf{4000}$

d. After rounded off the numbers nearest ten's

Actual value

Estimated value

26

30

29

30

Estimated product = $30 \times 30 = \mathbf{900}$

e. After rounded off the numbers nearest ten's

Actual value

Estimated value

67

70

41

40

Estimated product = $70 \times 40 = \mathbf{2800}$

f. After rounded off the number nearest ten's

Actual value

Estimated value

77

80

8

10

Estimated product = $80 \times 10 = \mathbf{800}$

2. a. After rounded off the numbers nearest hundred's

Actual value	Estimated value
--------------	-----------------

749	700
-----	-----

261	300
-----	-----

$$\therefore \text{Estimated product} = 700 \times 300 = 210000$$

- b. After rounded off the numbers nearest hundred's

Actual value	Estimated value
--------------	-----------------

327	300
-----	-----

816	800
-----	-----

$$\text{Estimated product} = 300 \times 800 = 240000$$

- c. After rounded off the numbers nearest hundred's

Actual value	Estimated value
--------------	-----------------

536	500
-----	-----

748	700
-----	-----

$$\text{Estimated product} = 500 \times 700 = 350000$$

- d. After rounded off the numbers nearest hundred's

Actual value	Estimated value
--------------	-----------------

634	600
-----	-----

459	500
-----	-----

$$\therefore \text{Estimated product} = 600 \times 500 = 3,00,000$$

- e. After rounded off the numbers nearest hundred's

Actual value	Estimated value
--------------	-----------------

853	900
-----	-----

393	400
-----	-----

$$\text{Estimated product} = 900 \times 400 = 360000$$

- f. After rounded off the numbers nearest hundred's

Actual value	Estimated value
--------------	-----------------

407	400
-----	-----

231	200
-----	-----

$$\text{Estimated product} = 400 \times 200 = 80000$$

Exercise 4.5

1. Rajni pays her school fee in 1 month = ₹ 997
 \therefore Rajni paid her school fee in 12 month = ₹ 997 \times 12
 = ₹ 11,964.

9	9	7
\times	1	2
<hr/>		
1	9	9
9	9	7
0		
1	1	9
6	4	

- So, Rajni will paid ₹ 11,964 as fee for a year.
2. Number of mangoes pached in 1 box = 135
 \therefore Number of mangoes pached in 32 boxes = $135 \times 32 = 4320$
 \therefore A farmer will pack 4320 mangoes in the 32 boxes.
3. There are days in 1 year = 365
 \therefore There are days in 8 years = $365 \times 8 = 2920$
 So, there are 2920 days in 8 years.
4. From each member, Arijit collected = ₹ 1500
 Number of members = 9
 \therefore From 9 member Arijit collected = $\text{₹ } 1500 \times 9 = \text{₹ } 13500$.
 So, Arijit collected ₹ 13500.
5. 1 day = 24 hours = 24×60 minutes = 1440 minutes
 Our heart beats in 1 minutes = 72 times
 \therefore Our heart beats in 1440 minutes = 72×1440 times = 1,03,680 times
 So, our hearts beats 1,03,680 times in a day.
6. The cost of 1 trourer = ₹ 1279
 \therefore The cost of 26 trourers = $\text{₹ } 1279 \times 26 = \text{₹ } 13,254$
 \therefore The cost of 26 trouser will be ₹ 33,254.
7. Weight of 1 papaya = 1288 grams
 \therefore Weight of 157 papaya = $1288 \times 157 = 2,02,216$ grams
 So, weight of 157 papaya is 202 kg 216 grams.
8. 1 truck carrys the boxes of apples = 3432
 \therefore 6 trucks will carry the boxes of apples = $3432 \times 6 = 20592$
 So, 6 trucks will carry 20,592 boxes of apples.

$$\begin{array}{r} 135 \\ \times 32 \\ \hline 270 \\ 4050 \\ \hline 4320 \end{array}$$

$$\begin{array}{r} 1440 \\ \times 72 \\ \hline 2880 \\ 100800 \\ \hline 103680 \end{array}$$

$$\begin{array}{r} 1288 \\ \times 157 \\ \hline 9016 \\ 64400 \\ 128800 \\ \hline 202216 \end{array}$$

Fun with Maths

Tick (✓) the correct choice :

Ans. a. 3,000 b. 64,00 c. 150 d. 24000

Multiple Choice Questions

Tick (✓) the correct choice :

Ans. 1. b. product 2. b. 4180 3. a. 381 4. a. 45,16

5

Division

Look Back

Simran used all the question bucket to point the answer house.
Ans.



$$\begin{array}{r} 639 - 3 \\ = 213 \end{array}$$



$$\begin{array}{r} 327 - 3 \\ = 109 \end{array}$$



$$\begin{array}{r} 824 - 2 \\ = 412 \end{array}$$



$$\begin{array}{r} 777 - 7 \\ = 111 \end{array}$$



$$\begin{array}{r} 212 - 4 \\ = 53 \end{array}$$

Exercise 5.1

Fill in the blanks :

Ans. a. $214 \div 1 = 214$

c. $25 \div 1 = 25$

e. $12 \div 12 = 1$

g. $0 \div 415 = 0$

i. $39 \div 99 = 1$

b. $175 \div 1 = 175$

d. $180 \div 180 = 1$

f. $0 \div 9 = 0$

h. $0 \div 16 = 0$

Exercise 5.2

1. Divide and check your answer.

a.

$$\begin{array}{r} 102 \\ 4 \overline{)308} \\ \underline{-30} \\ 00 \\ \underline{-00} \\ 08 \\ \underline{-08} \\ 0 \\ \underline{-0} \\ 0 \\ \underline{-0} \\ 0 \end{array}$$

$$308 \div 3$$

Divisor = 3, Dividend = 308

Quotient = 102, Remainder = 2

Check : Divisor \times Quotient + Remainder
= Dividend

$$3 \times 102 + 2 = 306 + 2 = 308$$

Thus, the division is correct.

$$\begin{array}{r} 43 \\ 4 \overline{)259} \\ -24 \downarrow \\ \hline 19 \\ -18 \\ \hline 1 \end{array}$$

$$259 \div 6$$

$$\text{Divisor} = 6, \text{Quotient} = 43$$

$$\text{Remainder} = 1, \text{Dividend} = 259$$

$$\text{Check : Divisor} \times \text{Quotient} + \text{Remainder} = \text{Dividend}$$

$$6 \times 43 + 1 = 258 + 1 = 259$$

Thus, the division is correct.

$$\begin{array}{r} 33 \\ 4 \overline{)235} \\ -21 \downarrow \\ \hline 25 \\ -21 \\ \hline 4 \end{array}$$

$$235 \div 7$$

$$\text{Divisor} = 7, \text{Quotient} = 33$$

$$\text{Remainder} = 4 \text{ Dividend} = 235$$

$$\text{Check : Divisor} \times \text{Quotient} + \text{Remainder} = \text{Dividend}$$

$$7 \times 33 + 4 = 231 + 4 = 235$$

Thus, the division is correct.

$$\begin{array}{r} 91 \\ 4 \overline{)729} \\ -72 \downarrow \\ \hline 09 \\ -8 \\ \hline 1 \end{array}$$

$$729 \div 8$$

$$\text{Divisor} = 8, \text{Quotient} = 91$$

$$\text{Remainder} = 1, \text{Dividend} = 729$$

$$\text{Check : Divisor} \times \text{Quotient} + \text{Remainder} = \text{Dividend}$$

$$8 \times 91 = 728 + 1 = 728 + 1 = 729$$

Thus, the division is correct.

$$\begin{array}{r} 108 \\ 9 \overline{)978} \\ -9 \downarrow \\ \hline 078 \\ -78 \\ \hline 6 \end{array}$$

$$978 \div 9$$

$$\text{Divisor} = 9, \text{Quotient} = 108$$

$$\text{Remainder} = 6, \text{Dividend} = 978$$

$$\text{Check : Divisor} \times \text{Quotient} + \text{Remainder} = \text{Dividend}$$

$$9 \times 108 + 6 = 972 + 6 = 978$$

Thus, the division is correct.

$$\begin{array}{r} 29 \\ 9 \overline{)267} \\ -18 \downarrow \\ \hline 87 \\ -81 \\ \hline 6 \end{array}$$

$$267 \div 9$$

$$\text{Divisor} = 9, \text{Quotient} = 29$$

$$\text{Remainder} = 6, \text{Dividend} = 267$$

$$\text{Check : Divisor} \times \text{Quotient} + \text{Remainder} = \text{Dividend}$$

$$9 \times 29 + 6 = 261 + 6 = 267$$

Thus, the division is correct.

$$\begin{array}{r} 50 \\ 9 \overline{)457} \\ \underline{-45} \downarrow \\ 07 \\ \underline{-0} \\ 7 \end{array}$$

$$457 \div 9$$

Divisor = 9, Quotient = 50 Remainder = 7

Check : Divisor \times Quotient + Remainder
= Dividend

$$9 \times 50 + 7 = 450 + 7 = 457$$

Thus, the division is correct.

$$\begin{array}{r} 129 \\ 7 \overline{)903} \\ \underline{-7} \\ 20 \\ \underline{-14} \\ 63 \\ \underline{-63} \\ 0 \end{array}$$

$$903 \div 7$$

Divisor = 7, Quotient = 129

Remainder = 0 Dividend = 903

Check : Divisor \times Quotient + Remainder
= Dividend

$$7 \times 129 + 0 = 903 + 0 = 903$$

Thus, division is correct.

$$\begin{array}{r} 1076 \\ 2 \overline{)2153} \\ \underline{-2} \\ 15 \\ \underline{-14} \\ 13 \\ \underline{-12} \\ 1 \end{array}$$

$$2153 \div 2$$

Divisor = 2, Quotient = 1076,

Remainder = 1 dividend = 2153

Check :

Divisor \times Quotient + Remainder
= Dividend

$$2 \times 1076 + 1 = 2152 + 1 = 2153$$

Thus, the division is correct.

$$\begin{array}{r} 216 \\ 3 \overline{)649} \\ \underline{-6} \\ 4 \\ \underline{-3} \\ 19 \\ \underline{-18} \\ 1 \end{array}$$

$$649 \div 3$$

Divisor = 3, Quotient = 216

Remainder = 1, dividend = 649

Check :

Divisor \times Quotient

$$3 \times 216 + 1 = 648 + 1 = 649$$

Thus, the division is correct.

$$\begin{array}{r} 1265 \\ 6 \overline{)7595} \\ \underline{-7} \\ 15 \\ \underline{-12} \\ 39 \\ \underline{-30} \\ 9 \\ \underline{-9} \\ 0 \end{array}$$

$$7595 \div 6$$

Divisor = 6, Quotient = 1265

Remainder = 5, Dividend = 7595

Check :

Divisor \times Quotient + Remainder = Dividend

$$6 \times 1265 + 5 = 7590 + 5 = 7595$$

Thus, division is correct.

$$\begin{array}{r}
 1076 \\
 8 \overline{) 8437} \\
 \underline{- 8} \\
 043 \\
 \underline{- 40} \\
 37 \\
 \underline{- 32} \\
 5
 \end{array}$$

$$8437 \div 8$$

$$\text{Divisor} = 8, \text{Quotient} = 1054$$

$$\text{Remainder} = 5 \text{ Dividend}$$

Check :

$$\text{Divisor} \times \text{Quotient} + \text{Remainder}$$

$$= \text{Dividend}$$

$$8 \times 1054 + 5 = 8432 + 5 = 8437$$

Thus, the division is correct.

$$\begin{array}{r}
 1346 \\
 3 \overline{) 4040} \\
 \underline{- 3} \\
 10 \\
 \underline{- 2} \\
 20 \\
 \underline{- 18} \\
 2
 \end{array}$$

$$4040 \div 3$$

$$\text{Divisor} = 3, \text{Quotient} = 1346, \text{Remainder} = 2$$

$$\text{and Dividend} = 4040$$

Check :

$$\text{Divisor} \times \text{Quotient} + \text{Remainder} = \text{Dividend}$$

$$3 \times 1346 + 2 = 4038 + 2 = 4040 = \text{Dividend}$$

So, the division is correct.

$$\begin{array}{r}
 402 \\
 6 \overline{) 2416} \\
 \underline{- 24} \\
 116 \\
 \underline{- 12} \\
 4
 \end{array}$$

$$2416 \div 6$$

$$\text{Divisor} = 6, \text{Quotient} = 402$$

$$\text{Remainder} = 4, \text{Dividend} = 2416$$

Check :

$$\text{Divisor} \times \text{Quotient} + \text{Remainder} = \text{Dividend}$$

$$6 \times 402 + 4 = 2412 + 4 = 2416 = \text{Dividend}$$

So, the division is correct.

$$\begin{array}{r}
 353 \\
 3 \overline{) 1059} \\
 \underline{- 9} \\
 15 \\
 \underline{- 15} \\
 9 \\
 \underline{- 9} \\
 0
 \end{array}$$

$$1059 \div 3$$

$$\text{Divisor} = 3, \text{Quotient} = 353$$

$$\text{Remainder} = 0, \text{Dividend} = 1059$$

Check :

$$\text{Divisor} \times \text{Quotient} + \text{Remainder} = \text{Dividend}$$

$$3 \times 353 + 0 = 1059 = \text{dividend}$$

So, the division is correct.

$$\begin{array}{r}
 912 \\
 3 \overline{) 3648} \\
 \underline{- 36} \\
 4 \\
 \underline{- 4} \\
 8 \\
 \underline{- 8} \\
 0
 \end{array}$$

$$\text{Divisor} = 4, \text{Quotient} = 912$$

$$\text{Remainder} = 0, \text{Dividend} = 3648$$

$$\text{Check : Divisor} \times \text{Quotient} + \text{Remainder}$$

$$= \text{Dividend}$$

$$4 \times 912 + 0 = 3648 = 3648 = \text{Dividend}$$

So, the division is correct.

2. a.
$$\begin{array}{r} 323 \\ 7 \overline{)969} \\ \underline{-9} \\ 06 \\ \underline{-6} \\ 0 \\ 08 \\ \underline{-9} \\ 0 \end{array}$$

Quotient = 323
Remainder = 0

b.
$$\begin{array}{r} 115 \\ 8 \overline{)924} \\ \underline{-8} \\ 12 \\ \underline{-8} \\ 44 \\ \underline{-40} \\ 4 \end{array}$$

Quotient = 115
Remainder = 4

c.
$$\begin{array}{r} 211 \\ 4 \overline{)844} \\ \underline{-8} \\ 04 \\ \underline{-4} \\ 04 \\ \underline{-4} \\ 0 \end{array}$$

Quotient = 211
Remainder = 0

d.
$$\begin{array}{r} 124 \\ 8 \overline{)874} \\ \underline{-7} \\ 17 \\ \underline{-14} \\ 34 \\ \underline{-28} \\ 6 \end{array}$$

Quotient = 124
Remainder = 6

e.
$$\begin{array}{r} 115 \\ 6 \overline{)738} \\ \underline{-6} \\ 13 \\ \underline{-12} \\ 18 \\ \underline{-18} \\ 0 \end{array}$$

Quotient = 123
Remainder = 0

f.
$$\begin{array}{r} 113 \\ 4 \overline{)565} \\ \underline{-5} \\ 06 \\ \underline{-5} \\ 15 \\ \underline{-15} \\ 0 \end{array}$$

Quotient = 211
Remainder = 0

g.
$$\begin{array}{r} 3181 \\ 3 \overline{)9543} \\ \underline{-9} \\ 5 \\ \underline{-3} \\ 24 \\ \underline{24} \\ 3 \\ \underline{-3} \\ 0 \end{array}$$

Quotient = 124
Remainder = 6

h.
$$\begin{array}{r} 115 \\ 6 \overline{)738} \\ \underline{-6} \\ 13 \\ \underline{-12} \\ 18 \\ \underline{-18} \\ 0 \end{array}$$

Quotient = 123
Remainder = 0

$$\begin{array}{r} \text{i.} \quad \begin{array}{r} 897 \\ 3 \overline{)5383} \\ \underline{-48} \\ 58 \\ \underline{-54} \\ 43 \\ \underline{42} \\ 1 \end{array} \end{array}$$

Quotient = 897
Remainder = 1

$$\begin{array}{r} \text{j.} \quad \begin{array}{r} 757 \\ 3 \overline{)6818} \\ \underline{-63} \\ 51 \\ \underline{-45} \\ 68 \\ \underline{63} \\ 5 \end{array} \end{array}$$

Quotient = 757
Remainder = 5

$$\begin{array}{r} \text{k.} \quad \begin{array}{r} 1347 \\ 3 \overline{)9432} \\ \underline{-7} \\ 24 \\ \underline{-21} \\ 33 \\ \underline{-33} \\ 28 \\ \underline{28} \\ 0 \end{array} \end{array}$$

Quotient = 1347
Remainder = 3

$$\begin{array}{r} \text{l.} \quad \begin{array}{r} 731 \\ 3 \overline{)1520} \\ \underline{-49} \\ 22 \\ \underline{-21} \\ 10 \\ \underline{-7} \\ 3 \end{array} \end{array}$$

Quotient = 731
Remainder = 3

$$\begin{array}{r} \text{m.} \quad \begin{array}{r} 757 \\ 3 \overline{)6818} \\ \underline{-63} \\ 51 \\ \underline{-45} \\ 68 \\ \underline{63} \\ 5 \end{array} \end{array}$$

Quotient = 757
Remainder = 5

$$\begin{array}{r} \text{n.} \quad \begin{array}{r} 1887 \\ 3 \overline{)7550} \\ \underline{-40} \\ 351 \\ \underline{-32} \\ 30 \\ \underline{-28} \\ 2 \end{array} \end{array}$$

Quotient = 2284
Remainder = 0

$$\begin{array}{r} \text{o.} \quad \begin{array}{r} 1887 \\ 3 \overline{)7550} \\ \underline{-4} \\ 35 \\ \underline{-32} \\ 35 \\ \underline{-28} \\ 2 \end{array} \end{array}$$

Quotient = 1887
Remainder = 2

$$\begin{array}{r} \text{p.} \quad \begin{array}{r} 2284 \\ 2 \overline{)4568} \\ \underline{-4} \\ 05 \\ \underline{-4} \\ 16 \\ \underline{-16} \\ 8 \\ \underline{8} \\ 0 \end{array} \end{array}$$

Quotient = 2284
Remainder = 0

Mental Maths

Find the quotient and remainder without doing long division.

Ans.	Q	R		Q	R
1. $99 \div 10$	9	9	2. $1350 \div 10$	135	0
3. $4107 \div 10$	410	7	4. $9999 \div 10$	999	9

5. $4109 \div 100$	41	9	6. $3075 \div 100$	30	75
7. $9092 \div 100$	90	92	8. $9999 \div 100$	99	99

Exercise 5.3

1. Fill in the blanks.

- a. $20000 \div 1000 \rightarrow Q = \mathbf{20}$ b. $3200 \div 100 \rightarrow Q = \mathbf{32}$
c. $3000 \div 100 \rightarrow Q = \mathbf{30}$ d. $15000 \div 1000 \rightarrow Q = \mathbf{15}$
e. $780 \div 10 \rightarrow Q = \mathbf{78}$ f. $92000 \div 1000 \rightarrow Q = \mathbf{69}$
g. $612000 \div 1000 \rightarrow Q = \mathbf{612}$ h. $69000 \div 1000 \rightarrow Q = \mathbf{92}$

2. Divide the following numbers by 10 and write the quotient and remainder.

When a number is divided by 10, the digit at the ones place is remainder and rest of digits are quotient.

	Q	R
a. $961 \div 10$	96	1
b. $398 \div 10$	39	8
c. $462 \div 10$	46	2
d. $1011 \div 10$	101	1
e. $2654 \div 10$	265	4
f. $12345 \div 10$	1234	5
g. $3922 \div 10$	392	2
h. $894 \div 10$	89	4

3. Divide the following numbers by 100.

When a number is divided by 100, the digits at ones and tens places are remainder and rest are quotient.

	Q	R
a. $925 \div 100$	9	25
b. $52630 \div 100$	52	63
c. $3498 \div 100$	34	98
d. $25607 \div 100$	256	07
e. $5629 \div 100$	56	29
f. $71808 \div 100$	718	08
g. $13629 \div 100$	136	29
h. $4810 \div 100$	48	10

4. Divide the following numbers by 1000.

When a number is divided by 1000, the digits at the ones tens and hundreds place are the remainder and rest are quotient.

