

Focus on

MATHEMATICS

Teacher's Manual
Class 3



TEACHER'S HELP BOOK

MATHEMATICS-3

Practice Exercise 1.1

1. (a) 396, 397, 398, 399, 400, 401, 402 (b) 714, 715, 716, 717, 718, 719, 720
2. (a) 342, 341, 340, 339, 338, 337, 336 (b) 819, 818, 817, 816, 815, 814, 813
3. (a) 350 (b) 879 4. (a) Two hundred thirty six (b) Eight hundred ninety six
5. (a) 579 (b) 350 6. (a) 226, 369, 467 (b) 155, 278, 308
7. (a) 520 (b) 205

8. (a) 682

Place value	
	2
→	80
→	600

(b) 915

Place value	
	5
→	10
→	900

9. Even numbers – 678, 282, 350, 218

Odd numbers – 633, 515, 461, 393, 777, 999

10. (a) $343 = 3$ hundreds + 4 tens + 3 ones = $300 + 40 + 3$
(b) $789 = 7$ hundreds + 8 tens + 9 ones = $700 + 80 + 9$

Practice Exercise 1.2

1. (a)

Th	H	T	O
4	2	3	4

(b)

Th	H	T	O
4	3	2	1

(c)

Th	H	T	O
6	3	4	6

(d)

Th	H	T	O
9	2	4	0

(e)

Th	H	T	O
9	9	9	9

(f)

Th	H	T	O
2	5	0	4

2. (b) 5,281 (c) Five thousand seven hundred forty two. (d) 7,409
(e) Eight thousand eight hundred forty three.

Practice Exercise 1.3

1.

	Number	Face value	Place	Place value
(a)	5235	3	tens	30
(b)	6786	7	hundreds	700
(c)	7075	7	tens	70
(d)	8543	8	thousands	8000
(e)	2567	5	hundreds	500
(f)	3078	7	tens	70
(g)	4617	4	thousands	4000

2.	(a) 2367	$2000 + 300 + 60 + 7$
	(b) 4582	$4000 + 500 + 80 + 2$
	(c) 3678	$3000 + 600 + 70 + 8$
	(d) 4859	$4000 + 800 + 50 + 9$
	(e) 2035	$2000 + 30 + 5$
	(f) 7636	$7000 + 600 + 30 + 6$
	(g) 6324	$6000 + 300 + 20 + 4$

Practice Exercise 1.4

1. (a) 1000, (b) 1030 (c) 5755 (d) 6374 (e) 7384 (f) 4010 (g) 6635 (h) 8460 (i) 2570 (j) 2001 (k) 7100 (l) 1065 (m) 6270 (n) 3000 (o) 3641

2. (a) 344 (b) 2136 (c) 3455 (d) 6788 (e) 8923 (f) 242 (g) 1393 (h) 2451 (i) 8071 (j) 9007

3. (a) Predecessor = **3610**; Successor = **3612** (b) Predecessor = **7877**; Successor = **7879** (c) Predecessor = **2549**; Successor = **2551**
(d) Predecessor = **6340**; Successor = **6342** (e) Predecessor = **8775**; Successor = **8777**

Practice Exercise 1.5

(a) > (b) < (c) > (d) > (e) < (f) > (g) < (h) < (i) < (j) < (k) > (l)
< (m) > (n) < (o) > (p) > (q) > (r) >

Practice Exercise 1.6

1. (a) 3176, 4154, 6625 (b) 6635, 7940, 8150 (c) 3544, 5154, 6470
(d) 2978, 7626, 8257 **2.** (a) 9646, 6275, 5344 (b) 9926, 7250,
3745 (c) 8000, 5000, 2000 (d) 5240, 2890, 1175

Practice Exercise 1.7

1. (a) Smallest = **2978**, Greatest = **6389** (b) Smallest = **1235**, Greatest = **7179** (c) Smallest = **4122**, Greatest = **6242** (d) Smallest = **3140**, Greatest = **7940** (e) Smallest = **1075**, Greatest = **7257** (f) Smallest = **2285**, Greatest = **6248** (g) Smallest = **2000**, Greatest = **8000** 2. (a) Greatest = **9960**, Smallest = **6099** (b) Greatest = **7652**, Smallest = **2567** (c) Greatest = **9844**, Smallest = **4489** (d) Greatest = **5321**, Smallest = **1235** (e) Greatest = **730**, Smallest = **307** (f) Greatest = **7542**, Smallest = **2457** (g) Greatest = **8850**, Smallest = **5088**