	Q	R
a. $6800 \div 1000$	6	800

b.	$5209 \div 1000$	5	209
c.	$3856 \div 1000$	3	856
d.	$21347 \div 1000$	21	347
e.	$62820 \div 1000$	62	820
f.	$51058 \div 1000$	51	058
g.	$72002 \div 1000$	13	629
h.	$572009 \div 1000$	527	9

Exercise 5.4

1. Divide and check your answer.

a.

$$\begin{array}{r} 28 \\ 21 \overline{)600} \\ \underline{-42} \\ 180 \\ \underline{-168} \\ 12 \end{array}$$

So, $Q = 28$, $R = 12$

Check : $Q \times D + R$

= Dividend

$$28 \times 21 + 12 = 588 + 12$$

$$= 600 \text{ (Dividend)}$$

So, answer is correct.

c.

$$\begin{array}{r} 41 \\ 18 \overline{)755} \\ \underline{-72} \\ 35 \\ \underline{-18} \\ 17 \end{array}$$

So, $Q = 41$, $R = 17$

Check : $Q \times D + R$

= Dividend

$$41 \times 18 + 17 = 738 + 17$$

$$= 755 \text{ (Dividend)}$$

So, answer is correct.

b.

$$\begin{array}{r} 28 \\ 21 \overline{)93} \\ \underline{-80} \\ 13 \end{array}$$

So, $Q = 5$, $R = 13$

Check : $Q \times D + R$

= Dividend

$$5 \times 16 + 13 = 80 + 13$$

$$= 93 \text{ (Dividend)}$$

So, answer is correct.

d.

$$\begin{array}{r} 51 \\ 15 \overline{)769} \\ \underline{-75} \\ 19 \\ \underline{-15} \\ 4 \end{array}$$

So, $Q = 51$, $R = 4$

Check : $Q \times D + R$

= Dividend

$$15 \times 51 + 4 = \text{Dividend}$$

$$765 + 4 = 769 =$$

So, answer is correct.

$$\begin{array}{r} \text{e.} \quad \frac{19}{14 \overline{)278}} \\ \underline{-14} \\ 138 \\ \underline{-126} \\ 12 \end{array}$$

So, $Q = 19$, $R = 12$
 Check : $Q \times D + R$
 = Dividend
 $19 \times 14 + 12 = \text{Dividend}$
 $266 + 12 = 278 = \text{Dividend}$
 So, answer is correct.

$$\begin{array}{r} \text{g.} \quad \frac{8}{14 \overline{)426}} \\ \underline{-408} \\ 18 \end{array}$$

So, $Q = 8$, $R = 18$
 Check : $Q \times D + R$
 = Dividend
 $8 \times 51 + 18 = \text{Dividend}$
 $408 + 18 = 426 = \text{Dividend}$
 So, answer is correct.

$$\begin{array}{r} \text{i.} \quad \frac{45}{16 \overline{)735}} \\ \underline{-64} \\ 90 \\ \underline{-80} \\ 15 \end{array}$$

So, $Q = 45$, $R = 15$
 Check : $Q \times D + R$
 = Dividend
 $45 \times 16 + 15 = 720 + 15$
 = Dividend
 $735 = \text{Dividend}$
 So, answer is correct.

$$\begin{array}{r} \text{f.} \quad \frac{32}{14 \overline{)579}} \\ \underline{-54} \\ 39 \\ \underline{-36} \\ 3 \end{array}$$

So, $Q = 32$, $R = 3$
 Check : $Q \times D + R$
 = Dividend
 $32 \times 18 + 3 = 576 + 3$
 $= 579 = (\text{Dividend})$
 So, answer is correct.

$$\begin{array}{r} \text{h.} \quad \frac{27}{21 \overline{)567}} \\ \underline{-42} \\ 147 \\ \underline{-147} \\ 0 \end{array}$$

So, $Q = 27$, $R = 0$
 Check : $Q \times D + R$
 = Dividend
 $27 \times 21 + 0 = 567 + 0$
 $567 = \text{Dividend}$
 So, answer is correct.

$$\begin{array}{r} \text{j.} \quad \frac{7}{25 \overline{)175}} \\ \underline{-175} \\ 0 \end{array}$$

So, $Q = 7$, $R = 0$
 Check : $Q \times D + R$
 = Dividend
 $7 \times 25 + 0 = 175 + 0$
 = Dividend
 $175 = \text{Dividend}$
 So, answer is correct.

$$\begin{array}{r} \text{k.} \quad \frac{23}{22 \overline{)525}} \\ -44 \\ \hline 85 \\ -66 \\ \hline 19 \end{array}$$

So, $Q = 23$, $R = 19$

Check : $Q \times D + R$

= Dividend

$23 \times 22 + 19 = 506 + 19$

= Dividend

525 = Dividend

So, answer is correct.

$$\begin{array}{r} \text{l.} \quad \frac{30}{23 \overline{)695}} \\ -69 \\ \hline 05 \\ -00 \\ \hline 5 \end{array}$$

So, $Q = 30$, $R = 5$

Check : $Q \times D + R$

= Dividend

$30 \times 23 + 5 = 690 + 5$

= Dividend

695 = Dividend

So, answer is correct.

2. Divide the following and write the quotient and remainder.

$$\begin{array}{r} \text{a.} \quad \frac{23}{22 \overline{)525}} \\ -44 \\ \hline 85 \\ -66 \\ \hline 19 \end{array}$$

$Q = 7$, $R = 12$

$$\begin{array}{r} \text{b.} \quad \frac{9}{81 \overline{)735}} \\ -729 \\ \hline 6 \end{array}$$

$Q = 9$, $R = 6$

$$\begin{array}{r} \text{c.} \quad \frac{9}{44 \overline{)433}} \\ -396 \\ \hline 37 \end{array}$$

$Q = 9$, $R = 37$

$$\begin{array}{r} \text{d.} \quad \frac{8}{42 \overline{)345}} \\ -336 \\ \hline 9 \end{array}$$

$Q = 8$, $R = 9$

$$\begin{array}{r} \text{e.} \quad \frac{19}{14 \overline{)278}} \\ -14 \\ \hline 138 \\ -126 \\ \hline 12 \end{array}$$

$Q = 19$, $R = 12$

$$\begin{array}{r} \text{f.} \quad \frac{32}{18 \overline{)579}} \\ -54 \\ \hline 39 \\ -36 \\ \hline 3 \end{array}$$

$Q = 32$, $R = 3$

$$\begin{array}{r} \text{g.} \quad \frac{11}{14 \overline{)513}} \\ -45 \\ \hline 63 \\ -45 \\ \hline 18 \end{array}$$

$Q = 11$, $R = 18$

$$\begin{array}{r} \text{h.} \quad \frac{6}{18 \overline{)115}} \\ -108 \\ \hline 7 \end{array}$$

$Q = 6$, $R = 7$

$$\begin{array}{r} \text{i.} \quad \frac{7}{34 \overline{)256}} \\ -238 \\ \hline 18 \end{array}$$

$Q = 7$, $R = 18$

$$\begin{array}{r} \text{j.} \quad \quad \quad 8 \\ 56 \overline{)460} \\ \underline{-448} \\ 12 \end{array}$$

$$Q=8, R=12$$

$$\begin{array}{r} \text{k.} \quad \quad \quad 4 \\ 21 \overline{)104} \\ \underline{-84} \\ 20 \end{array}$$

$$Q=4, R=20$$

$$\begin{array}{r} \text{l.} \quad \quad \quad 7 \\ 18 \overline{)141} \\ \underline{-126} \\ 15 \end{array}$$

$$Q=7, R=15$$

$$\begin{array}{r} \text{m.} \quad \quad \quad 4 \\ 56 \overline{)231} \\ \underline{-228} \\ 3 \end{array}$$

$$Q=4, R=3$$

$$\begin{array}{r} \text{n.} \quad \quad \quad 11 \\ 77 \overline{)904} \\ \underline{-77} \\ 134 \\ \underline{-77} \\ 57 \end{array}$$

$$Q=11, R=57$$

$$\begin{array}{r} \text{o.} \quad \quad \quad 15 \\ 38 \overline{)607} \\ \underline{-38} \\ 227 \\ \underline{-190} \\ 37 \end{array}$$

$$Q=15, R=37$$

$$\begin{array}{r} \text{p.} \quad \quad \quad 11 \\ 82 \overline{)952} \\ \underline{-82} \\ 132 \\ \underline{-82} \\ 50 \end{array}$$

$$Q=11, R=50$$

3. Divide and check your answer.

$$\begin{array}{r} \text{a.} \quad \quad \quad 170 \\ 52 \overline{)8841} \\ \underline{-52} \\ 364 \\ \underline{-364} \\ 01 \\ \underline{-0} \\ 1 \end{array}$$

$$\text{Quotient} = 170, \text{Remainder} = 1$$

$$\text{Divisor} = 52, \text{Dividend} = 8841$$

$$\text{Check : } Q \times D + R = \text{Dividend}$$

$$170 \times 52 + 1 = 8840 + 1 = 8841 = \text{Dividend}$$

So, answer is correct.

$$\begin{array}{r} \text{b.} \quad \quad \quad 39 \\ 53 \overline{)2089} \\ \underline{-159} \\ 499 \\ \underline{-477} \\ 22 \end{array}$$

$$\text{Quotient} = 39, \text{Remainder} = 22$$

$$\text{Divisor} = 53, \text{Dividend} = 2089$$

$$\text{Check : } Q \times D + R = \text{Dividend}$$

$$39 \times 53 + 22 = 2067 + 22 = 2089 = \text{Dividend}$$

So, answer is correct.

$$\begin{array}{r} 55 \\ 53 \overline{) 5204} \\ \underline{-465} \\ 554 \\ \underline{-465} \\ 89 \end{array}$$

Quotient = 55, Remainder = 89
 Divisor = 93, Dividend = 5204
 Check : $Q \times D + R = \text{Dividend}$
 $55 \times 93 + 89 = 5115 + 89 = 5204 = \text{Dividend}$
 So, answer is correct.

$$\begin{array}{r} 55 \\ 53 \overline{) 5204} \\ \underline{-465} \\ 554 \\ \underline{-465} \\ 89 \end{array}$$

Quotient = 133, Remainder
 Divisor = 48, Dividend = 6400
 Check : $Q \times D + R = \text{Dividend}$
 $133 \times 48 + 16 = 6384 + 16 = 6400 = \text{Dividend}$
 So, answer is correct.

$$\begin{array}{r} 84 \\ 75 \overline{) 6301} \\ \underline{-600} \\ 301 \\ \underline{-300} \\ 1 \end{array}$$

6301 by 75
 Quotient = 84, Remainder = 1
 Divisor = 75, Dividend = 6301
 Check : $Q \times D + R = \text{Dividend}$
 $84 \times 75 + 1 = 6300 + 1 = 6301 = \text{Dividend}$
 So, answer is correct.

$$\begin{array}{r} 158 \\ 18 \overline{) 4424} \\ \underline{-162} \\ 224 \\ \underline{-224} \\ 0 \end{array}$$

Quotient = 158, Remainder = 0
 Divisor = 28, Dividend = 4424
 Check : $Q \times D + R = \text{Dividend}$
 $158 \times 28 + 0 = 4424 + 0 = 4424 = \text{Dividend}$
 So, answer is correct.

$$\begin{array}{r} 241 \\ 17 \overline{) 4110} \\ \underline{-34} \\ 71 \\ \underline{-68} \\ 30 \\ \underline{-17} \\ 13 \end{array}$$

4110 by 17
 Quotient = 24, Remainder = 13
 Divisor = 17, Dividend = 4110
 Check : $Q \times D + R = \text{Dividend}$
 $241 \times 17 + 13 = 4097 + 13$
 $= 4110 = \text{Dividend}$
 So, answer is correct.

$$\begin{array}{r} 206 \\ 75 \overline{) 3708} \\ \underline{-36} \\ 108 \\ \underline{-108} \\ 0 \end{array}$$

Quotient = 206, Remainder = 0
 Divisor = 18, Dividend = 3708
 Check : $Q \times D + R = \text{Dividend}$
 $206 \times 18 + 0 = 3708 + 0 = 3708 = \text{Dividend}$
 So, answer is correct.

$$\begin{array}{r} 116 \\ 29 \overline{) 3374} \\ \underline{-29} \\ 47 \\ \underline{-29} \\ 184 \\ \underline{-184} \\ 10 \end{array}$$

3374 by 29

Quotient = 116, Remainder = 10

Divisor = 29, Dividend = 3374

Check : $Q \times D + R = \text{Dividend}$

$116 \times 29 + 10 = 3364 + 10$

$= 3374 = \text{Dividend}$

So, answer is correct.

$$\begin{array}{r} 155 \\ 41 \overline{) 6394} \\ \underline{-41} \\ 229 \\ \underline{-205} \\ 244 \\ \underline{-205} \\ 39 \end{array}$$

Quotient = 155, Remainder = 39

Divisor = 41, Dividend = 6394

Check : $Q \times D + R = \text{Dividend}$

$155 \times 41 + 39 = 6355 + 39 = 6394 = \text{Dividend}$

So, answer is correct.

$$\begin{array}{r} 146 \\ 62 \overline{) 9084} \\ \underline{-62} \\ 288 \\ \underline{-248} \\ 404 \\ \underline{-372} \\ 32 \end{array}$$

Quotient = 146, Remainder = 32

Divisor = 62, Dividend = 9084

Check : $Q \times D + R = \text{Dividend}$

$146 \times 62 + 32 = 9052 + 32 = 9084 = \text{Dividend}$

So, answer is correct.

$$\begin{array}{r} 130 \\ 27 \overline{) 3533} \\ \underline{-27} \\ 83 \\ \underline{-81} \\ 23 \\ \underline{-0} \\ 23 \end{array}$$

3533 by 27

Quotient = 130, Remainder = 0

Divisor = 27, Dividend = 3533

Check : $Q \times D + R = \text{Dividend}$

$130 \times 27 + 23 = 3510 + 23 = 3533 = \text{Dividend}$

So, answer is correct.

Exercise 5.5

1. Fill in the table and estimate the quotient.

Ans.

	QUESTION	ROUNDS TO	DIVISION	ESTIMATED QUOTIENT
a.	$78 \div 18$	10	$80 \div 20 = 8 \div 2$	4
b.	$289 \div 69$	10	$290 \div 70 = 29 \div 7$	4

c.	$691 \div 51$	10	$690 \div 50 = 69 \div 5$	13
b.	$289 \div 69$	10	$750 \div 30 = 75 \div 3$	25
c.	$64 \div 21$	10	$60 \div 20 = 6 \div 2$	3

2. Estimate the quotient by rounding off the numbers to the nearest tens, Ognore the remainders, if any :

- $63 \div 18$ is rounded off to the nearest 10,
 $60 \div 20 = 6 \div 2 = 3$
 So, estimated quotient is **3**.
- $178 \div 30$ is rounded off to the nearest 10,
 $180 \div 30 = 18 \div 3 = 6$.
 So, estimated quotient is **6**.
- $575 \div 58$ is rounded off to the nearest 10,
 $560 \div 60 = 56 \div 6 = 9$
 So, estimated quotient is **9**.
- $315 \div 51$ is rounded off to the nearest 10,
 $320 \div 50 = 32 \div 5 = 6$.
 So, estimated quotient is **6**.
- $491 \div 24$ is rounded off to the nearest 10,
 $490 \div 20 = 49 \div 2 = 24$
 So, estimated quotient is **24**.
- $251 \div 22$ is rounded off to the nearest 10,
 $250 \div 20 = 25 \div 2 = 12$
 So, estimated quotient is **12**.
- $9125 \div 73$ is rounded off to the nearest 10.
 $9130 \div 70 = 913 \div 7 = 130$
 So, estimated quotient is **130**.
- $1012 \div 15$ is rounded off to the nearest 10
 $1010 \div 20 = 101 \div 2 = 50$
 So, estimated quotient is **50**.

Hots

Number of packets = 9

Number of toffees in each packet = 50

Total number of toffees = $9 \times 50 = 450$ toffees.

6 toffees are packed in 1 box.

450 toffees are packed in $450 \div 6 = 75$ boxes.

So, shopkeeper will get 75 boxes.

Exercise 5.6

Solve these story sums.

Ans. 1. Earnings of 8 days = ₹ 9600

∴ Earning of 1 days = ₹ 9600 ÷ 8 = ₹ 1200

∴ Earnings of 30 days = ₹ 1200 × 30 = ₹ 36000

So, saurave will earn ₹ 36000 in 30 days.

$$\begin{array}{r} 1200 \\ 8 \overline{)9600} \\ \underline{-8} \\ 16 \\ \underline{-16} \\ 0 \\ \underline{-00} \\ 0 \\ \underline{-00} \\ 0 \end{array}$$

2. Cost of 23 books = ₹ 2875

∴ Cost of 1 book = ₹ 2875 ÷ 23 = ₹ 125

So, the cost of 1 book is ₹ 125.

$$\begin{array}{r} 125 \\ 23 \overline{)2875} \\ \underline{-23} \\ 57 \\ \underline{-46} \\ 115 \\ \underline{-115} \\ 0 \end{array}$$

3. Total number of saplings = 225

Number of row = 9

∴ Number of saplings in each row = 225 ÷ 9 = 25

So there were 25 saplings planted in each row.

$$\begin{array}{r} 25 \\ 9 \overline{)225} \\ \underline{-18} \\ 45 \\ \underline{-45} \\ 0 \end{array}$$

4. Total numbers of crayons = 6385

Number of children = 51

Each child gets crayons = 6385 ÷ 51

Q = 125 and R = 10

So, each child get 125 crayons and 10 crayons are left over.

$$\begin{array}{r} 125 \\ 51 \overline{)6385} \\ \underline{-51} \\ 128 \\ \underline{-102} \\ 265 \\ \underline{-255} \\ 10 \end{array}$$

5. The cost of 25 tickets = ₹ 2125

The cost of 1 ticket = ₹ 2125 ÷ 25 = ₹ 85

So, the cost of ticket is ₹ 85.

$$\begin{array}{r} 85 \\ 25 \overline{)2125} \\ \underline{-200} \\ 125 \\ \underline{-125} \\ 0 \end{array}$$

6. Total number of cakes produced = 7050
 Number of days = 30
 Number of cakes are produced in a day
 $= 7050 \div 30 = 235$
 So, 235 cakes are produced in a day.

$$\begin{array}{r} 235 \\ 30 \overline{) 7050} \\ \underline{- 60} \\ 105 \\ \underline{- 90} \\ 150 \\ \underline{- 150} \\ 0 \end{array}$$

7. Total length of rope = 3825 cm.
 Measurement of each piece = 35 cm
 \therefore Number of pieces can be cut $= 3825 \div 35$
 $Q = 109, R = 10$
 So, 109 pieces can be cut and 10 cm rope will be left over.

$$\begin{array}{r} 109 \\ 35 \overline{) 3825} \\ \underline{- 35} \\ 325 \\ \underline{- 315} \\ 10 \end{array}$$

Exercise 5.7

1. The cost of 20 chocolates = ₹ 360
 \therefore The cost of 1 chocolates = ₹ $360 \div 20 = ₹ 18$
 \therefore The cost of 23 chocolates = ₹ $18 \times 23 = ₹ 414$
 So, ₹ 414 will be the cost of 23 chocolates.

$$\begin{array}{r} 18 \\ 9 \overline{) 360} \\ \underline{- 20} \\ 160 \\ \underline{- 160} \\ 0 \end{array}$$

2. 1 year = 12 months
 The rent of 12 months = ₹ 48120
 \therefore The rent of 1 month = ₹ $48120 \div 12 = ₹ 4010$
 \therefore The rent of 7 months = ₹ $4010 \times 7 = ₹ 28070$
 So, ₹ 28070 will have to be paid as the rent of the building.

$$\begin{array}{r} 4010 \\ 23 \overline{) 48120} \\ \underline{- 48} \\ 12 \\ \underline{- 12} \\ 00 \\ \underline{- 0} \\ 0 \end{array}$$

3. 1 dozen = 12
 The cost of 12 bananas = ₹ 300
 The cost of 1 banana = ₹ $300 \div 12 = ₹ 25$
 \therefore The cost of 14 bananas = ₹ $25 \times 14 = ₹ 350$
 So, the cost of 14 bananas is ₹ 350

$$\begin{array}{r} 25 \\ 12 \overline{) 300} \\ \underline{- 24} \\ 60 \\ \underline{- 60} \\ 0 \end{array}$$

4. The cost of 5 litres of juice = ₹ 270
 \therefore The cost of 1 litre of juice = ₹ $270 \div 5$ = ₹ 54
 \therefore The cost of 9 litres of juice = ₹ 54×9 = ₹ 486
 So, the cost of 9 litres of juice is ₹ **486**.

$$\begin{array}{r} 54 \\ 5 \overline{) 270} \\ \underline{- 25} \\ 20 \\ \underline{- 20} \\ 0 \end{array}$$

5. The cost of 12 m ribbon = ₹ 48
 \therefore The cost of 1 m ribbon = ₹ $48 \div 12$ = ₹ 4
 \therefore The cost of 11 m ribbon = ₹ 4×11 = ₹ 44
 So, the cost of 11 m ribbon is ₹ **44**.

$$\begin{array}{r} 4 \\ 12 \overline{) 48} \\ \underline{- 48} \\ 0 \end{array}$$

6. The cost of 5 purse = ₹ 2950
 \therefore The cost of 1 purse = ₹ $2950 \div 5$ = ₹ 590
 \therefore The cost of 9 purses = ₹ 590×9 = ₹ 5310
 So, the cost of 9 purses is ₹ **5310**.

$$\begin{array}{r} 590 \\ 5 \overline{) 2950} \\ \underline{- 25} \\ 45 \\ \underline{- 45} \\ 00 \\ \underline{0} \\ 0 \end{array}$$

7. 2 weeks = 14 days
 Anant can make in 3 days = 57 baskets
 \therefore Anant can make in 1 day = $57 \div 3$ = 19 baskets
 \therefore Anant can make in 14 days = 19×14 = 266 baskets
 So, Anant can make 266 baskets in 2 weeks

$$\begin{array}{r} 19 \\ 3 \overline{) 57} \\ \underline{- 3} \\ 27 \\ \underline{- 27} \\ 0 \end{array}$$

8. Selling price of 48 kg mangoes = ₹ 768
 \therefore Selling price of 1 kg mango = ₹ $768 \div 48$ = ₹ 16
 \therefore Selling price of 4 kg mangoes = ₹ 16×4 = ₹ 64
 So, fruit vendor sold 4 kg mangoes at ₹ 64.

$$\begin{array}{r} 16 \\ 48 \overline{) 768} \\ \underline{- 48} \\ 288 \\ \underline{- 288} \\ 0 \end{array}$$

9. Total distributed kerosene = 369 litres
 Number of card holders = 41
 Each card holder will get kerosene = $369 \div 41$
 $= 9$ litres
 \therefore 6 card holders will get kerosene = 9×6
 $= 54$ litres.
 \therefore So 6 card holders will get 54 litres kerosene.

$$\begin{array}{r} 9 \\ 41 \overline{) 369} \\ \underline{- 369} \\ 0 \end{array}$$

10. Selling price of 3 mixers = ₹ 14625

Selling price of 1 mixer = ₹ $14625 \div 3 = ₹ 4875$

₹ Selling price of 5 mixers = ₹ $4875 \times 5 = ₹ 24375$

So, ₹ 24375 is the cost of 5 mixers.

$$\begin{array}{r} 4875 \\ 3 \overline{)14625} \\ \underline{-12} \\ 26 \\ \underline{-24} \\ 22 \\ \underline{-21} \\ 15 \\ \underline{15} \\ 0 \end{array}$$

11. The cost of 15 jeans = ₹ 3045

∴ The cost of 1 jean = ₹ $3045 \div 15 = ₹ 203$

∴ The cost of 5 jeans = ₹ $203 \times 5 = ₹ 1015$

So, ₹ 1015 will be the cost of 5 jeans.

$$\begin{array}{r} 203 \\ 15 \overline{)3045} \\ \underline{-30} \\ 45 \\ \underline{-45} \\ 0 \end{array}$$

12. 3 week = 21 days

In 7 days are stitched = 21 shirts

In 1 day are stitched = $21 \div 7 = 3$ shirts

In 21 days are stitched = $3 \times 21 = 63$ shirts.

So, 63 shirts will be stitched by the tailor.