Practice Exercise 1.8

1. (a) odd (b) odd (c) odd (d) odd (e) even (f) even (g) even
(h) even. **2.** (a) 88, even (b) 809, odd (c) 576, even (d) 660, even
(e) 1362, even (f) 470, even

Practice Exercise 1.9

1. Round off to nearest 10 : (a) 36 → (ones digit is more than 5, so round off to next higher ten) = **40**. (b) 27 → (ones digit is more than 5, so round off to next higher ten) = **30**. (c) 42 → (ones digit is less than 5, so round off to lower ten) = **40**. (d) 587 → (ones digit is more than 5, so round off to next higher ten) = **590**. (e) 656 → (ones digit is more than 5, so, round off to next higher ten) = **660**. (f) 968 → (ones digit is more than 5, so round off to next higher ten) = **970**.

2. Round off to nearest 100 : (a) 145 → (tens digit is less than 5, so round off to lower hundred) = **100**. (b) 4768 → (tens digit is more than 5, so round off to next higher hundred) = **4800**. (c) 5245 → (tens digit is less than 5, so round off to lower hundred) = **5200**. (d) 357 → (tens digit is equal to 5, so round off to next higher hundred) = **400**. (e) 2652 → (tens digit is equal to 5, so round off to next higher hundred) = **2700**. (f) 6826 → (tens digit is less than 5, so round off to lower hundred) = **6800**.

Practice Exercise 1.10

(a) $1754 - 100 = \mathbf{1654}$ (b) $3576 + 100 = \mathbf{3676}$ (c) $7564 + 10 = \mathbf{7574}$ (d) $2170 - 10 = \mathbf{2160}$ (e) $8705 - 100 = \mathbf{8605}$ (f) $3940 - 10 = \mathbf{3930}$ (g) $2004 + 10 = \mathbf{2014}$ (h) $9654 + 100 = \mathbf{9754}$ (i) $3547 - 1000 = \mathbf{2547}$ (j) $6474 - 1000 = \mathbf{5474}$ (k) $8970 + 1000 = \mathbf{9970}$ (l) $3574 + 1000 = \mathbf{4574}$

Practice Exercise 1.11

- When we skip count in 2's, the thousands, and hundreds remain the same, only keep adding 2. (a) **3411, 3413, 3415, 3417, 3419, 3421.** (b) **1035, 1037, 1039, 1041, 1043, 1045.**
- When we skip count in 10's, the thousands, hundreds and ones remain the same, only keep adding 10. (a) **3133, 3143, 3153, 3163, 3173, 3183.** (b) **6150, 6160, 6170, 6180, 6190, 6200.**
- When we skip count in 100's the thousands, tens and ones remain the same, only keep adding 100. (a) **5010, 5110, 5210, 5310, 5410, 5510** (b) **7326, 7426, 7526, 7626, 7726, 7826.**
- When we skip count in 1000's the hundreds, tens and ones remain the same, only keep adding 1000. (a) **8432, 9432, 10432, 11432, 12432, 13432.** (b) **9109, 10109, 11109, 12109, 13109, 14109.**

Mental math zone

- (a) successor = $5431 + 1 = \mathbf{5432}$ (b) predecessor = $5431 - 1 = \mathbf{5430}$
- 5006
- Add 2 in given numbers and get next number.
2963, 2965, 2967, 2969, 2971, 2973, 2975, 2977.
- Three thousand

eight **5.** (a) On comparing tens digits, $2 > 1$ so, $2623 > 2613$ (b) On comparing tens digits, $8 > 6$ so, $5586 > 5568$ **6.** 1294, 3420, 5132, 8806 **7.** 7642, 6963, 5246, 3278 **8.** Greatest = **9543** smallest = **3459** **9.** (a) $365 \rightarrow$ (Tens digit is more than 5, so round off to next higher hundreds) = 400 (b) $4875 \rightarrow$ (Tens digit is more than 5, so round off to next higher hundreds) = 4900 (c) $7762 \rightarrow$ (Tens digit is more than 5, so round off to next higher hundreds = 7800) **10.** $4526 = 4$ thousand + 5 hundred + 2 tens + 6 ones; $4000 + 500 + 20 + 6$. **11.** 3333 **12.** 90, 400

Multiple Choice Questions MCQs

- 1.** $500 + 20 + 3 = 523$ **2.** $2001 - 1 = 2000$ **3.** $6003 + 1 = 6004$
4. $348 - 1 = 347$ **5.** $1489 + 1 = 1490$ **6.** $6449 + 100 = 6549$.