13. The cost of 5 packets of chips = ₹ 240

∴ The cost of 1 packet of chips = ₹ $240 \div 5 = ₹ 48$

∴ The cost of 7 packets of chips = ₹ $48 \times 7 = ₹ 336$

So, the cost of 7 packets of chips is ₹ 336.

$$\begin{array}{r} 48 \\ 5 \overline{)240} \\ \underline{-20} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

Multiple Choice Questions

Tick (✓) the correct choice :

Ans. 1. b. 0

2. a. Q = 92, R = 567

3. b. ₹120

4. c. 62

6

Factors and Multiples

Look Back

Colour the circles which are divisible by numbers given in words.

Ans. 1. four

8

12

14

16

18

20

2. six

18

20

24

26

28

30

3. nine	27	36	46	56	63	90
4. twelve	26	36	48	72	94	108
5. fifteen	15	35	45	60	90	100

Exercise 6.1

- Find the first five multiples of the following :

a. 5,	5,	10,	15,	20,	25
b. 10,	10,	20,	30,	40,	50
c. 8,	8,	16,	24,	32,	40
d. 11,	11,	22,	33,	44,	55
e. 14,	14,	28,	42,	56,	70
- Write the following multiples :

a. 36	b. 28	c. 72	d. 65
e. 77	f. 90		
- Write as directed below :

a. 7, 14, 21, 28	b. 12, 16, 20
c. 81, 90	d. 42, 48, 54
e. 2, 4, 6, 8, 10	
- List the first 10 multiples of the following numbers. Find the common multiples and write the LCM also :
 - First ten multiples
 $2 \rightarrow 2, 4, \textcircled{6}, 8, 10, \textcircled{12}, 14, 16, \textcircled{18}, 20.$
 $3 \rightarrow 3, \textcircled{6}, 9, \textcircled{12}, 15, \textcircled{18}, 21, 24, 27, 30.$
 Common multiples = **6, 12, 18.**
 LCM = 6
 - 4 and 5
 First ten multiples
 $4 \rightarrow 4, 8, 12, 16, \textcircled{20}, 24, 28, 32, 36, \textcircled{40}.$
 $5 \rightarrow 5, 10, 15, \textcircled{20}, 25, 30, 35, \textcircled{40}, 45, 50.$
 Common multiples = **20, 40.**
 LCM = 20
 - 8 and 10
 First ten multiples
 $8 \rightarrow 8, 16, 24, 32, \textcircled{40}, 48, 56, 64, 72, \textcircled{80}.$
 $10 \rightarrow 10, 20, 30, \textcircled{40}, 50, 60, 70, \textcircled{80}, 90, 100.$
 Common multiples = **40, 80.**
 LCM = 40

d. 9 and 12

First ten multiples

9 \rightarrow 9, 18, 27, 36, 45, 54, 63, 72, 81, 90.

12 \rightarrow 12, 24, 36, 48, 60, 72, 84, 96, 108, 120.

Common multiples = **36, 72.**

LCM = **36**

e. 2 and 6

First ten multiples

2 \rightarrow 2, 4, 6, 8, 10, 12, 14, 16, 18, 20.

6 \rightarrow 6, 12, 18, 24, 30, 36, 42, 48, 54, 60.

Common multiples = **6, 12, 18**

LCM = **6**

f. 5 and 10

First ten multiples

5 \rightarrow 5, 10, 15, 20, 25, 30, 35, 40, 45, 50.

10 \rightarrow 10, 20, 30, 40, 50, 60, 70, 80, 90, 100.

Common multiples = 10, 20, 30, 40, 50.

LCM = 10

g. 2, 3 and 6

First ten multiples

2 \rightarrow 2, 4, 6, 8, 10, 12, 14, 16, 18, 20.

3 \rightarrow 3, 6, 9, 12, 15, 18, 21, 24, 27, 30.

6 \rightarrow 6, 12, 18, 24, 30, 36, 42, 48, 54, 60.

Common multiples = 6, 12, 18

LCM = 6

h. 4, 6 and 12

First ten multiples

4 \rightarrow 4, 8, 12, 16, 20, 24, 28, 32, 36, 40.

6 \rightarrow 6, 12, 18, 24, 30, 36, 42, 48, 54, 60.

12 \rightarrow 12, 24, 36, 48, 60, 72, 84, 96, 108, 120.

Common multiples = 12, 24, 36

LCM = 12

Hots

LCM of 2 and 5 = 10

Next 5 common multiples = 20, 30, 40, 50, 60.

Exercise 6.2

1. Find factors of the following using multiplication :

a. $1 \times 16 = 16$

$$2 \times 8 = 16$$

$$4 \times 4 = 16$$

Thus, factors of 16 are 1, 2, 7 and 14.

b. $1 \times 14 = 14$

$$2 \times 7 = 14$$

Thus, factors of 16 are 1, 2, 7 and 14.

c. $1 \times 54 = 54$

$$2 \times 27 = 54$$

$$3 \times 18 = 54$$

$$6 \times 9 = 54$$

Thus, factors of 54 are = 1, 2, 3, 6, 3, 18, 27 and 54.

d. $1 \times 25 = 25$

$$5 \times 5 = 25$$

Thus, factors of 12 are 1, 2, 3, 4, 6 and 12.

e. 1×12

$$2 \times 6 = 12$$

$$3 \times 4 = 12$$

Thus, factors of 12 are 1, 2, 3, 4, 6 and 12.

2. Find factors of the following using division.

a. $39 \div 1 = 39$

$$39 \div 3 = 13$$

$$39 \div 13 = 3$$

$$39 \div 39 = 1$$

Thus, factors of 39 are, 1, 3, 13 and 39.

b. $18 \div 1 = 18$

$$18 \div 6 = 3$$

$$18 \div 2 = 9$$

$$18 \div 9 = 2$$

$$18 \div 3 = 6$$

$$18 \div 18 = 1$$

Thus, factors of 18 are 1, 2, 3, 6 and 9 and 18.

c. $35 \div 1 = 35$

$$35 \div 5 = 7$$

$$35 \div 7 = 5$$

$$35 \div 35 = 1$$

Thus, factors of 35 are 1, 5, 7 and 35.

d. $56 \div 1 = 56$

$$56 \div 8 = 7$$

$$56 \div 2 = 28$$

$$56 \div 14 = 4$$

$$56 \div 4 = 14$$

$$56 \div 28 = 2$$

$$56 \div 7 = 8$$

$$56 \div 56 = 1$$

Thus, factors of 56 are 1, 2, 4, 7, 8, 14, 28 and 56.

e. 42

$$42 \div 1 = 42$$

$$42 \div 7 = 6$$

$$42 \div 2 = 21$$

$$42 \div 14 = 3$$

$$42 \div 3 = 14$$

$$42 \div 21 = 2$$

$$42 \div 6 = 7$$

$$42 \div 42 = 1$$

Thus, factors of 42 are 1, 2, 3, 6, 7, 14, 21 and 42.

3. Answer the following.

a.

$$\begin{array}{r} 4 \\ 12 \overline{)48} \\ - 48 \\ \hline 0 \end{array}$$

\therefore 48 is exactly divisible by 12

\therefore 12 is a factor of 48.

b.

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

56 is exactly divisible by 7.

So, 7 is a factor of 56.

c.

$$\begin{array}{r} 7 \\ 6 \overline{)42} \\ - 42 \\ \hline 0 \end{array}$$

42 is exactly divisible by 6.

So, 6 is a factor of 42.

d.

$$\begin{array}{r} 4 \\ 8 \overline{)35} \\ - 32 \\ \hline 0 \end{array}$$

35 is exactly divisible by 8.

So, 8 is a factor of 35.

4. Write all the factors of the numbers in each pair. Then find the common factors.

a. Factors of 22 : 1, 2, 11, 20

Factors of 4 : 1, 2, 4

Common factor of 22 and 4 are **1, 2**.

b. Factors of 21 : 1, 3, 7, 21

Factors of 14 : 1, 2, 7, 14

Common factor of 21 and 14 are **1, 7**.

c. Factors of 6 : 1, 2, 3, 6

Factors of 16 : 1, 2, 4, 8, 16

Common factor of 6 and 16 are **1, 2**.

d. Factors of 20 : 1, 2, 4, 5, 10, 20.

Factors of 18 : 1, 2, 3, 6, 9, 18.

Common factor of 20 and 18 are **1, 2**.

- e. Factors of 13 : 1, 13.
Factors of 17 : 1, 17
Common factor of 13 and 17 is **1**.
- f. Factors of 30 : 1, 2, 3, 5, 6, 10, 15, 30.
Factors of 45 : 1, 3, 5, 9, 15, 45.
Common factor of 30 and 45 are **1, 3, 5, 15**.
- g. Factors of 10 : 1, 2, 5, 10.
Factors of 25 : 1, 5, 25
Common factor of 10 and 25 are **1, 5**.
- h. Factors of 27 : 1, 3, 9, 27
Factors of 24 : 1, 2, 3, 4, 6, 8, 12, 24.
Common factor of 27 and 24 are **1, 3**.

5. Find the HCF of the following :

- a. 4 and 6
Factors of 4 = 1, 2, 4
Factors of 6 = 1, 2, 3, 6
Common factors = 1, 2
HCF = 2
- b. 9 and 15
Factors of 9 = 1, 3, 9.
Factors of 15 = 1, 3, 5, 15.
Common factors = 1, 3.
HCF = 3
- c. 30 and 40
Factors of 30 = 1, 2, 3, 5, 6, 10, 15, 30.
Factors of 40 = 1, 2, 4, 5, 8, 10, 20, 40.
Common factors = 1, 2, 5, 10.
HCF = 10
- d. 16 and 20
Factors of 16 = 1, 2, 4, 8, 16.
Factors of 20 = 1, 2, 4, 5, 10, 20.
Common factors = 1, 2, 4.
HCF = 4
- e. 6, 12 and 24
Factors of 6 = 1, 2, 3, 6.
Factors of 12 = 1, 2, 3, 4, 6, 12.
Factors of 24 = 1, 2, 3, 4, 6, 8, 12, 24.
Common factors = 1, 2, 3, 6.
HCF = 6
- f. 25, 45 and 50
Factors of 25 = 1, 5, 25

Factors of 45 = 1, 3, 5, 9, 15, 45.

Factors of 50 = 1, 2, 5, 10, 25, 50.

Common factors = 1, 5.

HCF = 5

6. Say whether the following are True or False.

- a. True b. False c. True d. False
e. True f. False

Exercise 6.3

1. Colour the square with even numbers green and with odd numbers red.

Even number : 724, 910, 84, 68, 20, 4, 92, 176, 216, 16, 10 and 630.

Odd numbers : 683, 49, 65, 3, 29, 285, 981, 347 and 489.

2. Write the following :

- a. 2 b. 999 c. 1 d. 998

3. Check whether the number is prime or composite by listing its factors :

a. 15

Factors of 15 = 1, 3, 5, 15.

So, 15 is a composite number.

b. 5

Factors of 5 = 1, 5.

So, 5 is a composite number.

c. 52

Factors of 52 = 1, 2, 4, 13, 26, 52.

So, 52 is a composite number.

d. 60

Factors of 60 = 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60.

So, 60 is a composite number.

e. 67

Factors of 67 = 1, 67.

So, 67 is a composite number.

f. 89

Factors of 89 = 1, 89.

So, 89 is a composite number.

g. 27

Factors of 27 = 1, 3, 9, 27.

So, 27 is a composite number.

h. 31

Factors of 31 = 1, 31.

So, 31 is a composite number.

i. 39

Factors of $39 = 1, 3, 13, 39$.

So, 39 is a composite number.

j. 99

Factors of $99 = 1, 3, 9, 11, 33, 99$.

So, 99 is a composite number.

k. 95

Factors of $95 = 1, 5, 19, 95$.

So, 95 is a composite number.

l. 12

Factors of $12 = 1, 2, 3, 4, 6, 12$.

So, 12 is a composite number.

4. Fill in the blanks :

a. The smallest prime number is **2**.

b. The smallest composite number is **4**.

c. There are **four** prime numbers between 1 and 10.

d. The number 1 is a **unique** number.

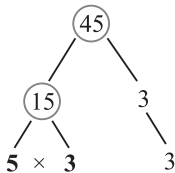
e. **2** is the only even prime number.

f. Composite numbers have **three** or more factors.

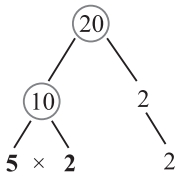
Mental Maths

Fill in the blanks :

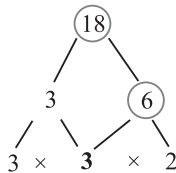
1.



2.



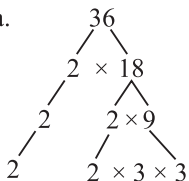
3.



Exercise 6.4

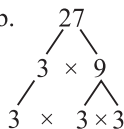
1. Find prime factors of given numbers.

a.



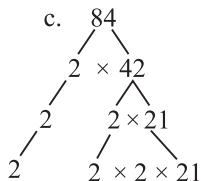
Prime factors of
 $36 = 2 \times 2 \times 3 \times 3$

b.



Prime factors of
 $27 = 3 \times 3 \times 3$

c.



Prime factors of
 $84 = 2 \times 2 \times 3 \times 7$

d.
$$\begin{array}{c} 85 \\ \swarrow \quad \searrow \\ 5 \times 17 \end{array}$$

Prime factors of
 $85 = 5 \times 17.$

e.
$$\begin{array}{c} 72 \\ \swarrow \quad \searrow \\ 2 \times 36 \\ \swarrow \quad \searrow \\ 2 \times 2 \times 18 \\ \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 2 \times 2 \times 2 \times 9 \\ \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 2 \times 2 \times 2 \times 3 \times 3 \end{array}$$

Prime factors of
 $27 = 3 \times 3 \times 3.$

f.
$$\begin{array}{c} 108 \\ \swarrow \quad \searrow \\ 2 \times 54 \\ \swarrow \quad \searrow \\ 2 \times 2 \times 27 \\ \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 2 \times 2 \times 3 \times 9 \\ \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 2 \times 3 \times 3 \times 3 \times 3 \end{array}$$

Prime factors of
 $108 = 2 \times 2 \times 3 \times 3 \times 3.$

g.
$$\begin{array}{c} 196 \\ \swarrow \quad \searrow \\ 2 \times 98 \\ \swarrow \quad \searrow \\ 2 \times 2 \times 49 \\ \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 2 \times 2 \times 7 \times 7 \end{array}$$

Prime factors of
 $196 = 2 \times 2 \times 7 \times 7.$

h.
$$\begin{array}{c} 96 \\ \swarrow \quad \searrow \\ 2 \times 48 \\ \swarrow \quad \searrow \\ 2 \times 2 \times 24 \\ \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 2 \times 2 \times 2 \times 12 \\ \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 2 \times 2 \times 2 \times 6 \\ \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 2 \times 2 \times 2 \times 3 \end{array}$$

Prime factors of $96 = 2 \times 2 \times 2 \times 2 \times 3$

2. Determine the prime factorization of the following numbers by division method :

a.
$$\begin{array}{r|l} 2 & 30 \\ \hline 3 & 15 \\ \hline 5 & 5 \\ \hline & 1 \end{array}$$

Prime factors
of $30 = 2 \times 3 \times 5$

b.
$$\begin{array}{r|l} 2 & 54 \\ \hline 3 & 27 \\ \hline 3 & 9 \\ \hline 3 & 3 \\ \hline & 1 \end{array}$$

Prime factors
of $136 = 2 \times 2 \times 2 \times 17$

c.
$$\begin{array}{r|l} 5 & 75 \\ \hline 5 & 15 \\ \hline 3 & 3 \\ \hline & 1 \end{array}$$

Prime factors
of $172 = 2 \times 2 \times 43$

g.
$$\begin{array}{r|l} 2 & 112 \\ \hline 2 & 56 \\ \hline 2 & 28 \\ \hline 2 & 14 \\ \hline 7 & 7 \\ \hline & 1 \end{array}$$

Prime factors
of $100 = 2 \times 2 \times 5 \times 5$

h.
$$\begin{array}{r|l} 5 & 125 \\ \hline 5 & 25 \\ \hline 5 & 5 \\ \hline & 1 \end{array}$$

Prime factors of
 $125 = 5 \times 5 \times 5$

Exercise 6.5

1. In each column put a (✓) if the number at left is divisible by the number at the top of the column. Otherwise put (X).

	Numbers	2	3	4	5	10
a.	218	✓	X	X	X	X
b.	240	✓	✓	✓	✓	✓
c.	2586	✓	✓	X	X	X
d.	3153	X	✓	X	X	X
e.	98664	✓	✓	✓	X	X

2. Fill one smallest digit in each of the boxes to make the number divisible by 9.

a. 8 b. 2 c. 0 d. 0

Multiple Choice Questions

Tick (✓) the correct choice :

1. c. unique 2. a. 2 3. b. 693 4. a. 56

Fun with Maths

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
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The prime numbers between 1 and 100 are 2, 3, 5, 7, 11, 13, 17, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97

7

Fractions

Look Back

1. Colour in yellow the shapes that show two equal parts and in green the shapes that show four equal parts.

Ans.



Yellow

Green

Green

Yellow

Green

Yellow

2. Colour :

a. $\frac{1}{3}$ of 12 pencils



b. $\frac{1}{4}$ of 8 mangoes



c. $\frac{1}{3}$ of 15 brinjal



d. $\frac{1}{4}$ of 16 kites



Mental Maths

Solve the riddles given below.

1. $\frac{1}{7}$

2. $\frac{1}{30}$

3. $\frac{1}{12}$

4. $\frac{1}{12}$

5. $\frac{1}{60}$

Exercise 7.1

1. Complete the following :

Ans. a. $\frac{8}{9} = \frac{24}{27} = \frac{56}{63} = \frac{72}{81}$

b. $\frac{11}{50} = \frac{44}{200} = \frac{330}{1500} = \frac{88}{400}$

c. $\frac{1}{5} = \frac{2}{10} = \frac{3}{15} = \frac{9}{45}$

d. $\frac{6}{17} = \frac{12}{34} = \frac{30}{85} = \frac{42}{119}$

$$e. \frac{7}{11} = \frac{14}{22} = \frac{35}{55} = \frac{56}{88}$$

$$f. \frac{1}{6} = \frac{2}{12} = \frac{7}{42} = \frac{11}{66}$$

2. Write the first three equivalent fraction of the following :

- a. First three equivalent fractions of

$$\frac{4}{11} = \frac{8}{22}, \frac{12}{33}, \frac{16}{44}$$

- b. First three equivalent fractions of

$$\frac{1}{9} = \frac{2}{18}, \frac{3}{27}, \frac{4}{36}$$

- c. First three equivalent fractions of

$$\frac{5}{6} = \frac{10}{12}, \frac{15}{18}, \frac{20}{24}$$

- d. First three equivalent fractions of

$$\frac{7}{10} = \frac{14}{20}, \frac{21}{30}, \frac{28}{40}$$

- e. First three equivalent fractions of

$$\frac{3}{5} = \frac{6}{10}, \frac{9}{15}, \frac{12}{20}$$

- f. First three equivalent fractions of

$$\frac{2}{7} = \frac{4}{14}, \frac{6}{21}, \frac{8}{28}$$

3. Write an equivalent fraction of $\frac{4}{5}$ with :

a. $\frac{4}{5} = \frac{4 \times 3}{5 \times 3} = \frac{12}{15}$

b. $\frac{4}{5} = \frac{4 \times 4}{5 \times 4} = \frac{16}{20}$

c. $\frac{4}{5} = \frac{4 \times 9}{5 \times 9} = \frac{36}{45}$

4. Tick (✓) the pair of fractions hat are equivalent :

a. ✓

b. ✓

e. ✓

Exercise 7.2

1. Fill in the Equivalent fractions :

Ans. a. $\frac{15 \div 5}{10 \div 5} = \frac{3}{2}$

b. $\frac{12 \div 4}{16 \div 4} = \frac{3}{4}$

c. $\frac{8 \div 8}{16 \div 8} = \frac{1}{2}$

d. $\frac{6 \div 2}{10 \div 2} = \frac{3}{5}$

e. $\frac{10 \div 2}{16 \div 2} = \frac{5}{8}$

f. $\frac{7 \div 7}{21 \div 7} = \frac{1}{3}$

2. Reduce the following fractions to the lowest terms.

- a. Common factor of 30 and 45 = 15

$$\therefore \frac{30}{45} = \frac{30 \div 15}{45 \div 15} = \frac{2}{3} \quad (\text{lowest term})$$

- b. Common factor of 49 and 63 = 7

$$\therefore \frac{49}{63} = \frac{49 \div 7}{63 \div 7} = \frac{7}{9} \quad (\text{lowest term})$$

- c. Common factor of 75 and 80 = 5

$$\therefore \frac{75}{80} = \frac{75 \div 5}{80 \div 5} = \frac{15}{16} \quad (\text{lowest term})$$

- d. Common factor of 25 and 40 = 5

$$\therefore \frac{25}{40} = \frac{25 \div 5}{40 \div 5} = \frac{5}{8} \quad (\text{lowest term})$$

- e. Common factor of 36 and 81 = 9

$$\therefore \frac{36}{81} = \frac{36 \div 9}{81 \div 9} = \frac{4}{9} \quad (\text{lowest term})$$

- f. Common factor of 16 and 18 = 2

$$\therefore \frac{16}{18} = \frac{16 \div 2}{18 \div 2} = \frac{8}{9} \quad (\text{lowest term})$$

- g. Common factor of 85 and 100 = 5

$$\therefore \frac{85}{100} = \frac{85 \div 5}{100 \div 5} = \frac{17}{20} \quad (\text{lowest term})$$

- h. Common factor of 24 and 32 = 8

$$\therefore \frac{24}{32} = \frac{24 \div 8}{32 \div 8} = \frac{3}{4} \quad (\text{lowest term})$$

- i. Common factor of 22 and 121 = 11

$$\therefore \frac{22}{121} = \frac{22 \div 11}{121 \div 11} = \frac{2}{11} \quad (\text{lowest term})$$

- j. Common factor of 42 and 48 = 6

$$\therefore \frac{42}{48} = \frac{42 \div 6}{48 \div 6} = \frac{7}{8} \quad (\text{lowest term})$$

- k. Common factor of 6 and 24 = 6

$$\therefore \frac{6}{24} = \frac{6 \div 6}{24 \div 6} = \frac{1}{4} \quad (\text{lowest term})$$