Practice Exercise 2.1

1. Write the Roman numerals:

1.	I	11.	XI	21.	XXI	31.	XXXI
2.	II	12.	XII	22.	XXII	32.	XXXII
3.	III	13.	XIII	23.	XXIII	33.	XXXIII
4.	IV	14.	XIV	24.	XXIV	34.	XXXIV
5.	V	15.	XV	25.	XXV	35.	XXXV
6.	VI	16.	XVI	26.	XXVI	36.	XXXVI
7.	VII	17.	XVII	27.	XXVII	37.	XXXVII
8.	VIII	18.	XVIII	28.	XXVIII	38.	XXXVIII
9.	IX	19.	XIX	29.	XXIX	39.	XXXIX
10.	X	20.	XX	30.	XXX	40.	XL

- 2.** (a) **14** (b) **29** (c) **15** (d) **19** (e) **29** (f) **32** (g) **21** (h) **17** (i) **35**

Mental math zone

- 1.** (b) $10 + 2 = 12$ (c) $5 + 2 = 7$ (d) $5 + 3 = 8$ (e) $10 + 5 + 1 = 16$
(f) $10 + 9 = 19$ (g) $10 + 10 + 4 = 24$ (h) $10 + 10 + 6 = 26$ (i) $10 + 6 = 16$ (j) $10 + 11 = 21$

- 2.** (b) **5** (c) **40** (d) **21** (e) **16** (f) **35**

Multiple Choice Questions MCQs

- 1.** $XL = 50 - 10 = 40$ **2.** $XXII = 10 + 10 + 2 = 22$
3. D. None of these **4.** $XVIII = 10 + 5 + 3 = 18$

Practice Exercise 3.1

- 1.** (a) 2 hundreds + 3 tens + 5 ones = **2** hundreds + **3** tens + **5** ones

(b) 5 hundreds + 23 tens + 4 ones = **7** hundreds + **3** tens + **4** ones
 (c) 7 hundreds + 35 tens + 12 ones = **10** hundreds + **6** tens + **2** ones

2. (a)

H	T	O
3	6	
+ 4	2	
7 8		

(b)

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

(c)

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

(d)

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

(e)

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

(f)

H	T	O
1		
8	6	2
+ 1	7	0
10 3 2		

(g)

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

(h)

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

3.

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

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

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

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

4. A flower vendor has lilies

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

A flowers vendor has roses

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

A flower vendor has total flowres

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

5. Karan bought a toy car for

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

6

Karan bought a toy train for

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

Total money spend by Karan

Practice Exercise 3.2

(a)

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

(b)

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

(c)

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

(d)

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

(e)

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

(f)

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

(g)

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

(h)

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

(i)

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

(j)

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

(k)

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

(l)

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

Practice Exercise 3.3

(a)

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

(b)

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

(c)

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

(d)

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

(e)

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

(f)

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

Practice Exercise 3.4

(a)

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

(b)

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

(c)

1	1	1	
6	8	0	6
+	1	2	9
8	1	0	0

(d)

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

(e)

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

(f)

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

(g)

1	1	1	
5	6	3	7
+	2	5	7
8	2	1	5

(h)

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

(i)

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

(j)

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

(k)

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

(l)

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

(m)

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

(n)

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

(o)

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

Practice Exercise 3.5

1. (a)

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

(b)

1	1	1	
3	8	3	7
+	2	9	8
6	8	2	1

(c)

1			
1	7	5	6
+	3	5	3
5	2	8	8

(d)

1	1		
5	1	2	3
2	5	8	7
+ 1	2	8	5
8	9	9	5

(e)

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

(f)

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

2. (a)

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

(b)

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

(c)

1	1	1	
4	6	5	2
3	5	0	8
+ 5	2	6	4
13	4	2	4

Practice Exercise 3.6

Note – The order of addends does not change the sum.