- l. Common factor of 15 and 30 = 15

$$\therefore \frac{15}{30} = \frac{15 \div 15}{30 \div 15} = \frac{1}{2} \quad (\text{lowest term})$$

Exercise 7.3

1. Classify the fractions as proper or improper fractions.

- | | |
|------------------------------------|--------------------------------------|
| a. $\frac{6}{9}$ proper fraction | b. $\frac{1}{9}$ Improper fraction |
| c. $\frac{15}{4}$ proper fraction | d. $\frac{6}{7}$ proper fraction |
| e. $\frac{5}{13}$ proper fraction | f. $\frac{4}{5}$ proper fraction |
| g. $\frac{48}{49}$ proper fraction | h. $\frac{17}{5}$ Improper fraction |
| i. $\frac{8}{5}$ Improper fraction | j. $\frac{18}{13}$ Improper fraction |

2. Convert the following improper fractions into mixed fractions.

- | | | |
|-----------------------------------|------------------------------------|---|
| a. $\frac{80}{7} = 11\frac{3}{7}$ | | $\begin{array}{r} 11 \\ 7 \overline{) 80} \\ \underline{- 7} \\ 10 \\ \underline{- 7} \\ 3 \end{array}$ |
| b. $\frac{44}{5} = 8\frac{4}{5}$ | c. $\frac{15}{7} = 2\frac{1}{7}$ | |
| d. $\frac{35}{6} = 5\frac{5}{6}$ | e. $\frac{18}{4} = 4\frac{2}{4}$ | |
| f. $\frac{25}{6} = 4\frac{1}{6}$ | g. $\frac{8}{3} = 2\frac{2}{3}$ | |
| h. $\frac{17}{2} = 8\frac{1}{2}$ | i. $\frac{92}{11} = 8\frac{4}{11}$ | |
| j. $\frac{54}{5} = 10\frac{4}{5}$ | | |

3. Convert the following mixed fractions into improper fractions.

- | | |
|---|---|
| a. $4\frac{1}{2} = \frac{4 \times 2 + 1}{2} = \frac{9}{2}$ | b. $3\frac{3}{5} = \frac{3 \times 5 + 3}{5} = \frac{18}{5}$ |
| c. $3\frac{3}{7} = \frac{3 \times 7 + 3}{7} = \frac{24}{7}$ | d. $6\frac{5}{8} = \frac{6 \times 8 + 5}{8} = \frac{53}{8}$ |
| e. $11\frac{2}{3} = \frac{11 \times 3 + 2}{3} = \frac{35}{3}$ | f. $4\frac{7}{9} = \frac{4 \times 9 + 7}{9} = \frac{43}{9}$ |
| g. $8\frac{3}{4} = \frac{8 \times 4 + 3}{4} = \frac{35}{4}$ | h. $2\frac{2}{5} = \frac{2 \times 5 + 2}{5} = \frac{12}{5}$ |
| i. $2\frac{2}{7} = \frac{2 \times 7 + 2}{7} = \frac{16}{7}$ | j. $2\frac{1}{9} = \frac{2 \times 9 + 1}{9} = \frac{19}{9}$ |

Exercise 7.4

1. Put the correct sign $<$, $>$ or $=$ in the box.

a. $<$	b. $<$	c. $<$	d. $>$
e. $<$	f. $<$	g. $>$	h. $<$

2. Tick (✓) the greatest and cross (X) the smallest fraction in the following.

a. $\frac{5}{3}, \frac{9}{3}, \frac{7}{3}, \frac{2}{3}$ ✓ X	b. $\frac{5}{9}, \frac{7}{9}, \frac{3}{7}, \frac{12}{7}$ X ✓	c. $2\frac{1}{7}, 3\frac{2}{7}, 4\frac{1}{7}, 1\frac{2}{7}$ ✓ X	d. $9\frac{2}{3}, 7\frac{5}{6}, 4\frac{1}{3}, 3\frac{7}{8}$ ✓ X
e. $9\frac{2}{3}, 7\frac{5}{6}, 4\frac{1}{3}, 3\frac{7}{8}$ X ✓	f. $3\frac{1}{4}, 8\frac{3}{4}, 3\frac{4}{5}, 6\frac{2}{5}$ X ✓		

3. Arrange in ascending order.

a. $\frac{7}{11}, \frac{2}{11}, \frac{5}{11}, \frac{4}{11}$, Ascending order $\frac{2}{11} < \frac{4}{11} < \frac{5}{11} < \frac{7}{11}$

b. $\frac{3}{9}, \frac{8}{9}, \frac{5}{7}, \frac{9}{7} = \frac{3 \times 7}{9 \times 7}, \frac{8 \times 7}{9 \times 7}, \frac{5 \times 9}{7 \times 9}, \frac{9 \times 9}{7 \times 9} = \frac{21}{63}, \frac{56}{63}, \frac{45}{63}, \frac{81}{63}$

In ascending order, $\frac{21}{63} < \frac{45}{63} < \frac{56}{63} < \frac{81}{63} = \frac{3}{9} < \frac{5}{7} < \frac{8}{9} < \frac{9}{7}$

c. $6\frac{2}{13}, 3\frac{1}{13}, 5\frac{5}{13} = 2\frac{4}{13}$

In ascending order, $2\frac{4}{13} < 3\frac{1}{13} < 5\frac{5}{13} < 6\frac{2}{13}$

$= 2\frac{4}{13} < 3\frac{1}{13} < 5\frac{5}{13} < 6\frac{2}{13}$

d. $2\frac{6}{15}, 4\frac{11}{15}, 7\frac{12}{5}, 7\frac{3}{5} = \frac{36}{15} < \frac{71}{15} < \frac{47}{5} < \frac{38}{5}$

$\frac{36}{15}, \frac{71}{15}, \frac{47 \times 3}{5 \times 3}, \frac{38 \times 3}{5 \times 3} = \frac{36}{15} < \frac{71}{15} < \frac{141}{15} < \frac{114}{15}$

In ascending order $= \frac{36}{15} < \frac{71}{15} < \frac{114}{15} < \frac{141}{15}$

$= 2\frac{6}{15} < 4\frac{11}{15} < 7\frac{3}{5} < 7\frac{12}{5}$

e. $7\frac{8}{6}, 7\frac{15}{19}, 7\frac{13}{19}, 8\frac{5}{6} = \frac{50}{6} < \frac{148}{19} < \frac{146}{19} < \frac{53}{6}$

$= \frac{50 \times 19}{6 \times 19}, \frac{148 \times 6}{19 \times 6}, \frac{146 \times 6}{19 \times 6}, \frac{53 \times 19}{6 \times 19}$

$$\frac{950}{114}, \frac{888}{114}, \frac{876}{114}, \frac{1007}{114}$$

$$\begin{aligned}\text{In ascending order} &= \frac{876}{114} < \frac{888}{114} < \frac{950}{114} < \frac{1007}{114} \\ &= 7\frac{13}{19} < 7\frac{15}{19} < 7\frac{8}{6} < 8\frac{5}{6}\end{aligned}$$

$$\begin{aligned}\text{f. } 7\frac{3}{11}, \frac{8}{13}, 2\frac{5}{13}, \frac{9}{11} &= \frac{80}{11}, \frac{8}{13}, \frac{31}{13}, \frac{9}{11} \\ &= \frac{80 \times 13}{11 \times 13}, \frac{8 \times 11}{13 \times 11}, \frac{31 \times 11}{13 \times 11}, \frac{9 \times 13}{11 \times 13} = \frac{1040}{143}, \frac{88}{143}, \frac{341}{143}, \frac{117}{148}\end{aligned}$$

$$\begin{aligned}\text{In ascending order} &= \frac{88}{143} < \frac{117}{143} < \frac{341}{143} < \frac{1040}{143} \\ &= \frac{8}{13} < \frac{9}{11} < 2\frac{5}{13} < 7\frac{3}{11}\end{aligned}$$

4. Arrange in descending order.

$$\text{a. } \frac{8}{17}, \frac{12}{17}, \frac{11}{17}, \frac{6}{17}$$

$$\text{In descending order, } \frac{12}{17} > \frac{11}{17} > \frac{8}{17} > \frac{6}{17}$$

$$\begin{aligned}\text{b. } \frac{3}{11}, \frac{4}{9}, \frac{1}{9}, \frac{2}{11} &= \frac{3 \times 9}{11 \times 9}, \frac{4 \times 11}{9 \times 11}, \frac{1 \times 11}{9 \times 11}, \frac{2 \times 8}{11 \times 9} \\ &= \frac{27}{99}, \frac{44}{99}, \frac{11}{99}, \frac{18}{99}\end{aligned}$$

$$\text{In descending order} = \frac{4}{9} > \frac{3}{11} > \frac{2}{11} > \frac{1}{9}$$

$$\text{c. } 4\frac{3}{11}, \frac{29}{6}, 3\frac{5}{6}, \frac{9}{11} = \frac{47}{11}, \frac{29}{6}, \frac{23}{6}, \frac{9}{11}$$

$$= \frac{47 \times 6}{11 \times 6}, \frac{29 \times 11}{6 \times 11}, \frac{23 \times 11}{6 \times 11}, \frac{9 \times 6}{11 \times 6} = \frac{282}{66}, \frac{319}{66}, \frac{256}{66}, \frac{54}{66}$$

$$\text{In descending order} =$$

$$= \frac{29}{6} < 4\frac{3}{11} < 3\frac{5}{6} < \frac{9}{11}$$

$$\text{d. } 2\frac{4}{9}, 5\frac{7}{10}, 10\frac{7}{9}, 6\frac{9}{10} = \frac{22}{9}, \frac{57}{10}, \frac{97}{9}, \frac{69}{10}$$

$$= \frac{22 \times 10}{9 \times 10}, \frac{57 \times 9}{10 \times 9}, \frac{97 \times 10}{9 \times 10}, \frac{69 \times 9}{10 \times 9} = \frac{220}{90}, \frac{513}{90}, \frac{970}{90}, \frac{621}{90}$$

$$\begin{aligned}\text{In descending order} &= \frac{970}{90} > \frac{621}{90} > \frac{513}{90} > \frac{220}{90} \\ &= 10\frac{7}{9} > 6\frac{9}{10} > 5\frac{7}{10} > 2\frac{4}{9}\end{aligned}$$

$$\text{e. } 3\frac{7}{12}, 7\frac{2}{12}, 5\frac{5}{12}, 4\frac{11}{12} = \frac{43}{12}, \frac{86}{12}, \frac{65}{12}, \frac{59}{12}$$

$$\begin{aligned}\text{In descending order} &= \frac{86}{12} > \frac{65}{12} > \frac{59}{12} > \frac{43}{12} \\ &= 7\frac{2}{12} > 5\frac{5}{12} > 4\frac{11}{12} > 3\frac{7}{12}\end{aligned}$$

$$\begin{aligned}\text{f. } 9\frac{5}{7}, 9\frac{7}{11}, 9\frac{10}{7}, 9\frac{8}{7} &= \frac{68}{7}, \frac{10}{11}, \frac{73}{7}, \frac{71}{7} \\ &= \frac{68 \times 11}{7 \times 11} > \frac{106 \times 7}{11 \times 7} > \frac{73 \times 11}{7 \times 11} > \frac{71 \times 11}{7 \times 11} \\ &= \frac{748}{77}, \frac{742}{77}, \frac{803}{77}, \frac{781}{77}\end{aligned}$$

$$\begin{aligned}\text{In descending order } \frac{803}{77} &> \frac{781}{77} > \frac{748}{77} > \frac{742}{77} \\ &= 9\frac{10}{7} > 9\frac{8}{7} > 9\frac{5}{7} > 9\frac{7}{11}\end{aligned}$$

Exercise 7.5

1. Find the sum.

$$\text{a. } \frac{4}{11} + \frac{5}{11} = \frac{4+5}{11} = \frac{9}{11}$$

$$\text{b. } \frac{5}{9} + \frac{3}{9} = \frac{5+3}{9} = \frac{8}{9}$$

$$\text{c. } \frac{1}{12} + \frac{7}{12} = \frac{1+7}{12} = \frac{8}{12}$$

$$\text{d. } \frac{5}{21} + \frac{10}{21} = \frac{5+10}{21} = \frac{15}{21}$$

$$\text{e. } \frac{13}{19} + \frac{5}{19} = \frac{13+5}{19} = \frac{18}{19}$$

$$\text{f. } \frac{3}{10} + \frac{4}{10} = \frac{3+4}{10} = \frac{7}{10}$$

$$\text{g. } \frac{1}{17} + \frac{3}{17} = \frac{1+3}{17} = \frac{4}{17}$$

$$\text{h. } \frac{7}{16} + \frac{5}{16} = \frac{7+5}{16} = \frac{12}{16}$$

$$\text{i. } \frac{1}{10} + \frac{3}{10} + \frac{2}{10} = \frac{1+3+2}{10} = \frac{6}{10}$$

$$\text{j. } \frac{7}{16} + \frac{5}{16} = \frac{7+5}{16} = \frac{12}{16}$$

$$\text{k. } \frac{5}{14} + \frac{7}{14} + \frac{1}{14} = \frac{5+7+1}{14} = \frac{13}{14}$$

$$\begin{aligned}\text{l. } \frac{3}{7} + \frac{6}{7} + \frac{2}{7} &= \frac{3+6+2}{7} \\ &= \frac{11}{7}\end{aligned}$$

2. Add the following :

a. LCM of 9 and 8 = 72

$$\therefore \frac{1}{9} + \frac{1}{8} = \frac{1 \times 8}{9 \times 8} + \frac{1 \times 9}{8 \times 9} + \frac{4 \times 4}{9 \times 4} = \frac{8}{12} + \frac{9}{72} = \frac{8 \times 9}{72} = \frac{17}{72}$$

b. LCM of 3 and 6 = 6

$$\therefore \frac{1}{3} + \frac{1}{6} = \frac{1 \times 2}{3 \times 2} + \frac{1 \times 1}{6 \times 1} = \frac{2}{6} + \frac{1}{6} + \frac{2+1}{6} = \frac{3}{6} = \frac{3 \div 3}{6 \div 3} = \frac{1}{2}$$

c. LCM of 4 and 9 = 36

$$\therefore \frac{1}{4} + \frac{4}{9} = \frac{1 \times 9}{4 \times 9} + \frac{4 \times 4}{9 \times 4} = \frac{9}{36} + \frac{16}{36} = \frac{9 \times 16}{36} = \frac{25}{36}$$

d. LCM of 2 and 5 = 10

$$\therefore \frac{4}{5} + \frac{1}{2} = \frac{4 \times 2}{5 \times 2} + \frac{1 \times 5}{2 \times 5} = \frac{8}{10} + \frac{5}{10} = \frac{8 \times 5}{10} = \frac{13}{10} = 1\frac{3}{10}$$

e. LCM of 7 and 2 = 14

$$\therefore \frac{15 \times 2}{7 \times 2} + \frac{15 \times 7}{2 \times 7} = \frac{30}{14} + \frac{105}{14} = \frac{30 + 105}{14} = \frac{135}{14} = 9\frac{9}{14}$$

f. LCM of 3 and 2 = 6

$$\therefore \frac{5 \times 2}{3 \times 2} + \frac{13 \times 3}{2 \times 3} = \frac{10}{6} + \frac{39}{6} = \frac{10 + 39}{6} = \frac{49}{6} = 8\frac{1}{6}$$

g. LCM of 6 and 4 = 12

$$\therefore \frac{25 \times 2}{6 \times 2} + \frac{9 \times 3}{4 \times 3} = \frac{50}{12} + \frac{27}{12} = \frac{50 + 27}{12} = \frac{77}{12} = 6\frac{5}{12}$$

h. LCM of 5 and 3 = 15

$$\therefore \frac{21 \times 3}{5 \times 3} + \frac{13 \times 5}{3 \times 5} = \frac{63}{15} + \frac{65}{15} = \frac{63 + 65}{15} = \frac{128}{15} = 8\frac{8}{15}$$

Exercise 7.6

1. a. $\frac{3}{11} - \frac{2}{11} = \frac{3-2}{11} = \frac{1}{11}$

b. $\frac{21}{23} - \frac{10}{23} = \frac{21-10}{23} = \frac{11}{23}$

c. $\frac{8}{18} - \frac{3}{18} = \frac{8-3}{18} = \frac{5}{18}$

d. $\frac{5}{17} - \frac{3}{17} = \frac{5-3}{17} = \frac{2}{17}$

e. $\frac{17}{15} - \frac{3}{15} = \frac{17-3}{15} = \frac{14}{15}$

f. $\frac{16}{31} - \frac{12}{31} = \frac{16-12}{31} = \frac{4}{31}$

$$g. \frac{11}{14} - \frac{7}{14} = \frac{11-7}{14} = \frac{4}{14}$$

$$h. \frac{15}{24} - \frac{7}{24} = \frac{15-7}{24} = \frac{8}{24}$$

$$i. 2\frac{5}{4} - \frac{1}{4} = \frac{13}{4} - \frac{1}{4} = \frac{13-1}{4} = \frac{12}{4} = \frac{12 \div 4}{4 \div 4} = \frac{3}{1} = 3$$

$$k. 3\frac{4}{5} - 1\frac{2}{5} = \frac{19}{5} - \frac{7}{5} = \frac{19-7}{5} = \frac{12}{5} = 2\frac{2}{5}$$

$$l. 3\frac{3}{5} - 1\frac{4}{5} = \frac{18}{5} - \frac{9}{5} = \frac{18-9}{5} = \frac{9}{5} = 1\frac{4}{5}$$

2. Subtract the following :

a. LCM of 3 and 7 = 21

$$\therefore \frac{1}{3} - \frac{2}{7} = \frac{1 \times 7}{3 \times 7} - \frac{2 \times 3}{7 \times 3} = \frac{7}{21} - \frac{6}{21} = \frac{7-6}{21} = \frac{1}{21}$$

b. LCM of 2 and 6 = 6

$$\therefore \frac{1}{2} - \frac{1}{6} = \frac{1 \times 3}{2 \times 3} - \frac{1 \times 1}{6 \times 1} = \frac{3}{6} - \frac{1}{6} = \frac{3-1}{6} = \frac{2}{6} = \frac{2 \div 2}{6 \div 2} = \frac{1}{3}$$

c. LCM of 3 and 8 = 24

$$\therefore \frac{2}{3} - \frac{4}{8} = \frac{2 \times 8}{3 \times 8} - \frac{4 \times 3}{8 \times 3} = \frac{16}{24} - \frac{12}{24} = \frac{16-12}{24} = \frac{4}{24} = \frac{4 \div 4}{24 \div 4} = \frac{1}{6}$$

d. LCM of 7 and 4 = 28

$$\therefore \frac{5}{7} - \frac{1}{4} = \frac{5 \times 4}{7 \times 4} - \frac{1 \times 7}{4 \times 7} = \frac{20}{28} - \frac{7}{28} = \frac{20-7}{28} = \frac{13}{28}$$

e. LCM of 2 and 4 = 4

$$\therefore 3\frac{1}{2} - 1\frac{3}{4} = \frac{7}{2} - \frac{7}{4} = \frac{7 \times 2}{2 \times 2} - \frac{7 \times 1}{4 \times 1} = \frac{14}{4} - \frac{7}{4} = \frac{14-7}{4} = \frac{7}{4} = 1\frac{3}{4}$$

f. LCM of 3 and 6 = 6

$$\therefore 10\frac{1}{3} - 7\frac{4}{6} = \frac{31}{3} - \frac{46}{6} = \frac{31 \times 2}{3 \times 2} - \frac{46 \times 1}{6 \times 1} = \frac{62}{6} - \frac{46}{6} = \frac{62-46}{6} = \frac{16}{6} = \frac{16 \div 2}{6 \div 2} = \frac{8}{3} = 2\frac{2}{3}$$

g. LCM of 2 and 5 = 10

$$\therefore 6\frac{1}{2} - 3\frac{2}{5} = \frac{13}{2} - \frac{17}{5} = \frac{13 \times 5}{2 \times 5} = \frac{17 \times 2}{5 \times 2} = \frac{65}{10} - \frac{34}{10} = \frac{31}{10}$$

h. LCM of 2 and 5 = 10

$$\therefore 9\frac{1}{2} - 8\frac{3}{5} = \frac{19}{2} - \frac{43}{5} = \frac{19 \times 5}{2 \times 5} = \frac{43 \times 2}{5 \times 2} = \frac{95}{10} - \frac{86}{10} = \frac{95 - 86}{10}$$

Exercise 7.7

- Time taken to complete English homework = $\frac{1}{5}$ hours
Time taken to complete Mathematics home work = $\frac{3}{5}$ hours
Time taken to complete both home work = $\left(\frac{1}{5} + \frac{3}{5}\right) = \frac{1+3}{5} = \frac{4}{5}$ hours
So, Rishi completed his homework in $\frac{4}{5}$ hours.
- John bought kg.
Sugar was bought by John = $\frac{3}{4}$ kg
Sugar was used = $\frac{1}{4}$ kg
Sugar was left over = $\left(\frac{3}{4} - \frac{1}{4}\right) \text{ kg} = \frac{3-1}{4} \text{ kg} = \frac{2}{4} \text{ kg} = \frac{1}{2} \text{ kg}$
So, $\frac{1}{2}$ kg sugar was left over.
- Money was spent by Neil on fees = $\frac{1}{3}$ of money
Money was spent on book = $\frac{1}{3}$ of money
Total money was spent = $\left(\frac{1}{3} + \frac{1}{3}\right)$ of money = $\frac{1+1}{3} = \frac{2}{3}$ of money
So, Neil spent $\frac{2}{3}$ of his money in all.
- Length of Karan ribbon = $\frac{2}{5}$ m
Lengh of Kiran's ribbon = $\frac{1}{5}$ m
More Length of Karna's ribbon than Kiran's ribbon
$$= \left(\frac{2}{5} - \frac{1}{5}\right) \text{ m} = \frac{2-1}{5} = \frac{1}{5} \text{ m.}$$

So, Karan bought $\frac{1}{5}$ m of ribbon more than Kiran.

5. Sakshi had $= 2\frac{1}{5}$ kg of rice

She used $= 1\frac{3}{5}$ kg of rice

Rice was left $= \left(2\frac{1}{5} - 1\frac{3}{5}\right)$ kg $= \left(\frac{11}{5} - \frac{8}{5}\right)$ kg

$$= \left(\frac{11-8}{5}\right) \text{ kg} = \frac{3}{5} \text{ kg}$$

So, $\frac{3}{5}$ kg of rice was left.

6. Vinita ate $= \frac{1}{4}$ of the cake

Rihamate $= \frac{3}{4}$ of the cake

More cake was eaten by Rihana $= \left(\frac{3}{4} - \frac{1}{4}\right)$ of the cake

$$= \frac{1}{2} \text{ of the cake}$$

So, Rihana ate more $\frac{1}{2}$ of the cake than Vinita.

Multiple Choice Questions

Tick (✓) the correct choice :

Ans. 1. a. $\frac{5}{11}$

2. b. $12\frac{1}{7}$

3. b. 1

4. c. $\frac{2}{7}$

8

Decimals

Look Back

1. Write decimal for the shaded part.

Ans. a. $\frac{2}{4} = 0.5$

b. $\frac{3}{4} = 0.75$

c. $\frac{3}{8} = 0.375$

d. $\frac{2}{5} = 0.4$

Exercise 8.1

1. Write in decimals :

a. 0.9

b. 0.3

c. 0.6

d. 0.8

e. 1.3

f. 1.6

g. 1.5

h. 1.9

i. 2.7

j. 5.6

k. 6.8

l. 7.5

m. 8.8

n. 7.2

o. 9.7

p. 8.7

q. 17.6

f. 37.5

s. 27.3

t. 38.5

2. Make a place value chart and show the following decimals on it :

- a. $\frac{3}{10}$ b. $\frac{7}{10}$ c. $\frac{8}{10}$ d. $\frac{4}{10}$
 e. $\frac{6}{10}$ f. $\frac{10}{10}$ g. $\frac{2}{10}$ h. $\frac{9}{10}$
 i. $\frac{9}{10}$ j. $\frac{5}{10}$ k. $\frac{14}{10}$ l. $\frac{26}{10}$
 m. $\frac{47}{10}$ n. $\frac{132}{10}$ o. $\frac{3424}{10}$

3. Make a place value chart and show the following decimals on it:

Q. Part	₁₀₀ Hundreds	₁₀ Tens	₁ Ones	Tenths $\frac{1}{10}$
a.	2	7	3	8 or eight-tenth
b.	1	5	6	9 or nine-tenth
c.	3	9	6	7 or seven-tenth
d.	1	7	6	5 or five-tenth
e.	3	9	4	or four-tenth
f.	2	6	1	or one-tenth
g.	1	7	4	or four-tenth
h.	1	3	5	or five-tenth

Exercise 8.2

1. Fill in the equivalent fractions (in decimals) :

- a. 1.17 b. 0.37 c. 7.14 d. 0.21
 e. 5.26 f. 0.06 g. 0.04 h. 4.13

2. Write in common fractions :

- a. $6\frac{73}{100}$ b. $4\frac{78}{100}$ c. $3\frac{17}{100}$ d. $1\frac{14}{100}$
 e. f. g. h.

3. Write in decimals.

- a. 15.123 b. 0.213 c. 7.064 d. 0.025
 e. 2.013 f. 0.003 g. 0.007 h. 0.104

4. Write in common fractions.

- a. $93\frac{540}{1000}$ b. $\frac{10}{1000}$ c. $\frac{234}{1000}$ d. $8\frac{1}{1000}$
 e. $\frac{56}{1000}$ f. $61\frac{185}{1000}$ g. $\frac{4}{1000}$ h. $\frac{876}{1000}$

Exercise 8.3

1. Write the place and place value of :

- | | | | |
|----------------|-------|--------------|------------------------|
| a. 5 in 15.171 | Place | Ones | Place Value 5 |
| b. 7 in 6.710 | Place | Tenth | Place Value 0.7 |
| c. 4 in 5.413 | Place | Tenth | Place Value 0.4 |
| d. 8 in 5.813 | Place | Tenth | Place Value 0.8 |

2. Fill in the blanks :

- | | | |
|-----------------------|---------------------------|----------------------------|
| a. one -tenths | seven -hundredths. | |
| b. two -tenths | seven -hundredths | three -thousandths. |
| c. one -tenths | one -hundredths | seven -thousandths. |
| d. one -tenths | three -hundredths. | |

3. Fill in the boxes :

- | | |
|---|--|
| a. $2.673 = 2\frac{6}{10} + \frac{7}{100} + \frac{3}{1000}$ | b. $7.321 = 7 + \frac{3}{10} + \frac{2}{100} + \frac{3}{1000}$ |
| c. $9.01 = 9 + \frac{1}{100}$ | d. $6.132 = 6 + \frac{1}{10} + \frac{3}{100} + \frac{2}{1000}$ |
| e. $8.02 = 8 + \frac{2}{100}$ | f. $8.145 = 8 + \frac{1}{10} + \frac{4}{100} + \frac{5}{1000}$ |

4. Write the standard numeral (short form) in decimals :

- | | | |
|------------|------------|------------|
| a. 7.093 | b. 200.247 | c. 328.354 |
| d. 328.354 | e. 13.205 | f. 4.007 |
| g. 8.604 | | |

5. Write the place value of 5 in each :

- Place value of 5 in $103.805 = 0.005$
- Place value of 5 in $12.579 = 0.5$
- Place value of 5 in $43.578 = 0.5$
- Place value of 5 in $28.35 = 0.05$
- Place value of 5 in $53.274 = 50$

6. Write in the expanded form :

- | | |
|--|--|
| a. $8.005 = 8 + \frac{5}{1000}$ | b. $47.08 = 40 + 7 + \frac{8}{100}$ |
| c. $9.27 = 9 + \frac{2}{10} + \frac{7}{100}$ | d. $6.403 = 6 + \frac{4}{10} + \frac{3}{1000}$ |

$$e. 18.875 = 10 + 8 + \frac{8}{10} + \frac{7}{100} + \frac{5}{1000}$$

7. **Make a Place value chart and write the following number in it :**

Q.Part	Hundreds	Tens	Ones	Point	tenths	Hundredths	thousandths
	100	10	1	.	$\frac{1}{10} = 0.1$	$\frac{1}{100} = 0.01$	$\frac{1}{1000} = 0.001$
a.			8	.	0	5	6
b.		6	2	.	2	1	4
c.	2	0	5	.	0	0	8
d.			0	.	8	8	3
e.	1	1	5	.	8	5	1

Exercise 8.4

- Write correct or incorrect for each of the following :**
 - Correct
 - Incorrect
 - Correct
 - Incorrect
 - Correct
 - Incorrect
- Which are the equivalent decimal fractions?**
 - 0.37 and 0.370 are equivalent decimal fractions.
 - 0.9 and 0.09 are not equivalent decimal fractions.
 - 0.41 and 0.410 are equivalent decimal fractions.
 - 0.9 and 0.900 are equivalent decimal fractions.
 - 0.13 and 0.013 are not equivalent decimal fractions.
 - 0.23 and 0.230 are equivalent decimal fractions.
- Compare and write < or > for each :**
 - >
 - >
 - <
 - <
 - <
 - <
- Which is the smallest fraction?**
 - 5.82 is the smallest fraction among 5.82, 6.92, 6.029, 6.629.
 - 0.389 is the smallest fraction among 0.408, 0.39, 0.389, 0.42.

Exercise 8.5

- Fill in the blanks :**
 - 0.7
 - 0.8
 - 0.9
 - 0.7
- Add the following :**

$$\begin{array}{r} 18.08 \\ + 15.09 \\ \hline 33.17 \end{array}$$

$$\begin{array}{r} 5.20 \\ + 0.68 \\ \hline 5.88 \end{array}$$

$$\begin{array}{r} 0.41 \\ + 0.65 \\ \hline 1.06 \end{array}$$

$$\begin{array}{r} 0.74 \\ + 0.22 \\ \hline 0.96 \end{array}$$

e.
$$\begin{array}{r} 0.8 \\ + 0.1 \\ \hline 0.9 \end{array}$$
 f.
$$\begin{array}{r} 0.3 \\ + 0.4 \\ \hline 0.7 \end{array}$$
 g.
$$\begin{array}{r} 0.2 \\ + 0.1 \\ \hline 0.3 \end{array}$$
 h.
$$\begin{array}{r} 0.6 \\ + 0.1 \\ \hline 0.7 \end{array}$$

i.
$$\begin{array}{r} 121241.22 \\ + 529754.88 \\ \hline 650996.10 \end{array}$$
 j.
$$\begin{array}{r} 2214.5678 \\ + 6845.1428 \\ \hline 9059.7106 \end{array}$$
 k.
$$\begin{array}{r} 78.855 \\ + 98.658 \\ \hline 177.513 \end{array}$$
 l.
$$\begin{array}{r} 123.225 \\ + 36.115 \\ \hline 159.340 \end{array}$$

3. Simplify the following :

- a. $0.08 + 0.0067 + 0.005 + 0.038 = 0.1297$
 b. $0.587 + 0.247 + 7.852 + 47.805 = 56.491$
 c. $22.36 + 8.6 + 39.5 + 45.68 = 116.14$
 d. $6.4 + 4.65 + 0.8 + 6.08 = 17.93$

Multiple Choice Questions

Tick (✓) the correct choice :

- Ans.** 1. c. 2. a. 3. c. 4. a.
 5. a. 6. a. 7. b.

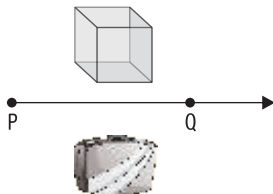
9

Geometry

Look Back

1. Match the following :

- a. circle
 b. cone
 c. sphere
 d. cuboid
 e. cube
 f. Ray
- i.
 ii.
 iii.
 iv.
 v.
 vi.



Round object, 1 face, 0 corner and 0 edges

2 faces, 1 edge and 1 corner

0 sides, 0 corners

2. Write the name of 3 objects from your surroundings for the given shapes.

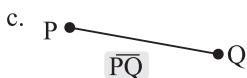
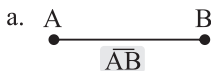
Ans. Do it yourself.

Exercise 9.1

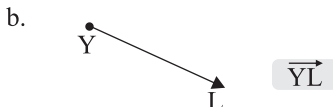
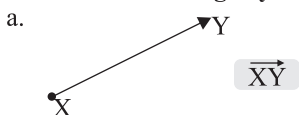
1. Fill in the blanks :

a. ray b. two c. point d. line segment

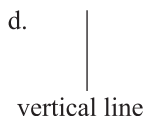
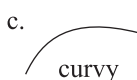
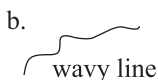
2. Join the given points to make line segments. Name the line segments.



3. Name the following ray.



4. Observe the pictures carefully. Write the name of the following lines :



Exercise 9.2

1. Measure the following line segments :

Ans. a. Do it yourself.

2. Draw the line segments of the following lengths.

Ans. a. Do it yourself.

3. Measure the length of each line segment and compare by putting $<$, $>$ or $=$ signs.

Ans. a. $\overline{AB} = \overline{CD}$

b. $\overline{PQ} > \overline{RS}$

c. $\overline{EF} < \overline{GH}$

Exercise 9.3

1. Name the angles.

- | | |
|-----------------------|-----------------------|
| a. Right angle LMN | b. Acute angle ABC |
| c. Obtuse angle PQR | d. Straight angle ABC |
| e. Complete angle PQR | f. Reflex angle RST |

2. Name the arms and vertex of the given angles.

- | | |
|-----------------------|-----------------------|
| a. Angle \angle BCD | b. Angle \angle AOB |
| Vertex C | Vertex O |
| Arms CBCD | Arms OA, OB |

3. In the figure, name the points that lie.

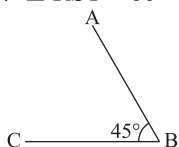
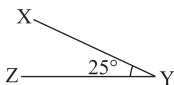
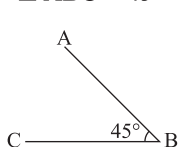
- | | |
|---------------|---------------|
| a. point G, D | b. point L, P |
| c. point B, J | |

4. Use a protractor to measure the following angles and name them.

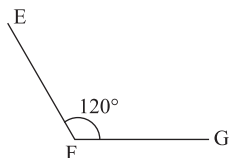
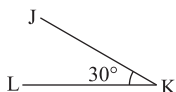
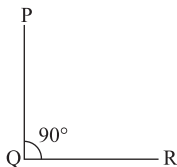
- | | |
|--|--|
| a. Right angle \angle PQR = 90° | b. Acute angle \angle AB = 45° |
| c. Acute angle \angle JKL = 80° | d. Obtuse angle \angle XYZ = 110° |
| e. Straight angle \angle LMN = 180° | |
| f. Acute angle \angle UVW = 30° | |

5. Draw the following angles in your notebook and name them :

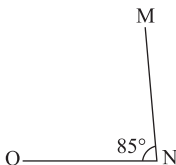
- | | | |
|------------------------------|------------------------------|------------------------------|
| a. \angle ABC = 45° | b. \angle XYZ = 25° | c. \angle RST = 60° |
|------------------------------|------------------------------|------------------------------|



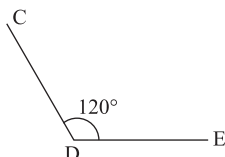
- | | | |
|------------------------------|------------------------------|-------------------------------|
| d. \angle PQR = 90° | e. \angle JKL = 30° | f. \angle EFG = 120° |
|------------------------------|------------------------------|-------------------------------|



- g. \angle MNO = 85°



- h. \angle CDE = 120°



Exercise 9.4

1. Put a tick (✓) for the closed figure and (X) for open figure.
 a. ✓ b. X c. ✓ d. ✓ e. X f. ✓

2. Colour the polygons.

Figure a, b, g, h and i are polygons.

Figure c, d, e, f are not polygons.

Exercise 9.5

1. Name the following in the figures given below :

The centre

O

A radius

OR

A diameter

MN

A chord

MQ

The centre

O

A radius

OD

A diameter

AB

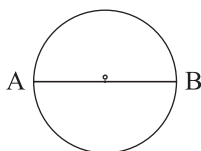
A chord

CD

2. Colour the polygons.

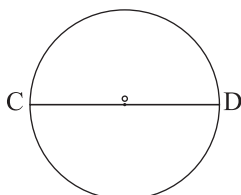
- a. Radius = 4 cm

Diameter A B = 8 cm



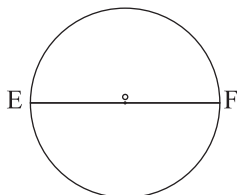
- b. Radius CO = 5.5m

Diameter CD = 11 cm



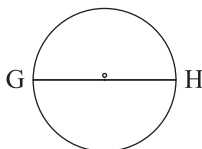
- c. Radius EO = 5 cm

Diameter EF = 10 cm



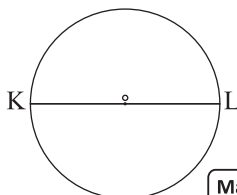
- d. Radius GO = 2cm

Diameter GH = 4 cm



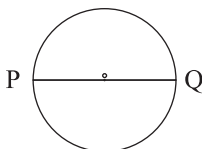
- e. Radius KO = 3.5 cm

Diameter KL = 7 cm



- f. Radius PO = 2.5 cm

Diameter PQ = 5 cm

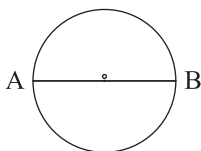


3. Calculate radius for the given diameter in each case and draw circle also :

a. Diameter $d = AB = 2 \text{ cm}$

$$\text{Radius } r = AO = \frac{9}{2} = \frac{2}{2}$$

$$= 1 \text{ cm}$$

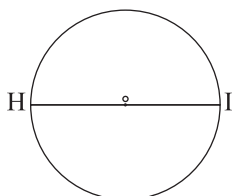


b. Diameter $d = HI = 9 \text{ cm}$

$$\text{Radius } r = HO = \frac{d}{2}$$

$$= \frac{9}{2} = 4.5 \text{ cm}$$

$$HO = OI = 4.5 \text{ cm}$$

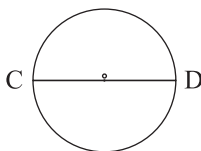


c. Diameter $d = CD = 5 \text{ cm}$

$$\text{Radius } r = CO = OD = \frac{d}{2}$$

$$= \frac{5}{2} = 2.5 \text{ cm}$$

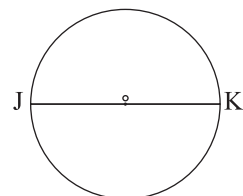
$$CO = OD = 2.5 \text{ cm}$$



d. Diameter $d = JK = 10 \text{ cm}$

$$\text{Radius } r = JO = OK$$

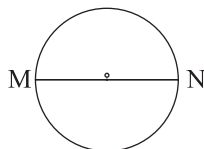
$$= \frac{d}{2} = \frac{10}{2} = 5 \text{ cm}$$



e. Diameter $d = MN = 4 \text{ cm}$

$$\text{Radius } r = \frac{d}{2} = \frac{4}{2} = 2 \text{ cm}$$

$$= MO = NO = 2 \text{ cm}$$

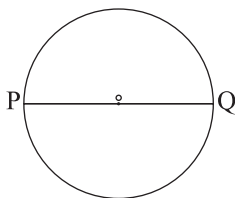


f. Diameter $d = PQ = 6 \text{ cm}$

$$\text{Radius } PO = OQ = \frac{d}{2}$$

$$= \frac{6}{2} = 3 \text{ cm}$$

$$PO = OQ = 3 \text{ cm}$$



4. Write T for True and F for False :

- a. True b. True c. False d. True e. False

Multiple Choice Questions

Tick (✓) the correct choice :

- Ans. 1. a. 2. a. 3. c. 4. a.

Fun with Maths

1. Identify the following curves as open or closed.

- Ans. a. closed curve b. open curve. c. open curve
d. closed curve

2. Identify the polygons from the following figures.

- a. Polygon b. Not Polygon c. Polygon
d. Not Polygon

3. Fill in the blanks :

- a. A circle is a **round** shape.
b. Circle has **infinite** diameters.
c. A circle has no **side** or corners.
d. The radius is **half of** the diameter.
e. The diameter is the longest **chord** of the circle.

10 Symmetry and Patterns

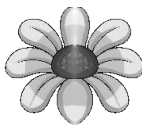
Look Back

1. Draw the other side of each shapes so that they looks symmetrical.

a.



b.



2. Complete the patterns.

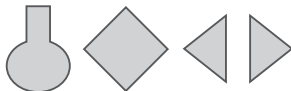
a.



b.



c.

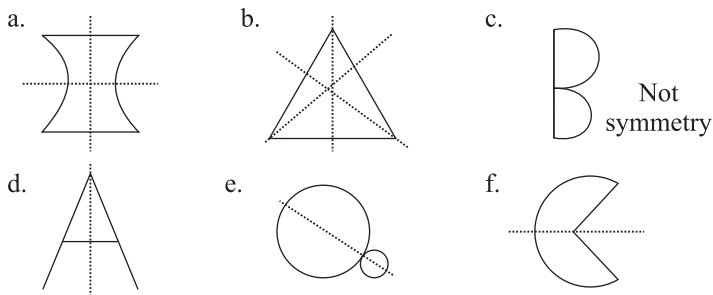


3. Tick (✓) the correct option that continues the pattern.

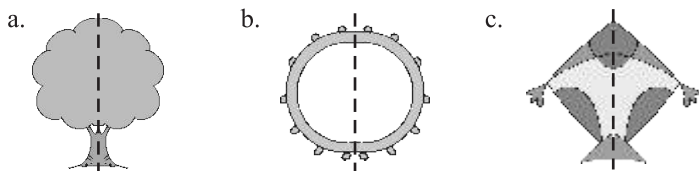
- a. D18 ☐ D17 ☒ D19 ☐ b. ACD ☐ ABD ☒ ADB ☐
 c. 45 ☐ 50 ☐ 47 ☒

Exercise 10.1

1. Is the dotted line, a line of symmetry in each of the following?
 a. Yes b. Not c. Yes d. Not
 e. Yes f. Not g. Not g. Not
2. Which of the following figures are symmetrical? Draw the axis of symmetry in the symmetrical figures.

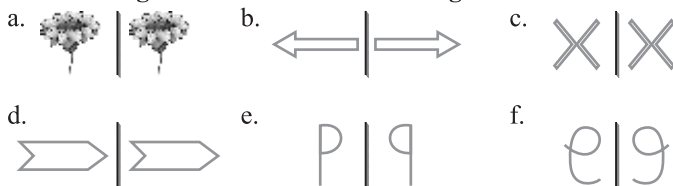


3. Complete the figures along their line of symmetry.



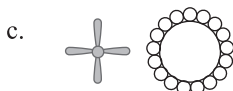
Exercise 10.2

1. Mark a tick for the figures that are examples of reflections :
 b. ✓ c. ✓ d. ✓ e. ✓ f. ✓
2. Draw the figures whose reflections are given below:



Exercise 10.3

1. Complete the patterns.



2. Write the next three terms in each pattern.

a. 59, 49, 39

b. 61, 73, 85

c. 12, 10, 8

d. E9, F6, G7; Z26

e. 8, 6, 4

c. 8, 6, 4

3. Observe the patterns and fill in the blanks.

a. $1 + 2 + 3 + 04 + 05 = 15$

b. $(2 \times 2) (1 \times 1) = 2 + 1$

$2 + 3 + 4 + 05 + 06 = 20$

$(3 \times 3) (2 \times 2) = 3 + 2$

$3 + 4 + 5 + 06 + 07 = 25$

$(4 \times 4) (3 \times 3) = 4 + 3$

$4 + 5 + 6 + 07 + 08 = 30$

$(5 \times 5) (4 \times 4) = 5 + 4$

$5 + 6 + 7 + 08 + 09 = 35$

$(6 \times 6) (5 \times 5) = 6 + 5$

$6 + 7 + 8 + 09 + 10 = 40$

$(7 \times 7) (6 \times 6) = 7 + 6$

$7 + 8 + 9 + 10 + 11 = 45$

c. $9 \times 0 + 1 = 1$

d. $15873 \times 7 \times 1 = 111111$

$9 \times 1 + 2 = 11$

$15873 \times 7 \times 2 = 222222$

$9 \times 2 + 3 = 21$

$15873 \times 7 \times 3 = 333333$

$9 \times 3 + 4 = 31$

$15873 \times 7 \times 4 = 444444$

$9 \times 4 + 5 = 41$

$15873 \times 7 \times 5 = 555555$

$9 \times 5 + 6 = 51$

$15873 \times 7 \times 6 = 666666$

$9 \times 6 + 7 = 61$

4. The rules for these patterns consist of two steps-work them out and write the next three terms.

a. 1, 2, 5, 14, **41, 122, 365**

b. 1, 3, 7, 15, **31, 63, 127**

c. 1, 4, 13, 40, **121, 364, 1093**

d. 0, 3, 12, 39, **120, 363, 1092**

e. 2, 3, 5, 9 **17, 33, 65**

Exercise 10.4

1. Read the message using the first code above.

a. MEET MEIN PARK

b. PLANT MORE TREES



2. Read the message using the second code.

a. 19125 1415 161512252085145

d. 1912255118208

Multiple Choice Questions

Tick (✓) the correct choice :

- Ans. 1. 2. a. Infinite 3. c. 105 4. a.  