- (a) $2875 + 0 = \mathbf{2875}$ (b) $3675 + 0 = \mathbf{3675}$ (c) $3248 + \mathbf{2547} = 2547 + 3248$ (d) $4987 + \mathbf{2467} = 2467 + \mathbf{4987}$ (e) $2547 + 3670 = 3670 + 2547$ (f) $1549 + \mathbf{4642} = 4642 + 1549$ (g) $2245 + 5285 + \mathbf{6756} = 6756 + 5285 + 2245$ (h) $1765 + 2832 + 3432 = 2832 + \mathbf{1765} + 3432$ (i) $2413 + 3374 + \mathbf{9234} = 9234 + \mathbf{2413} + 3374$

Practice Exercise 3.7

(a) Actual sum

2	3	3
+ 5	4	5
7	7	8

Estimated sum

2	0	0
+ 5	0	0
7	0	0

(b) Actual sum

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

Estimated sum

3	0	0	0
+ 4	0	0	0
7	0	0	0

(c) Actual sum

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

Estimated sum

4	0	0	0
+ 3	0	0	0
7	0	0	0

(d) Actual sum

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

Estimated sum

$$\begin{array}{r} 4 \quad 0 \quad 0 \quad 0 \\ + 3 \quad 0 \quad 0 \quad 0 \\ \hline 7 \quad 0 \quad 0 \quad 0 \end{array}$$

Practice Exercise 3.8

- (a) $30 + 40 = 70$ (b) $200 + 300 = 500$ (c) $2000 + 3000 = 5000$
(d) $1475 + 20 = 1495$ (e) $2435 + 200 = 2635$ (f) $4594 + 5000 = 9594$
(g) $5646 + 50 = 5696$ (h) $3548 + 300 = 3848$ (i) $3995 + 4000 = 7995$
(j) $3215 + 70 = 3285$ (k) $6137 + 700 = 6837$
(l) $1785 + 7000 = 8785$ (m) $22 + 68 = 90$ (n) $75 + 25 = 100$ (o) $528 + 132 = 660$
(p) $105 + 55 = 160$ (q) $386 + 214 = 600$ (r) $66 + 34 = 100$ (s) $59 + 161 = 220$ (t) $148 + 52 = 200$ (u) $209 + 271 = 480$

Practice Exercise 3.9

1

1. Number of pencils in 1st box = 3 4 7

Number of pencils in 2nd box = + 4 2 9

Total pencils in the boxes = 7 7 6

So, the total pencils in the boxes = 776

11

2. Sachin Tendulkar Scored runs = 1 6 8

M. S. Dhoni Scored runs = + 1 3 4

Total runs = 3 0 2

So, the total runs scored both = 302

11

3. Mr Sharma spent on decoration = ₹ 6 2 4

Mr Sharma spent on cake = ₹ 1 6 2

Mr Sharma spent on sweets = + ₹ 4 3 6

Total money spent = ₹ 1 2 2 2

So, the total money spent by Mr. Sharma = ₹ 1222

11

4. People visited the exhibition on Monday = 5 4 3 4

People visited the exhibition on Tuesday = 2 2 4 2

People visited the exhibition on Wednesday = + 1 3 1 1

8 9 8 7

So, the total people visited on these three days = 8987.

5. Vandana had beads = 2 8 3 4
 Vandana found beads = + 1 7 5
 Total beads = 3 0 0 9

So, Vandana had total beads = 3009.

6. Number of men in a village = 2 4 5 1
 Number of women in a village = 2 0 3 2
 Number of children in a village = + 1 3 1 5
 Total people in a village = 5 7 9 8

So, the total number of people in a village = 5798.

7. Number of woman watch cricket match in a stadium = 4 7 2
 Number of men watch cricket match in a stadium = + 2 1 7 4
 Total people = 2 6 4 6

So, the total people watch cricket match in stadium = 2646

1 1 1

8. Ananya had oranges = 2 5 6 7
 Ananya had apples = 1 5 4 3
 Ananya had pineapples = + 5 3 5
 Total fruits = 4 6 4 5

So, the total fruits had by Ananya = 4645

1 1 1

9. Veeneta bought a red suit = ₹ 2 9 4 5
 Veeneta bought a yellow suit = + ₹ 2 2 8 5
 She spend total money = ₹ 5 2 3 0
 So, total money spend by Veeneta = ₹ 5230

1 1 1

10. Factory produced bikes in 1st months = 2 7 5 4
 Factory produced bikes in 11nd months = 1 7 5 4
 Factory produced bikes in IIIrd months = + 1 9 6 3
 Total bikes produced = 6 4 7 1

So, the total bikes produced during there months is 6471.

Mental math zone

1. Note – Add to 1 the tens place (a) 257 = 2 (5 + 1) 7 = **267**
 (b) 382 = 3 (8 + 1) 2 = **392** (c) 561 = 5 (6 + 1) 1 = **571** (d) 804 = 8 (0 + 1) 4 = **814** (e) 920 = 9 (2 + 1) 0 = **930** (f) 736 = 7 (3 + 1)

- 6 = **746** 2. Note – Add 1 to the hundreds place (a) 283 = (2 + 1) 83 = **383** (b) 569 = (5 + 1) 69 = **669** (c) 848 = (8 + 1) 48 = **948**

- (d) $472 = (4 + 1) \ 72 = \mathbf{572}$ (e) $694 = (6 + 1) \ 94 = \mathbf{794}$ (f) $181 = (1 + 1) \ 81 = \mathbf{281}$ 3. Note – Add tens place only and then put zero
 (a) $70 + 10 = \mathbf{80}$ (b) $40 + 50 = \mathbf{90}$ (c) $20 + 40 = \mathbf{60}$ (d) $10 + 20 = \mathbf{30}$
 (e) $20 + 30 = \mathbf{50}$ (f) $80 + 20 = \mathbf{100}$ (g) $60 + 20 = \mathbf{80}$ (h) $10 + 30 = \mathbf{40}$
 4. (a) 80 (b) 270 (c) 4680 (d) 5480 5. (a) 500 (b) 800 (c) 800 (d) 1000

Multiple Choice Questions MCQs

1. 40 2. 200 3. 40

4.

1
3
6
+ 4 3
7 9

5.

1
1
2
5
+ 5 5
1 8 0

6.

1
7
2
6
+ 1 1 9
8 4 5

Mental math zone

Child A	Sum	Child B
8	8	0
8	15	7
7	22	15

Practice Exercise 4.1

1. (a) $235 = \mathbf{2}$ hundreds + $\mathbf{3}$ tens + $\mathbf{5}$ ones
 (b) $647 = \mathbf{6}$ hundreds + $\mathbf{4}$ tens + $\mathbf{7}$ ones
 2. (a) $246 = \mathbf{2}$ hundreds + $\mathbf{4}$ tens + $\mathbf{6}$ ones
 (b) $528 = \mathbf{5}$ hundreds + $\mathbf{2}$ tens + $\mathbf{8}$ ones

3.(a)

7	15	12
8	6	2
- 4	9	6
3 6 6		

(b)

4	14	13
5	5	3
- 2	7	9
2 7 4		

(c)

	5	10
6	6	0
- 2	5	4
4 0 6		

(d)

7	10	13
8	1	3
- 3	8	7
4 2 6		

4. (a)

	5	10
9	6	0
- 6	2	5
3 3 5		

(b)

7	16	18
8	7	8
- 2	8	9
5 8 9		

(c)

8	12	
6	9	2
- 1	7	8
5 1 4		

Practice Exercise 4.2

(a)

6	8	4	3
- 1	4	1	2
5 4 3 1			

(b)

8	7	5	2
- 3	3	4	1
5 4 1 1			

(c)

9	7	5	6
- 2	5	4	4
7 2 1 2			

(d)

7	4	6	9
- 2	2	5	7
5	2	1	2

(e)

5	8	5	2
- 1	4	3	1
4	4	2	1

(f)

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

(g)

8	8	6	5
- 3	3	5	4
5	5	1	1

(h)

7	4	9	2
- 1	2	7	1
6	2	2	1

(i)

5	7	9	4
- 2	4	5	3
3	3	4	1

(j)

6	6	4	9
- 4	4	0	8
2	2	4	1

(k)

9	6	7	5
- 6	2	3	4
3	4	4	1

(l)

3	6	6	7
- 1	2	5	3
2	4	1	4

Practice Exercise 4.3

(a)