11

Metric Measures

Look Back

1. Tick (✓) the right unit that you would use to measure the following :
a. iv. m b. iii. cm c. ii. m d. i. km e. iii. l
2. Observe the statements given. think carefully and put in the correct units.
a. Sonal is 156 **cm** tall.
b. A bag of mangoes weighs 9 **kg**.
c. The distance between bengaluru and Chennai is around 366 **km**.
d. Gayathri drank 3 ml of cough syrup this morning.
e. the tree next to the house is about 8 **m** tall.

Mental Maths

Fill in the blanks.

1. 250 2. 750 3. 5250 4. 9500

Exercise 11.1

1. Change to centimetres.

1 m = 100 cm

a. 12 m = 12×100 cm = **1200 cm**

b. 3 m = 3×100 cm = **300 cm**

c. 3 m 8 cm = 3 m + 8 cm = 3×100 cm + 8 cm = 300 cm + 8 cm = **308 cm**

d. 8 m 14 cm = 8 m + 14 cm = 8×100 cm + 14 cm = 800 cm + 14 cm = **814 cm**

e. 6 m 50 cm = 6 m + 50 cm = 6×100 cm + 50 cm = 600 cm + 50 cm = **650 cm**

f. 2 m 14 cm = 2 m + 14 cm = 2×100 cm + 14 cm = 200 cm + 14 cm = **214 cm**

g. 7 m 75 cm = 7 m + 75 cm = 7×100 cm + 75 cm = 700 cm + 75 cm = **775 cm**

$$\begin{aligned} \text{h. } 9 \text{ m } 2 \text{ cm} &= 9 \text{ m} + 2 \text{ cm} = 9 \times 100 \text{ cm} + 2 \text{ cm} = 900 \text{ cm} + 2 \\ &\text{cm} = \mathbf{902 \text{ m}} \end{aligned}$$

2. Express in metres and centimetres.

$$100 \text{ cm} = 1 \text{ m}$$

$$\begin{aligned} \text{a. } 1437 \text{ cm} &= 1400 \text{ cm} + 37 \text{ cm} \\ &= (1400 \div 100) \text{ m} + 37 \text{ cm} \\ &= 14 \text{ m} + 37 \text{ cm} \\ &= \mathbf{14 \text{ m } 37 \text{ cm}} \end{aligned}$$

$$\begin{aligned} \text{b. } 925 \text{ cm} &= 900 \text{ cm} + 25 \text{ cm} \\ &= (900 \div 100) \text{ m} + 25 \text{ cm} \\ &= 9 \text{ m} + 25 \text{ cm} \\ &= \mathbf{9 \text{ m } 25 \text{ cm}} \end{aligned}$$

$$\begin{aligned} \text{c. } 600 \text{ cm} \\ &= (600 \div 100) \text{ m} = 6 \text{ m} \end{aligned}$$

$$\begin{aligned} \text{d. } 901 \text{ cm} \\ &= 900 \text{ cm} + 1 \text{ cm} \\ &= (900 \div 100) \text{ m} + 1 \text{ cm} \\ &= 9 \text{ m} + 1 \text{ cm} = 9 \text{ m } 1 \text{ cm} \end{aligned}$$

$$\begin{aligned} \text{e. } 705 \text{ cm} \\ &= 700 \text{ cm} + 5 \text{ cm} \\ &= (700 \div 100) \text{ m} + 5 \text{ cm} \\ &= 7 \text{ m} + 5 \text{ cm} \\ &= \mathbf{7 \text{ m } 5 \text{ cm}} \end{aligned}$$

$$\begin{aligned} \text{f. } 310 \text{ cm} \\ &= 300 \text{ cm} + 10 \text{ cm} \\ &= (300 \div 100) \text{ m} + 10 \text{ cm} \\ &= 3 \text{ m} + 10 \text{ cm} \\ &= \mathbf{3 \text{ m } 10 \text{ cm}} \end{aligned}$$

$$\begin{aligned} \text{g. } 385 \text{ cm} \\ &= 300 \text{ cm} + 85 \text{ cm} \\ &= (300 \div 100) \text{ m} + 85 \text{ cm} \\ &= 3 \text{ m} + 85 \text{ cm} \\ &= \mathbf{3 \text{ m } 85 \text{ cm}} \end{aligned}$$

$$\begin{aligned} \text{h. } 4005 \text{ cm} \\ &= 4000 \text{ cm} + 5 \text{ cm} \\ &= (4000 \div 100) \text{ m} + 5 \text{ cm} \\ &= 40 \text{ m} + 5 \text{ cm} \\ &= \mathbf{40 \text{ m } 5 \text{ cm}} \end{aligned}$$

3. Express in metres.

$$1 \text{ km} = 1000 \text{ m}$$

a. $5 \text{ km} = 5 \times 1000 \text{ m} = \mathbf{5000 \text{ km}}$

b. $14 \text{ km} = 14 \times 1000 \text{ m} = \mathbf{14000 \text{ km}}$

c. $9 \text{ km } 25 \text{ m} = 9 \text{ km} + 25 \text{ m} = 9 \times 1000 \text{ m} + 25 \text{ m}$
 $= 9000 \text{ m} + 25 \text{ m} = \mathbf{9025 \text{ m}}$

d. $8 \text{ km } 705 \text{ m} = 8 \text{ km} + 705 \text{ m} = 8 \times 1000 \text{ m} + 705 \text{ m}$
 $= 8000 \text{ m} + 705 \text{ m} = \mathbf{8705 \text{ m}}$

e. $1 \text{ km } 125 \text{ m} = 1 \text{ km} + 125 \text{ m} = 1 \times 1000 \text{ m} + 125 \text{ m}$
 $= 1000 \text{ m} + 125 \text{ m} = \mathbf{1125 \text{ m}}$

f. $6 \text{ km } 295 \text{ m} = 6 \text{ km} + 295 \text{ m} = 6 \times 1000 \text{ m} + 295 \text{ m}$
 $= 6000 \text{ m} + 295 \text{ m} = \mathbf{6295 \text{ m}}$

g. $3\frac{1}{2} \text{ km} = \text{km} = \frac{7}{2} \times 1000 \text{ m} = \frac{7000}{2} \text{ m} = \mathbf{3500 \text{ m}}$

h. $7\frac{1}{2} \text{ km} = \frac{15}{2} \text{ km} = \frac{15}{2} \times 1000 \text{ m} = \frac{15000}{2} \text{ m} = 7500 \text{ m}$

4. Change to kilometres and metres.

$$1000 \text{ m} = 1 \text{ km}$$

a. $3000 \text{ m} = (3000 \div 1000) \text{ km} = \mathbf{3 \text{ km}}$

b. $1084 \text{ m} = 1000 \text{ m} + 84 \text{ m}$
 $= (1000 \div 1000) \text{ km} + 84 \text{ m}$
 $= 1 \text{ km} + 84 \text{ m} = \mathbf{1 \text{ km } 84 \text{ m}}$

c. $1950 \text{ m} = 1000 \text{ m} + 950 \text{ m}$
 $= (1000 \div 1000) \text{ km} + 950 \text{ m}$
 $= 1 \text{ km} + 950 \text{ m} = \mathbf{1 \text{ km } 950 \text{ m}}$

d. $7025 \text{ m} = 7000 \text{ m} + 25 \text{ m}$
 $= (7000 \div 1000) \text{ km} + 25 \text{ m}$
 $= 7 \text{ km} + 25 \text{ m} = \mathbf{7 \text{ km } 25 \text{ m}}$

e. $1805 \text{ m} = 1000 \text{ m} + 805 \text{ m}$
 $= (1000 \div 1000) \text{ km} + 805 \text{ m}$
 $= 1 \text{ km} + 805 \text{ m} = \mathbf{1 \text{ km } 805 \text{ m}}$

f. $8050 \text{ m} = 8000 \text{ m} + 50 \text{ m}$
 $= (8000 \div 1000) \text{ km} + 50 \text{ m}$
 $= 8 \text{ km} + 50 \text{ m}$
 $= \mathbf{8 \text{ km } 50 \text{ m}}$

g. $5175 \text{ m} = 5000 \text{ m} + 175 \text{ m}$
 $= (5000 \div 1000) \text{ km} + 175 \text{ m}$
 $= 5 \text{ km} + 175 \text{ m}$
 $= \mathbf{5 \text{ km } 175 \text{ m}}$

$$\begin{aligned}
 \text{h. } 3246 \text{ m} &= 3000 \text{ m} + 246 \text{ m} \\
 &= (3000 \div 1000) \text{ km} + 246 \text{ m} \\
 &= 3 \text{ km} + 246 \text{ m} \\
 &= \mathbf{3 \text{ km } 246 \text{ m}}
 \end{aligned}$$

5. Change the following.

$$1 \text{ cm} = 10 \text{ mm}$$

$$1 \text{ dm} = 10 \text{ cm} = 100 \text{ mm}$$

$$10 \text{ dm} = 1 \text{ m}$$

$$\begin{aligned}
 \text{a. } 61 \text{ cm } 9 \text{ mm into mm} \\
 &= 61 \text{ cm} + 9 \text{ mm} \\
 &= 61 \times 10 \text{ mm} + 9 \text{ mm} \\
 &= 610 \text{ mm} + 9 \text{ mm} \\
 &= \mathbf{619 \text{ mm}}
 \end{aligned}$$

$$\begin{aligned}
 \text{b. } 921 \text{ dm into m} \\
 &= 920 \text{ dm} + 1 \text{ dm} = (920 \div 10) \text{ m} + 1 \text{ dm} \\
 &= 92 \text{ m} + 1 \text{ dm} = \mathbf{92 \text{ m } 1 \text{ dm}}
 \end{aligned}$$

$$\begin{aligned}
 \text{c. } 12 \text{ dm } 5 \text{ cm into cm} \\
 &= 12 \text{ dm} + 5 \text{ cm} = 12 \times 10 \text{ cm} + 5 \text{ cm} \\
 &= 120 \text{ cm} + 5 \text{ cm} = \mathbf{125 \text{ cm}}
 \end{aligned}$$

$$\begin{aligned}
 \text{d. } 50 \text{ mm} \\
 &= (50 \div 10) \text{ cm} = \mathbf{5 \text{ cm}}
 \end{aligned}$$

Exercise 11.2

1. Change the following into g.

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

$$\text{a. } 17 \text{ kg} = 17 \times 1000 \text{ g} = \mathbf{17000 \text{ g}}$$

$$\text{b. } 12 \text{ kg} = 12 \times 1000 \text{ g} = \mathbf{12000 \text{ g}}$$

$$\begin{aligned}
 \text{c. } 9 \text{ kg } 279 \text{ g} &= 9 \text{ kg} + 279 \text{ g} = 9 \times 1000 \text{ g} + 279 \text{ g} \\
 &= 9000 \text{ g} + 279 \text{ g} = \mathbf{9279 \text{ g}}
 \end{aligned}$$

$$\begin{aligned}
 \text{d. } 4 \text{ kg } 15 \text{ g} &= 4 \text{ kg} + 15 \text{ g} = 4 \times 1000 \text{ g} + 15 \text{ g} \\
 &= 4000 \text{ g} + 15 \text{ g} = \mathbf{4015 \text{ g}}
 \end{aligned}$$

$$\begin{aligned}
 \text{e. } 11 \text{ kg } 9 \text{ g} &= 11 \text{ kg} + 9 \text{ g} = 11 \times 1000 \text{ g} + 9 \text{ g} \\
 &= 11000 \text{ g} + 9 \text{ g} = \mathbf{11009 \text{ g}}
 \end{aligned}$$

$$\begin{aligned}
 \text{f. } 6 \text{ kg } 75 \text{ g} &= 6 \text{ kg} + 75 \text{ g} = 6 \times 1000 \text{ g} + 75 \text{ g} \\
 &= 6000 \text{ g} + 75 \text{ g} = \mathbf{6075 \text{ g}}
 \end{aligned}$$

$$\begin{aligned}
 \text{g. } 15 \text{ kg } 15 \text{ g} &= 15 \text{ kg} + 15 \text{ g} = 15 \times 1000 \text{ g} + 15 \text{ g} \\
 &= 15000 \text{ g} + 15 \text{ g} = \mathbf{15015 \text{ g}}
 \end{aligned}$$

$$\begin{aligned}
 \text{h. } 7 \text{ kg } 256 \text{ g} &= 7 \text{ kg} + 256 \text{ g} = 7 \times 1000 \text{ g} + 256 \text{ g} \\
 &= 7000 \text{ g} + 256 \text{ g} = \mathbf{7256 \text{ g}}
 \end{aligned}$$

2. Change the following into mg.

$$1 \text{ g} = 1000 \text{ m}$$

a. $10 \text{ g} = 10 \times 1000 \text{ mg} = \mathbf{10,000 \text{ mg}}$

b. $19 \text{ g} = 19 \times 1000 \text{ mg} = \mathbf{19,000 \text{ mg}}$

c. $5 \text{ g } 25 \text{ mg} = 5 \text{ g} + 25 \text{ mg} = 5 \times 1000 \text{ mg} + 25 \text{ mg}$
 $= 5000 \text{ mg} + 25 \text{ mg} = \mathbf{5025 \text{ mg}}$

d. $6 \text{ g } 732 \text{ mg} = 6 \text{ g} + 732 \text{ mg} = 6 \times 1000 \text{ mg} + 732 \text{ m}$
 $= 6000 \text{ mg} + 732 \text{ mg} = \mathbf{6732 \text{ mg}}$

e. $3 \text{ g } 58 \text{ mg} = 3 \text{ g} + 58 \text{ mg} = 3 \times 1000 \text{ mg} + 58 \text{ mg}$
 $= 3000 \text{ mg} + 58 \text{ mg} = \mathbf{3058 \text{ mg}}$

f. $3 \text{ g } 408 \text{ mg} = 3 \text{ g} + 408 \text{ mg} = 3 \times 1000 \text{ mg} + 408 \text{ mg}$
 $= 3000 \text{ mg} + 408 \text{ mg} = \mathbf{3408 \text{ mg}}$

g. $82 \text{ g } 82 \text{ mg} = 82 \text{ g} + 82 \text{ mg} = 82 \times 1000 \text{ mg} + 82 \text{ mg}$
 $= 82000 \text{ mg} + 82 \text{ mg} = \mathbf{82082 \text{ mg}}$

h. $1 \text{ g } 9 \text{ mg} = 1 \text{ g} + 9 \text{ mg} = 1 \times 1000 \text{ mg} + 9 \text{ mg}$
 $= 1000 \text{ mg} + 9 \text{ mg} = \mathbf{1009 \text{ mg}}$

3. Change the following into kg.

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

a. $2075 \text{ g} = 2000 \text{ g} + 75 \text{ g} = (2000 \div 1000) \text{ kg} + 75 \text{ g}$
 $= 2 \text{ kg} + 75 \text{ g} = \mathbf{2 \text{ kg } 75 \text{ g}}$

b. $8008 \text{ g} = 8000 \text{ g} + 8 \text{ g} = (8000 \div 1000) \text{ kg} + 8 \text{ g}$
 $= 8 \text{ kg} + 8 \text{ g} = \mathbf{8 \text{ kg } 8 \text{ g}}$

c. $8080 \text{ g} = 8000 \text{ g} + 80 \text{ g} = (8000 \div 1000) \text{ kg} + 80 \text{ g}$
 $= 8 \text{ kg} + 80 \text{ g} = \mathbf{8 \text{ kg } 80 \text{ g}}$

d. $4000 \text{ g} = (4000 \div 1000) \text{ kg} = \mathbf{4 \text{ kg}}$

e. $6700 \text{ g} = 6000 \text{ g} + 700 \text{ g} = (6000 \div 1000) \text{ kg} + 700 \text{ g}$
 $= 6 \text{ kg} + 700 \text{ g} = \mathbf{6 \text{ kg } 700 \text{ g}}$

f. $77008 \text{ g} = 77000 \text{ g} + 8 \text{ g} = (77000 \div 1000) \text{ kg} + 8 \text{ g}$
 $= 77 \text{ kg} + 8 \text{ g} = \mathbf{77 \text{ kg } 8 \text{ g}}$

g. $7849 \text{ g} = 7000 \text{ g} + 849 \text{ g} = (7000 \div 1000) \text{ kg} + 849 \text{ g}$
 $= 7 \text{ kg} + 849 \text{ g} = \mathbf{7 \text{ kg } 849 \text{ g}}$

h. $2387 \text{ g} = 2000 \text{ g} + 387 \text{ g} = (2000 \div 1000) \text{ kg} + 387 \text{ g}$
 $= 2 \text{ kg} + 387 \text{ g} = \mathbf{2 \text{ kg } 387 \text{ g}}$

4. Change the following into g.

$$1000 \text{ mg} = 1 \text{ g}$$

a. $8000 \text{ mg} = (8000 \div 1000) \text{ g} = \mathbf{8 \text{ g}}$

b. $4200 \text{ mg} = 4000 \text{ mg} + 200 \text{ mg} = (4000 \div 1000) \text{ g} + 200 \text{ mg}$
 $= 4 \text{ g} + 200 \text{ mg} = \mathbf{4 \text{ g } 200 \text{ mg}}$

- c. $7288 \text{ mg} = 7000 \text{ mg} + 288 \text{ mg} = (7000 \div 1000) \text{ g} + 288 \text{ mg}$
 $= 7 \text{ g} + 288 \text{ mg} = \mathbf{7 \text{ g } 288 \text{ mg}}$
- d. $4500 \text{ mg} = 4000 \text{ mg} + 500 \text{ mg} = (4000 \div 100) \text{ g} + 500 \text{ mg}$
 $= 4 \text{ g} + 500 \text{ mg} = \mathbf{4 \text{ g } 500 \text{ mg}}$
- e. $3255 \text{ mg} = 3000 \text{ mg} + 255 \text{ mg} = (3000 \div 1000) \text{ g} + 255 \text{ mg}$
 $= 3 \text{ g} + 255 \text{ mg} = \mathbf{3 \text{ g } 255 \text{ mg}}$
- f. $6018 \text{ mg} = 6000 \text{ mg} + 18 \text{ mg} = (6000 \div 1000) \text{ g} + 18 \text{ mg}$
 $= 6 \text{ g} + 18 \text{ mg} = \mathbf{6 \text{ g } 18 \text{ mg}}$
- g. $27055 \text{ mg} = 27000 \text{ mg} + 55 \text{ mg} = (27000 \div 1000) \text{ g} + 55 \text{ mg}$
 $= 27 \text{ g} + 55 \text{ mg} = \mathbf{27 \text{ g } 55 \text{ mg}}$
- h. $19265 \text{ mg} = 19000 \text{ mg} + 265 \text{ mg} = (19000 \div 1000) \text{ g} + 265 \text{ mg}$
 $= 19 \text{ g} + 265 \text{ mg} = \mathbf{19 \text{ g } 265 \text{ mg}}$

Exercise 11.3

1. Convert into L.

$$1 \text{ kL} = 1000 \text{ L}$$

- a. $6 \text{ kL} = 6 \times 1000 \text{ L} = \mathbf{6000 \text{ L}}$
- b. $15 \text{ kL} = 15 \times 1000 \text{ L} = \mathbf{15000 \text{ L}}$
- c. $6 \text{ kL } 90 \text{ L} = 6 \text{ kL} + 90 \text{ L} = 6 \times 1000 \text{ L} + 90 \text{ L}$
 $=$
- d. $8 \text{ kL } 8 \text{ L} = 8 \text{ kL} + 8 \text{ L} = 8 \times 1000 \text{ L} + 8 \text{ L}$
 $= 8000 \text{ L} + 8 \text{ L} = 8008 \text{ L}$
- e. $4 \text{ kL } 70 \text{ L} = 4 \text{ kL} + 70 \text{ L} = 4 \times 1000 \text{ L} + 70 \text{ L}$
 $= 4000 \text{ L} + 70 \text{ L} = 4070 \text{ L}$
- f. $12 \text{ kL } 265 \text{ L} = 12 \text{ kL} + 265 \text{ L} = 12 \times 1000 \text{ L} + 265 \text{ L}$
 $= 12000 \text{ L} + 265 \text{ L} = 12265 \text{ L}$
- g. $18 \text{ kL } 1 \text{ L} = 18 \text{ kL} + 1 \text{ L} = 18 \times 1000 \text{ L} + 1 \text{ L}$
 $= 18000 \text{ L} + 1 \text{ L} = 18001 \text{ L}$
- h. $25 \text{ kL } 70 \text{ L} = 25 \text{ kL} + 70 \text{ L} = 25 \times 1000 \text{ L} + 70 \text{ L}$
 $= 25000 \text{ L} + 70 \text{ L} = 25070 \text{ L}$

2. Convert into mL.

$$1 \text{ L} = 1000 \text{ mL}$$

- a. $16 \text{ L} = 16 \times 1000 \text{ mL} = 16000 \text{ mL}$
- b. $7 \text{ L} = 7 \times 1000 \text{ mL} = 7000 \text{ mL}$
- c. $1 \text{ L } 4 \text{ mL} = 1 \text{ L} + 4 \text{ mL} = 1 \times 1000 \text{ mL} + 4 \text{ mL}$
 $= 1000 \text{ mL} + 4 \text{ mL} = 1004 \text{ mL}$
- d. $7 \text{ L } 270 \text{ mL} = 7 \text{ L} + 270 \text{ mL} = 7 \times 1000 \text{ mL} + 270 \text{ mL}$
 $= 7000 \text{ mL} + 270 \text{ mL} = 7270 \text{ mL}$
- e. $17 \text{ L } 55 \text{ mL} = 17 \text{ L} + 55 \text{ mL} = 17 \times 1000 \text{ mL} + 55 \text{ mL}$
 $= 17000 \text{ mL} + 55 \text{ mL} = 17055 \text{ mL}$

- f. $10\text{ L } 450\text{ mL} = 10\text{ L} + 450\text{ mL} = 10 \times 1000\text{ mL} + 450\text{ mL}$
 $= 10,000\text{ mL} + 450\text{ mL} = \mathbf{10,450\text{ mL}}$
- g. $3\text{ L } 15\text{ mL} = 3\text{ L} + 15\text{ mL} = 3 \times 1000\text{ mL} + 15\text{ mL}$
 $= 3000\text{ mL} + 15\text{ mL} = \mathbf{3015\text{ mL}}$
- h. $2\text{ L } 970\text{ mL} = 2\text{ L} + 970\text{ mL} = 2 \times 1000\text{ mL} + 970\text{ mL}$
 $= 2000\text{ mL} + 970\text{ mL} = \mathbf{2970\text{ mL}}$

3. Convert into kL.

$$1000\text{ L} = 1\text{ kL}$$

- a. $7280\text{ L} = 7000\text{ L} + 280\text{ L} = (7000 \div 1000)\text{ kL} + 280\text{ L}$
 $= 7\text{ kL} + 280\text{ L} = \mathbf{7\text{ kL } 280\text{ L}}$
- b. $62000\text{ L} = (62000 \div 1000)\text{ kL} = 62\text{ kL}$
- c. $15255\text{ L} = 15000\text{ L} + 255\text{ L} = (15000 \div 1000)\text{ kL} + 255\text{ L}$
 $= 15\text{ kL} + 255\text{ L} = \mathbf{15\text{ kL } 255\text{ L}}$

Exercise 11.4

1. Add :

- a. $75\text{ kg } 250\text{ g} + 62\text{ kg } 127\text{ g}$ b. $8\text{ L } 455\text{ mL} + 16\text{ L } 285\text{ mL}$
 $= 137\text{ kg } 377\text{ g}$ $= 24\text{ L } 740\text{ mL}$

kg	g
75	250
+ 62	675
137	925

kg	g
8	455
+ 16	285
24	740

- c. $42\text{ km } 175\text{ m} + 69\text{ km } 675\text{ m}$
 $= 111\text{ km } 850\text{ m}$

kg	g
42	175
+ 69	675
111	850

- d. $54\text{ kg } 672\text{ g} + 67\text{ kg } 372\text{ g}$ e. $8\text{ g } 30\text{ mg} + 19\text{ g } 705\text{ mg} + 30\text{ g } 475\text{ mg} = 58\text{ g } 210\text{ mg}$
 $= 122\text{ kg } 44\text{ g}$

kg	g
54	672
+ 67	372
122	44

g	mg
8	30
+ 19	705
30	475
58	210

- f. $33\text{ L } 333\text{ mL} + 66\text{ L } 666\text{ mL}$ g. $15\text{ m } 25\text{ cm} + 8\text{ m } 65\text{ cm}$
 $= 99\text{ L } 999\text{ mL}$ $= 23\text{ m } 90\text{ cm}$

L	mL
33	333
+ 66	666
99	999

m	cm
15	25
+ 8	65
23	90

2. Subtract :

a. 10 L 250 mL - 5 L 650 mL
= 4 L 600 mL

L	mL
10	250
- 5	650
4	600

b. 81 kg 350 g - 73 kg 450 g
= 7 kg 900 g

kg	g
81	350
- 73	450
7	900

c. 32 kg 100 g - 17 kg 400 g
= 14 kg 700 g

kg	g
32	100
- 17	400
14	700

d. 92 m 66 cm - 88 m 46 cm
= 4 m 20 cm

m	cm
92	66
- 88	46
4	20

e. 38 g 400 mg - 27 g 875 mg
= 10 g 525 mg

g	mg
38	400
- 27	875
10	525

f. 88 L 672 mL - 74 L 900 mL
= 13 L 772 mL

L	mL
88	672
- 74	900
13	772

g. 72 km 700 m - 66 km 825 m
= 5 km 875 m

km	m
72	700
- 66	825
5	875

h. 40 km 35 km 675 m - 35 km 325 m
= 4 km 325 m

km	m
40	000
- 35	675
4	325

Exercise 11.5

Solve the following :

Ans. 1. The mangoes are bought = 9 kg 500 g

The mangoes are sold = 4 kg 750 g

The mangoes are left with him = 4 kg 750 g

So, 4 kg 750 g mangoes are left with the shopkeeper.

2. Distance travelled by car = 5 km 250 m

Distance travelled by bus = 3 km 450 m

Distance travelled by walk = 6000 m

Total distance = 9 km 300 m

So, Mr. Jackson travelled 9 km 300 m in all.

kg	g
9	500
- 4	750
4	750

km	m
5	250
3	450
+	0 600
9	300

12 Time and Calendar

Look Back

1. Choose the activities according to the time taken to complete them and list them in the suitable boxes by writing the correct letters.

Takes minutes

- a. Brushing your teeth
- e. having lunch
- f. making a cup of tea
- g. Having a bath

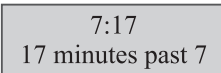
Takes hours

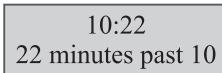
- b. Watching a movie
- c. Sleeping at night
- d. Attending school on Monday
- h. Stitching a Kuarta

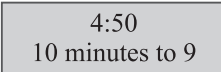
Exercise 12.1

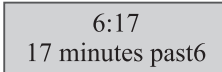
1. Read the time shown in the clock to the exact minute and write it in any two ways.

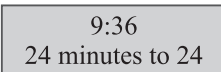
Ans.

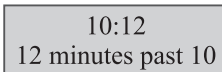
a. 
7:17
17 minutes past 7

b. 
10:22
22 minutes past 10


c. 
4:50
10 minutes to 9


d. 
6:17
17 minutes past 6


e. 
9:36
24 minutes to 24

f. 
10:12
12 minutes past 10

2. Draw the hands of the clocks to show the given time.

a. 
3:42

b. 
9:13

c. 
fifty-three

3. Write the time 2 hours before :

- a. 1 : 18 a.m.

The time 2 hours before 1 : 18 am is 11 : 18 pm

- b. 7 : 25 a.m.

- The time 2 hours before 7 : 25 am is 5 : 25 am
- c. 9 : 08 a.m.
The time 2 hours before 9 : 08 am is 7 : 08 am
- d. 11 : 47 a.m.
The time 2 hours before 11 : 47 am is 9 : 47 am
- e. 10 : 30 p.m.
The time 2 hours before 10 : 30 pm is 8 : 30 pm
- f. 1 : 02 p.m.
The time 2 hours before 1 : 02 pm is 11 : 02 am

4. Give the time 3 hours after :

- a. 11 : 00 p.m.
The time 3 hours after 11 : 00 pm is 2 : 00 am
- b. 8 : 31 p.m.
The time 3 hours after 8 : 31 pm is 11 : 31 pm
- c. 7 : 40 a.m.
The time 3 hours after 7 : 40 am is 10 : 40 am
- d. 1 : 04 p.m.
The time 3 hours after 1 : 04 pm is 4 : 04 pm
- e. 6 : 03 a.m.
The time 3 hours after 6 : 03 am is 9 : 03 am
- f. 11 : 15 a.m.
The time 3 hours after 11 : 15 am is 2 : 15 pm

Mental Maths

1. Hockey match was start at 1440 hours.
The time in the 12 hour clock would be **2:45 p.m.**
2. 4:15 p.m. in the 24 hours clock to **1615 hours**

Exercise 12.2

- 1. Change the 12-hour clock time to 24-hour clock time :**
- | 12-hour clock time | 24-hour clock time : |
|---------------------------|-----------------------------|
| a. 10 : 00 a.m. | 1000 hours |
| b. 11 : 00 a.m. | 1100 hours |
| c. 12 midnight | 0000 hours/2400 hours |
| d. 2 : 47 p.m. | 1447 hours |
| e. 8 : 45 a.m. | 0845 hours |
| f. 8 : 20 p.m. | 2020 hours |
| g. 1 : 05 p.m. | 1305 hours |
| h. 3 : 15 a.m. | 0315 hours |

2. Change the 24-hour clock time to 12-hour clock time :

24-hour clock time	12-hour clock time
a. 0800 hours	8 : 00 am
b. 1320 hours	1 : 20 pm
c. 1640 hours	4 : 40 pm
d. 1115 hours	11 : 15 am
e. 0430 hours	4 : 30 am
f. 2340 hours	11 : 40 pm
g. 1200 hours	12 : 00 noon
h. 2250 hours	10 : 50 pm

Exercise 12.3

1. Convert the following into seconds :

- 1 minute = 60 seconds
- a. 5 minutes = 5×60 seconds = **300 seconds**
- b. 17 minutes = 17×60 seconds = **1020 seconds**
- c. 24 minutes = 24×60 seconds = **1440 seconds**
- d. 36 minutes 48 seconds = 36 minutes + 48 seconds
 $= 36 \times 60$ seconds + 48 seconds = 2160 second + 48 seconds
= **2208 seconds**
- e. 10 minutes 17 seconds = 10 minutes + 17 seconds
 $= 10 \times 60$ seconds + 17 seconds = 600 seconds + 17 seconds
= **617 seconds**

2. Convert the following into hours and minutes :

60 minutes = 1 hour

- a. 487 minutes = $(487 \div 60)$ hours
 $487 \div 60$ gives quotient 8 and remainder 7
= 8 hours 7 minutes
- b. 325 minutes = $(325 \div 60)$ hours
 $325 \div 60$ gives quotient 5 and remainder 25.
= 5 hours 25 minutes
- c. 156 minutes = $(156 \div 60)$ hours
 $156 \div 60$ gives quotient 2 and remainder 36
= 2 hours 36 minutes
- d. 526 minutes = $(526 \div 60)$ hours
 $526 \div 60$ gives quotient 8 and remainder 6
= 8 hours 46 minutes
- e. 1515 minutes = $(1515 \div 60)$ hours
 $1515 \div 60$ gives quotient 25 and remainder 15
= 25 hours 15 minutes

$$\begin{array}{r} 60 \overline{)487} \langle 8 \\ - 480 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 60 \overline{)325} \langle 5 \\ - 300 \\ \hline 25 \end{array}$$

- f. $1025 \text{ minutes} = (1025 \div 60) \text{ hours}$
 $1025 \div 60$ gives quotient = 17 and remainder 5
 = 17 hours 5 minutes

3. Convert the following into minutes :

- 60 minutes = 1 hour
 60 seconds = 1 minutes
- a. $360 \text{ seconds} = (360 \div 60) \text{ minutes} = \mathbf{6 \text{ minutes}}$
 b. $7 \text{ hours} = 7 \times 60 \text{ minutes} = \mathbf{420 \text{ minutes}}$
 c. $3 \text{ hours } 25 \text{ minutes} = 3 \text{ hours} + 25 \text{ minutes}$
 $= 3 \times 60 \text{ minutes} + 25 \text{ minutes} = 180 \text{ minutes} + 25 \text{ minutes}$
 $= \mathbf{205 \text{ minutes}}$
 d. $5 \text{ hours } 20 \text{ minutes} = 5 \text{ hours} + 20 \text{ minutes} = 5 \times 60$
 $\text{minutes} + 20 \text{ minutes}$
 $= 300 \text{ minutes} + 20 \text{ minutes} = \mathbf{320 \text{ minutes}}$
 e. $15 \text{ hours } 6 \text{ minutes} = 15 \text{ hours} + 6 \text{ minutes} = 15 \times 60 \text{ minutes}$
 $+ 6 \text{ minutes}$
 $= 900 \text{ minutes} + 6 \text{ minutes} = \mathbf{906 \text{ minutes}}$
 f. $6 \text{ hours } 14 \text{ minutes} = 6 \text{ hours} + 14 \text{ minutes} = 6 \times 60 \text{ minutes}$
 $+ 14 \text{ minutes}$
 $= 360 \text{ minutes} + 14 \text{ minutes} = \mathbf{374 \text{ minutes}}$

Exercise 12.4

1. Add :

- a.

min	sec
①	
45	
15	
100	0
- b.

Hr	min
①	
35	
40	
115	
- c.

Hr	min
①	
332	
448	
820	
- d.

Hr	min	sec
①	①	
10	40	26
+	4	26
15	07	00
- e.

Hr	min	sec
①	①	
35	40	50
+	5	16
40	57	20
- f.

Hr	min	sec
①①	①	
13	40	54
9	28	31
23	29	25

2. Find :

- a.

min	sec
40	45
-28	20
12	25
- b.

min	sec
12	45
-6	30
6	15
- c.

min	sec
3	48
-1	03
2	45
- d.

Hr	min	sec
12	20	04
-8	14	02
4	06	02

e.

Hr	min	sec
24	77	65
25	73	05
- 16	24	10
8	49	55

f.

Hr	min	sec
13	77	85
14	18	25
- 6	30	48
7	47	37

3. Add :

a. 12 hr 45 min + 15 hr 35 min
= 28 hr 20 min

hr	min
①	
12	45
+ 15	35
28	20

b. 7 hr 40 min + 10 hr 25 min
= 18 hr 05 min

hr	min
①	
7	40
+ 10	25
18	05

c. 19 hr 25 min + 13 hr 50 min
= 33 hr 15 min

hr	min
①	
19	25
+ 13	50
33	15

d. 16 hr + 14 hr 50 min
= 30 hr 50 min

hr	min
16	00
+ 14	50
30	50

e. 2 hr 20 min + 8 hr 40 min
= 11 hr

hr	min
①	
2	20
+ 8	40
11	00

f. 3 hr 15 min + 5 hr 30 min
= 8 hr 45 min

hr	min
3	15
+ 5	30
8	45

4. Subtract :

a. 18 hr 50 min - 12 hr 35 min
= 6 hr 15 min

hr	min
18	50
- 12	35
6	15

b. $15 \text{ hr } 30 \text{ min} - 11 \text{ hr}$
 $= 4 \text{ hr } 30 \text{ min}$

hr	min
15	30
- 11	30
4	00

c. $14 \text{ hr } 45 \text{ min} - 9 \text{ hr } 50 \text{ min}$
 $= 4 \text{ hr } 55 \text{ min}$

hr	min
13	105
- 9	50
4	55

d. $7 \text{ hr } 45 \text{ min} - 4 \text{ hr } 20 \text{ min}$
 $= 3 \text{ hr } 25 \text{ min}$

hr	min
7	45
- 4	20
3	25

e. $2 \text{ hr } 40 \text{ min} - 13 \text{ hr } 55 \text{ min}$
 $= 7 \text{ hr } 45 \text{ min}$

hr	min
20	100
- 13	55
7	45

f. $10 \text{ hr } 10 \text{ min} - 6 \text{ hr } 25 \text{ min}$
 $= 3 \text{ hr } 45 \text{ min}$

hr	min
9	70
- 6	25
3	45

5. Find the duration of time from :

a. Duration of time from 7 : 15 a.m. to 11 : 45 a.m.
 $= 11 : 45 \text{ am} - 7 : 15 \text{ am} = 4 \text{ hr } 30 \text{ min}$

hr	min
11	45
- 7	15
4	30

b. Duration of time from 1 : 15 p.m. to 2 : 00 p.m.
 $= 2 : 00 \text{ pm} - 1 : 15 \text{ pm}$
 $= \mathbf{45 \text{ min}}$

c. Duration of time from 10 : 30 a.m. to 5 : 30 p.m.
 $= \text{from } 1030 \text{ hr to } 1730 \text{ hr}$
 $= 1730 \text{ hr} - 1030 \text{ hr}$
 $= \mathbf{700 \text{ hr}}$

- d. Duration of time from 1230 hr to 0900 hr (Next day)

Duration of time from 12 : 30 hr to (0900 + 24 00

= 3300 hr)

= 3300 hr 1230 hr = **20 hr 30 min**

hr	min
33	00
- 12	30
20	30

- e. Duration of time from 1615 hr to 2030 hr

= 2030 hr 1615 hr

= **4 hr 15 min**

hr	min
20	30
- 16	15
4	15

6. a. 45 minutes before 9:30 a.m. = 8:45 a.m.

Manav reached the school at 9:30 a.m.

Naman reached the school 45 minutes before

Manav

So, Naman reached the school at **8:45 a.m.**

hr	min
9	30
- 0	45
8	45

- b. Time earlier 2 hours 45 from 6 : 30 pm = 3 : 45 pm

Arpit reached home at 6 : 30 pm

Johan had reached 2 hours 45 minutes earlier than Arpit.

So, Johan had reached home at **3 : 45 pm**

hr	min
6	30
- 2	45
3	45

- c. Programme starts at 1415 hours

Programme ends after 3 hours 45 minutes.

So, programme will end at **1800 hours.**

hr	min
14	15
- 3	45
18	00

- d. 3 hr 45 min before 9 : 30 am = 5 : 45 am

The Chennai Mail reached at 9 : 30 am

The Hourah mail had reached 3 hours 45 min before.

So, the Howrach mail had reached Mumbai at 5 : 45 am.

hr	min
9	30
- 3	45
5	45

- e. Jane took 12 hr 35 min for same distance.

Joe took 8 hr 42 min for same distance.

So less time take by Joe = 12 hr 35 min 8 hr 4 min
= 3 hr 53 min

So, Joe took less time by 3 hr 53 min than Jane.

hr	min
12	35
- 8	42
3	53

- f. 20 minutes after 7 : 15 am = 7 : 35 am
 40 minutes after 7 : 35 am = 8 : 15 am
 15 minutes after 8 : 15 am = 8 : 30 am
 Shreya started for school at 7 : 15 am
 She waited for 20 min upto 7 : 35 for the bus.
 She traelled for 40 min upto 8 : 15 am
 She walked for 15 min upto 8 : 30 am
 So, she reached school at **8 : 30 am**

- g. A bus reached city bat 3 : 35 pm
 A bus left city A at 2 : 40 pm
 The time taken by bus = 3 : 35 pm 2 : 40 pm
 = 55 minutes.
 So, the bus took 55 minutes to reach city B
 from city A.

hr	min
2	95
3	35
- 2	40
0	55

- h. Rohit took 3 hr 23 min to reach same distance.
 Rahul took 2 hr 53 min more than Rohit.
 Time was taken by Rahul = 3 hr 23 min +
 2 hr 53 min = **6 hr 16 min**

hr	min
3	23
3	23
+ 2	53
6	16

Exercise 12.5

1. Convert the days to hours :

A day = 24 hours

A fort night = 15 days

a. $1\frac{1}{5}$ days = $\frac{3}{2}$ days = $\frac{13}{4} \times 24$ hours = **36 hours**

b. 3 days = 3×24 hours = **72 hours**

c. A fortnight = 15 days = 15×24 hours = **360 hours**

d. $3\frac{1}{4}$ days = $\frac{13}{4}$ days = $\frac{13}{4} \times 24$ hours = **360 hours**

2. Convert into days :

1 week = 7 days

a. 96 hours = $(96 \div 24)$ days = **4 days**

b. 2 weeks and 4 days = 2×7 days + 4 days = 14 days + 4 days
 = **18 days**

c. 146 hours = $(146 \div 24)$ days

146 \div 24 gives quotient = 6 and remainder = 2 = 6 days 2 hr

d. 4 weeks = 4×7 days = **28 days**

3. Which of the following are leap years?

a. 1998

1998 is not exactly divisible by 4.

So, 1998 is not a leap year.

$$\begin{array}{r} 499 \\ 4 \overline{)1998} \\ \underline{-16} \\ 39 \\ \underline{-36} \\ 38 \\ \underline{-36} \\ 02 \end{array}$$

b. 1952

1952 is exactly divisible by 4.

So, 1952 is a leap year.

$$\begin{array}{r} 688 \\ 4 \overline{)1952} \\ \underline{-16} \\ 35 \\ \underline{-32} \\ 32 \\ \underline{-32} \\ 0 \end{array}$$

c. 2002

2002 is not divisible by 4.

So, 2002 is not a leap year.

$$\begin{array}{r} 500 \\ 4 \overline{)2002} \\ \underline{-20} \\ 02 \\ \underline{-00} \\ 2 \end{array}$$

d. 2004

2004 is exactly divisible by 4.

So, 2004 is a leap year.

$$\begin{array}{r} 501 \\ 4 \overline{)2004} \\ \underline{-20} \\ 004 \\ \underline{-4} \\ 0 \end{array}$$

e. 2010

2010 is not divisible by 4.

So, 2010 is not a leap year.

$$\begin{array}{r} 502 \\ 4 \overline{)2012} \\ \underline{-20} \\ 10 \\ \underline{-8} \\ 2 \end{array}$$

f. 2012

2012 is exactly divisible by 4.

So, 2012 is a leap year.

$$\begin{array}{r} 503 \\ 4 \overline{)2012} \\ \underline{-20} \\ 012 \\ \underline{-12} \\ 0 \end{array}$$

g. 2032

2032 is exactly divisible by 4.

So, 2032 is a leap year.

$$\begin{array}{r} 508 \\ 4 \overline{)2032} \\ \underline{-20} \\ 032 \\ \underline{-32} \\ 0 \end{array}$$

- h. 2028
 2028
 2028 is exactly divisible by 4.
 So, 2028 is a leap year.

$$\begin{array}{r} 207 \\ 4 \overline{)2028} \\ \underline{-20} \\ 28 \\ \underline{-28} \\ 0 \end{array}$$

4. Solve.

- a. Nandini was on leave from 10 May to 11 July.
 Days from 10 May to 31 May = 22 days.
 Days from 1 June to 30 June = 30 days.
 Days from 1 July to 11 July = 11 days
 Total Days when she was on leave = $22 + 30 + 11 = 63$ days.
 So, Nandini was on leave of 63 days.
- b. Gaurav's family reach Shimla on the morning of 19 October.
 They left Shimla on 5 November.
 Days from 19 October to 31 October = 13 days
 Days from 1 November to 5 November = 5 days
 Total days when they stayed in Shimla = $13 + 5 = 18$ days.
 So they stayed in Shimla **18 days**
- c. Mrs Kaushal took a leave of 35 days from 14th April.
 Days from 14 April to 30 April = 17 days
 Days of leave in May = $35 - 17 = 18$
 So, she was on leave from 14th April 18th May.
 So, she will rejoin on 19th May her duty.

Multiple Choice Questions

Tick (✓) the correct choice :

- Ans.** 1. a. 1835 2. c. 11:05p.m. 3. c. 52
 4. b. 5400 5. a. 6

Fun with Maths


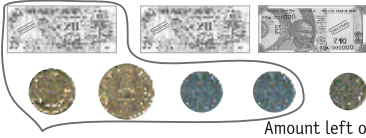
Do it yourself.


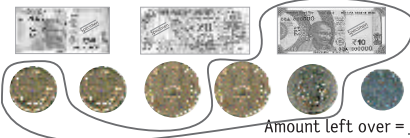
13 Money

Look Back

Circle the money Rachna needs to buy each item. Write the amount left over.

Ans.

1.   Amount left over = ₹ 30.25

2.   Amount left over = ₹ 77.75

Exercise 13.1

1. Write as paise (p) :

a. ₹ 6 = 600 p

b. ₹ 10 = 1000 p

c. ₹ 5.50 = 550 p

d. ₹ 4.15 = 415 p

e. ₹ 32.25 = 3225 p

f. ₹ 7.05 = 705 p

g. ₹ 151.20 = 15120 p

h. ₹ 18.50 = 1850 p

i. ₹ 40.70 = 4070 p

2. Write as rupees (₹) :

a. 100 p = ₹ 1

b. 600 p = ₹ 6

c. 2600 p = ₹ 26


d. 575 p = ₹ 5.75

e. 1545 p = ₹ 15.45


f. 2750 p = ₹ 27.50

Mental Maths

Write amount to paise :

1.  = 600p

2.  = 2500 p

3.  = 13,000 p

4.  = 15,000 p

Exercise 13.2

1. Add the following :

a.
$$\begin{array}{r} \text{₹ } 227.57 \\ - \text{₹ } 621.68 \\ \hline \text{₹ } 849.25 \end{array}$$

b.
$$\begin{array}{r} \text{₹ } 641.79 \\ - \text{₹ } 191.81 \\ \hline \text{₹ } 833.60 \end{array}$$

c.
$$\begin{array}{r} \text{₹ } 781.11 \\ - \text{₹ } 321.23 \\ \hline \text{₹ } 521.59 \end{array}$$

d.
$$\begin{array}{r} \text{₹ } 2074.97 \\ - \text{₹ } 130.21 \\ \hline \text{₹ } 97.65 \\ \text{₹ } 435.77 \end{array}$$

2. Add :

a. $\text{₹ } 33.07 + \text{₹ } 54.45 + \text{₹ } 96.08 = \text{₹ } 183.60$

b. $\text{₹ } 207.23 + \text{₹ } 149.50 + \text{₹ } 9.27 = \text{₹ } 366.00$

c. $\text{₹ } 61 + \text{₹ } 40.50 + \text{₹ } 73.75 = \text{₹ } 175.25$

d. $\text{₹ } 38.90 + \text{₹ } 79 + \text{₹ } 58.58 = \text{₹ } 166.48$

3. Subtract the following.

a.
$$\begin{array}{r} \text{₹ } 205.45 \\ - \text{₹ } 145.30 \\ \hline \text{₹ } 60.15 \end{array}$$

b.
$$\begin{array}{r} \text{₹ } 713.79 \\ - \text{₹ } 198.81 \\ \hline \text{₹ } 594.60 \end{array}$$

c.
$$\begin{array}{r} \text{₹ } 847.91 \\ - \text{₹ } 691.21 \\ \hline \text{₹ } 156.70 \end{array}$$

d.
$$\begin{array}{r} \text{₹ } 498.70 \\ - \text{₹ } 211.20 \\ \hline \text{₹ } 287.50 \end{array}$$

4. Subtract :

a. $\text{₹ } 63.47$ from $\text{₹ } 192.60 = \text{₹ } 129.13$

b. $\text{₹ } 326.69$ from $\text{₹ } 500 = \text{₹ } 173.31$

c. $\text{₹ } 215.80$ from $\text{₹ } 557.25 = \text{₹ } 341.45$

d. $\text{₹ } 69.56$ from $\text{₹ } 802.49 = \text{₹ } 732.93$

5. Solve :

a. The cost of a foot ball = $\text{₹ } 110.00$

The cost of a toy car = $\text{₹ } 90.00$

Difference in their costs = $\text{₹ } 20.00$

So, $\text{₹ } 20$ is the difference in their cost.

b. The cost of a packet of crayons = $\text{₹ } 25.50$

The cost of a book = ₹ 60.75

The cost of a bag = ₹ 135.95

The total cost of all the things ₹ 222.20

So, total cost of all things is ₹ 222.20

- c. The cost of a book = ₹ 89.75

The cost of a pen = ₹ 25.00

total money spent = 114.75

Sambhav gave to shopkeeper = ₹ 200.00

he spent money = ₹ 114.75

Money should be get back ₹ 85.25

So, ₹ 85.25 should be get back.

Exercise 13.3

1. Find the product :

a. ₹ $61.25 \times 18 = ₹ 1102.50$

$$\begin{array}{r} 61.25 \\ \times 18 \\ \hline 49000 \\ + 61250 \\ \hline 1102.50 \end{array}$$

b. ₹ $9.95 \times 34 = ₹ 338.30$

$$\begin{array}{r} 9.95 \\ \times 34 \\ \hline 3980 \\ + 29850 \\ \hline 338.30 \end{array}$$

c. ₹ $17.06 \times 25 = ₹ 426.50$

$$\begin{array}{r} 17.06 \\ \times 25 \\ \hline 8530 \\ + 34120 \\ \hline 426.50 \end{array}$$

d. ₹ $37.48 \times 42 = ₹ 1574.16$

$$\begin{array}{r} 37.48 \\ \times 42 \\ \hline 7496 \\ + 14920 \\ \hline 1574.16 \end{array}$$

e. ₹ $92.64 \times 15 = ₹ 1389.60$

$$\begin{array}{r} 92.64 \\ \times 15 \\ \hline 46320 \\ + 92640 \\ \hline 1389.60 \end{array}$$

f. ₹ $70.48 \times 23 = ₹ 1621.04$

$$\begin{array}{r} 70.48 \\ \times 23 \\ \hline 21144 \\ + 140960 \\ \hline 1621.04 \end{array}$$

2. Divide :

a. ₹ 518.25 ÷ 5
= ₹ 103.65

$$\begin{array}{r} 103.65 \\ 5 \overline{) 518.25} \\ \underline{-5} \\ 18 \\ \underline{-15} \\ 32 \\ \underline{-32} \\ 25 \\ \underline{-25} \\ 0 = r \end{array}$$

b. ₹ 8,260.44 ÷ 4
= ₹ 2065.11

$$\begin{array}{r} 2065.11 \\ 7 \overline{) 8260.44} \\ \underline{-8} \\ 26 \\ \underline{-24} \\ 20 \\ \underline{-20} \\ 4 \\ \underline{-4} \\ 04 \\ \underline{-4} \\ 0 \end{array}$$

c. ₹ 4,106.92 ÷ 2
= ₹ 2053.46

$$\begin{array}{r} 2053.46 \\ 7 \overline{) 4106.92} \\ \underline{-4} \\ 10 \\ \underline{-10} \\ 6 \\ \underline{-6} \\ 9 \\ \underline{-8} \\ 12 \\ \underline{-12} \\ 0 \end{array}$$

d. ₹ 937.44 ÷ 3
= ₹ 312.48

$$\begin{array}{r} 312.48 \\ 3 \overline{) 937.44} \\ \underline{-9} \\ 3 \\ \underline{-3} \\ 7 \\ \underline{-6} \\ 14 \\ \underline{-12} \\ 24 \\ \underline{-24} \\ 0 \end{array}$$

e. ₹ 343.20 ÷ 11 = ₹ 31.20

$$\begin{array}{r} 31.20 \\ 5 \overline{) 343.20} \\ \underline{-33} \\ 13 \\ \underline{-11} \\ 22 \\ \underline{-22} \\ 08 \\ \underline{-0} \\ 0 \end{array}$$

$$\begin{aligned} \text{f. } ₹ 3,889.20 \div 12 \\ = ₹ 324.10 \end{aligned}$$

$$\begin{array}{r} 324.10 \\ 12 \overline{) 3889.20} \\ \underline{-36} \\ 28 \\ \underline{-24} \\ 49 \\ \underline{-48} \\ 12 \\ \underline{-12} \\ 0 \\ \underline{-0} \\ 0 \end{array}$$

$$\begin{aligned} \text{g. } ₹ 9,223.92 \div 9 \\ = ₹ 1024.88 \end{aligned}$$

$$\begin{array}{r} 1024.88 \\ 9 \overline{) 9223.92} \\ \underline{-9} \\ 22 \\ \underline{-18} \\ 43 \\ \underline{-36} \\ 79 \\ \underline{-72} \\ 72 \\ \underline{-72} \\ 0 \end{array}$$

$$\begin{aligned} \text{h. } ₹ 7,127.33 \div 7 \\ = ₹ 1018.19 \end{aligned}$$

$$\begin{array}{r} 1018.19 \\ 7 \overline{) 7127.33} \\ \underline{-7} \\ 12 \\ \underline{-7} \\ 57 \\ \underline{-56} \\ 13 \\ \underline{-7} \\ 63 \\ \underline{-63} \\ 0 \end{array}$$

$$\begin{aligned} \text{i. } ₹ 3,364.80 \div 16 \\ = ₹ 210.30 \end{aligned}$$

$$\begin{array}{r} 210.30 \\ 16 \overline{) 3364.80} \\ \underline{-32} \\ 16 \\ \underline{-16} \\ 48 \\ \underline{-48} \\ 79 \\ \underline{-72} \\ 72 \\ \underline{-72} \\ 0 \end{array}$$

3. Solve the following word problems.

- a. The cost of 1 kg of rice = ₹ 13.50
The cost of 35 kg of rice = ₹ 13.50 × 35
= ₹ 472.50

So, the cost of 35 kg of rice is ₹ 472.50.

- b. The price of a crayon packet is ₹ 16.15
The price of 3 crayon packets is ₹ 16.15 × 3 = ₹ 48.45
Ria bought 3 crayon packets of the price ₹ 48.45.
So, Ria had to pay ₹ 48.45.

$$\begin{array}{r} 13.50 \\ \times 35 \\ \hline 6750 \\ 40500 \\ \hline 472.50 \end{array}$$

- c. Total money was given to some friends = ₹ 1250.00

Each friend got = ₹ 250

Number of friends = $1250 \div 250$

= 5 friends

$$\begin{array}{r} 5 \\ 250 \overline{) 1250} \\ \underline{- 1250} \\ 0 \end{array}$$

So, 5 friends got the money.

- d. The cost of a postal stamp = ₹ 0.75

The cost of 50 postal stamps = ₹ 0.75×50

= ₹ 37.50

$$\begin{array}{r} 0.75 \\ \times 50 \\ \hline 37.50 \end{array}$$

So, total cost of 50 postal stamps is ₹ 37.5

- e. The cost of 25 packets of balloons = ₹ 300

The cost of 1 packet of balloon = ₹ $300 \div 25$

= ₹ 12

$$\begin{array}{r} 12 \\ 25 \overline{) 300} \\ \underline{- 25} \\ 50 \\ \underline{- 50} \\ 0 \end{array}$$

So, the cost of each packet of balloons is ₹ 12.

Exercise 13.4

1. Read the bills to find the total amount and the money left over.

a.

S. No.	Item	Quantity	Per kg (₹)	Cost (₹)
(i)	Pulse	1 kg	95.00	95.00
(ii)	Salt	$\frac{1}{2}$ kg	14.50	7.25
(iii)	Sugar	1 kg	40.00	40.00
(iv)	Coffee Powder	$\frac{1}{2}$ kg	24.00	6.00
Total =				₹148.25

b.

S. No.	Item	Quantity	Per kg	Cost
(i)	Pulse	$\frac{1}{2}$ kg	95.00	19.00
(ii)	Salt	2 kg	14.50	172.00
Total =				₹ 191.00

Money left over = ₹ $(200 - 191)$ ₹ 29

c.

S. No.	Item	Quantity	Rate	Cost
(i)	Comb	1	12.75	12.75
(ii)	Ribbon	2 m	5.00	10.00
(iii)	Clips	6	10.50	63.00
(iv)	Hair pins	2	7.00	14.00
				Total = ₹ 99.75

2. Solve :

- a. Karan has ₹ 139

The cost of a book is ₹ 197.75

The money that Karan needs to buy book = ₹ (197.75 – 139.0)
= ₹ 58.75

So Karan needs ₹ 58.75 to buy ₹ 58.75

- b. The cost of apples = ₹ 22.75

The shopkeeper Returned = ₹ 27.25.

She gave him money = ₹ (22.75 + 27.25) = ₹ 50.00

So, Kiran gave shopkeeper ₹ 50.

Fun with Maths

Make a bill for the following purchases made by Mrs Gautam at a grocery shop. also. Calculate the amount she gets back if she pays ₹1000.

Ans.

Item	Quantity	Cost per unit	Total Cost
Sugar	3 kg	₹38.25	₹114.75
Snacks	2	₹28.75	₹57.50
Flour	5 kg	₹22.50	₹112.50
Dal	1 kg	₹88.00	₹88.00
Rice	3 kg	₹45.50	₹136.50
		Grand Total =	₹509.25

Multiple Choice Questions

Tick (✓) the correct choice :

Ans. 1. a. ₹130.45 2. b. 20 3. a. ₹286.50 4. c. ₹372.12

14 Money

Mental Maths

Measure the distance around the following by using a ruler or metre tape.

Ans. Do it yourself.

Mental Maths

Find the perimeter of each figure :

Ans. 1. 20 cm 2. 22 cm 3. 24 cm 4. 24 cm

Exercise 14.1

1. Find the perimeter of the following :
 - a. Perimeter = $8 + 8 + 8 + 8 = 32$ cm
 - b. Perimeter = $2(20 + 40) = 2 \times 60 = 120$ cm
 - c. Perimeter = $4 \times 18 = 72$ cm
 - d. Perimeter = $2(3 + 2) = 2 \times 5 = 10$ m
 - e. Perimeter = $18 + 18 + 12 + 20 + 12 = 80$ cm
2. Find the perimeter of each figure. The side of each small square is 1 cm.
 - a. Perimeter = $3 + 2 + 2 + 1 + 3 + 2 + 2 + 5 = 20$ cm
 - b. Perimeter = $3 + 1 + 1 + 1 + 1 + 2 + 2 + 1 + 1 + 1 + 2 + 2 = 18$ cm
 - c. Perimeter = $3 + 1 + 3 + 2 + 6 + 3 = 18$ cm
 - d. Perimeter = $2 + 1 + 2 + 1 + 1 + 1 + 2 + 1 + 1 + 2 = 14$ cm
 - e. Perimeter = $3 + 14 + 1 + 2 + 1 + 1 + 3 + 1 + 1 + 2 + 1 + 1 = 18$ cm
 - f. Perimeter = $3 + 1 + 1 + 4 + 2 + 5 = 16$ cm
3. Find the perimeter of the following figures :
 - a. Perimeter = $8 + 6 + 4 + 4 + 6 = 28$ cm
 - b. Perimeter = $6 \times 3 = 18$ cm
 - c. Perimeter = $4 + 5 + 7 + 3 = 19$ cm

Exercise 14.2

1. Find the perimeter of a rectangle whose :
Perimeter of a rectangle = $2(\text{length } l + \text{breadth } b)$

- a. length = 24 cm, breadth = **17 cm**
 \therefore Perimeter $P = 2(l + b) = 2(24 + 17) = 2 \times 41 = \mathbf{82 \text{ cm}}$.
- b. length = 42 m, breadth = 20 m
 Perimeter $P = 2(l + b) = 2(42 + 20) = 2 \times 62 = \mathbf{124 \text{ m}}$
- c. length = 36 cm, breadth = 15 cm
 Perimeter $P = 2(l + b) = 2(36 + 15) = 2 \times 51 = \mathbf{102 \text{ cm}}$
- d. length = 18 m, breadth = 9 m
 Perimeter $P = 2(l + b) = 2(18 + 9) = 2 \times 27 = \mathbf{54 \text{ m}}$

2. Find the perimeter of a square each of whose side is :

Perimeter of a square $P = 4 \times \text{side } a$

- a. Side $a = 14 \text{ cm}$
 \therefore Perimeter $P = 4 \times a = 4 \times 14 = \mathbf{56 \text{ cm}}$
- b. Side $a = 35 \text{ cm}$
 \therefore Perimeter $P = 4 \times a = 4 \times 35 = \mathbf{140 \text{ cm}}$
- c. Side $a = 17 \text{ m}$
 \therefore Perimeter $P = 4 \times a = 4 \times 17 = \mathbf{68 \text{ m}}$
- d. Side $a = 42 \text{ m}$
 Perimeter $P = 4 \times 42 = \mathbf{168 \text{ m}}$

3. Solve :

- a. Length of a rectangular park $l = 15 \text{ m}$ and breadth $b = 8 \text{ m}$
 \therefore Perimeter of the park $= 2(l + b) = 2(15 + 8) = 2 \times 23$
 $= 46 \text{ m}$
 Perimeter run 46 m in 1 round around the park.
 So, the distance he runs in 5 round $= 46 \times 5 = 230 \text{ m} = 230 \times 100 \text{ cm} = 23000 \text{ cm}$
 So, he runs everyday **23000 cm**.
- b. Side of a square painting = 30 cm
 \therefore Perimeter of painting $= 4 \times 30 = 120 \text{ cm} = 1 \text{ m } 20 \text{ cm}$.
 So, the length of the frame of painting is **1 m 20 cm**.
- c. Length of rectangular football court $l = 24 \text{ m}$
 breadth b of the court = 20 m
 \therefore Perimeter $p = 2(l + b) = 2(24 + 20) = 2 \times 44 = \mathbf{88 \text{ m}}$
- d. Length of rectangular field $l = 18 \text{ m}$
 breadth of rectangular field $b = 12 \text{ m}$

$$\therefore \text{Perimeter of the field } p = 2(l + b) = 2(18 + 12) = 2 \times 30 \\ = 60 \text{ m}$$

So, **60 m** length of the fence needed.

Exercise 14.3

Find the area and perimeter of these painting. The side of each square is 1 cm.

- a. Perimeter = $2(l + b) = 2(8 + 6) = 2 \times 14 = 28 \text{ cm}$
Area = $l \times b = 8 \times 6 = 48 \text{ sq. cm}$
- b. Perimeter = $2(l + b) = 2(6 + 8) = 2 \times 14 = 28 \text{ cm}$
Area = $l \times b = 6 \times 8 = 48 \text{ sq. cm}$
- c. Perimeter = $2(l + b) = 2(5 + 6) = 2 \times 11 = 22 \text{ cm}$
Area = $l \times b = 5 \times 6 = 30 \text{ sq. cm}$
- d. Perimeter = $2(l + b) = 2(5 + 7) = 2 \times 12 = 24 \text{ cm}$
Area = $l \times b = 5 \times 7 = 35 \text{ sq. cm}$
- e. Perimeter = $2(l + b) = 2(8 + 6) = 2 \times 14 = 28 \text{ cm}$
Area = $l \times b = 8 \times 6 = 48 \text{ sq. cm}$
- f. Perimeter = $2(l + b) = 2(4 + 6) = 2 \times 10 = 20 \text{ cm}$
Area = $l \times b = 4 \times 6 = 24 \text{ sq. cm}$

2. **Which of these fruits will occupy the highest area?**
Figure be will occupy the highest area.

Fun with Maths

Grand Parent's

Bed Room = 14 Units

Wash room = 6 Units

Study Room = 6 Units

Kids Room = 6 Units

Kitchen = 12 Units

Drawing Room = 18 Units

Bed room (Parents) = 15 Units

Dining Room = 15 Units

Multiple Choice Questions















Tick (✓) the correct choice :

- Ans.** 1. c. $4 \times \text{side}$ 2. b. 100 m 3. b. 60 cm 4. a. 2 m 80 cm
5. a. Square 6. a. 3:4 7. c. 6x
8. b. 1sq.m = 10000 sq.cm

15 Data Handling








































1. Represent the given information with the help of a pictograph. the marks obtained by Rohan in different subjects in unit test.

Ans. Use 1  = 10 marks and 1  = 5 marks

Name of Subject	Marks obtained
Hindi	  
English	   
Maths	    
Science	 

2. The following information is about the number of students in classes from I to V.

Ans. Use 1  = 5 students

Class↓	Number of Students →
I	          
II	        
III	    
IV	     
V	       

- Class I has the maximum number of students.
- Class III has the minimum number of students.
- 20 students are more in class I than class IV.
- Total number of students is 190 in all classes.

3. **Read the following bar graph. It shows the number of shells collected by five friends from seashore in Goa.**

Now, answer the following questions :

- Kinjal collected the maximum number of shells.
 - 10 shells were collected by Reshma and Kinjal together.
 - Aakrti collected the least number of shells.
 - 270 shells were collected by five friends in all.
4. **Members of a childrens club were asked to name their favourite tourist spot. Their choices are given below :**

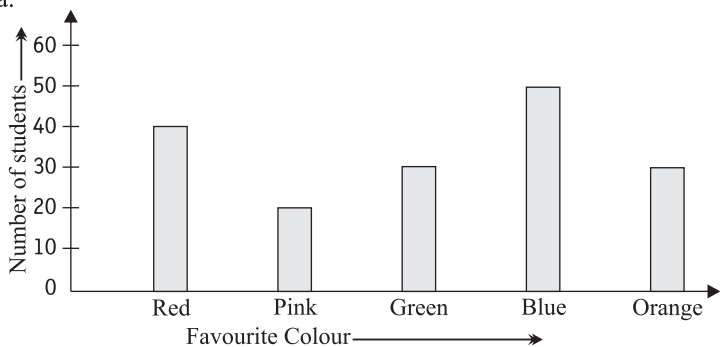
Tourist spot	Tally Mark	Number of Children
Shimla		3
Goa		6
Darjeeling		4
Nainital		4

- Goa is the most favourite tourist spot.
- Shimla is the least favourite tourist spot.
- 6 students like Goa.

Exercise 15.2

- 15 students eat fruits in Class I.
20 students eat fruits in Class II.
10 students eat fruits in Class III.
5 students eat fruits in Class IV.
25 students eat fruits in Class V.
 - Maximum students of Class V eat fruits.
 - Minimum students of class IV eat fruits.
 - 75 students were surveyed in all.
- The bar graph given below shows the number of children like different types of fruits observe the bar graph and answer the following questions.**
 - Guava is most liked by children.
 - Orange is least liked by the children.
 - 20 children like apple.
 - 73 children depicted in the bar graph.

3. a.



b.