2	15	13	13
3	6	4	3
- 1	7	5	6
1	8	8	7

(b)

3	16	17	15
4	7	8	5
- 1	9	8	7
2	7	9	8

(c)

□	7	12	12
6	8	3	2
- 5	6	7	5
1	1	5	7

(d)

□	5	14	10
7	6	5	0
- 1	5	6	8
6	0	8	2

(e)

8	10	15	14
9	1	6	4
- 5	3	7	5
3	7	8	9

(f)

6	15	9	10
7	6	0	0
- 1	9	7	5
5	6	2	5

(g)

8	12	13	10
9	3	4	0
- 2	9	8	2
6	3	5	8

(h)

7	9	9	14
8	0	0	4
- 5	2	4	8
2	7	5	6

(i)

5	9	13	10
6	0	4	0
- 3	7	8	9
2	2	5	1

(j)

4	10	12	11
5	1	3	1
- 1	7	6	5
3	3	6	6

(k)

□	11	13	10
2	2	4	0
- 1	8	7	6
3	6	4	

(l)

5	12	15	10
6	3	6	0
- 3	3	6	5
2	9	9	5

(m)

5	13	14	16
6	4	5	6
-	1	5	7
4	8	7	8

(n)

	3	14	15
7	4	5	5
-	3	3	8
4	0	6	7

(o)

4	18	6	11
5	8	7	1
-	3	9	6
1	9	0	3

(p)

5	18	6	11
6	8	7	1
-	1	9	6
4	9	0	3

(q)

3	13	12	16
4	4	3	6
-	2	8	7
1	5	5	8

(r)

	7	16	18
5	8	7	8
-	1	2	8
4	5	8	9

(s)

7	12	13	17
8	3	4	7
-	4	8	7
3	4	6	9

(t)

		7	11
9	5	8	1
-	6	4	6
3	1	1	2

Practice Exercise 4.4

.....

(a)

6	2	1	8
-	3	5	4
2	6	7	6

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

(b)

8	0	0	0
-	5	4	5
2	5	4	3

2	5	4	3
+ 5	4	5	7
8	0	0	0

(c)

4	2	4	6
-	1	7	5
2	4	9	4

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

(d)

6	7	7	7
-	5	5	5
1	2	2	2

1	2	2	2
+ 5	5	5	5
6	7	7	7

(e)	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>5</td><td>3</td><td>3</td><td>5</td></tr> <tr><td>-</td><td>2</td><td>4</td><td>3</td></tr> <tr><td></td><td>2</td><td>9</td><td>0</td></tr> <tr><td></td><td>0</td><td>0</td><td></td></tr> </table>	5	3	3	5	-	2	4	3		2	9	0		0	0		<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>2</td><td>9</td><td>0</td><td>0</td></tr> <tr><td>+</td><td>2</td><td>4</td><td>3</td></tr> <tr><td></td><td>5</td><td>3</td><td>3</td></tr> <tr><td></td><td>5</td><td>3</td><td>5</td></tr> </table>	2	9	0	0	+	2	4	3		5	3	3		5	3	5
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	1	6	4																															
	6																																	
1	6	4	6																															
+	1	3	5																															
	3	0	0																															
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(g)	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>4</td><td>2</td><td>5</td><td>4</td></tr> <tr><td>-</td><td>1</td><td>6</td><td>7</td></tr> <tr><td></td><td>2</td><td>5</td><td>8</td></tr> <tr><td></td><td>0</td><td>0</td><td></td></tr> </table>	4	2	5	4	-	1	6	7		2	5	8		0	0		<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>2</td><td>5</td><td>8</td><td>0</td></tr> <tr><td>+</td><td>1</td><td>6</td><td>7</td></tr> <tr><td></td><td>4</td><td>2</td><td>5</td></tr> <tr><td></td><td>4</td><td>2</td><td>4</td></tr> </table>	2	5	8	0	+	1	6	7		4	2	5		4	2	4
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-	1	6	7																															
	2	5	8																															
	0	0																																
2	5	8	0																															
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(h)	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>5</td><td>1</td><td>7</td><td>5</td></tr> <tr><td>-</td><td>2</td><td>2</td><td>6</td></tr> <tr><td></td><td>2</td><td>9</td><td>1</td></tr> <tr><td></td><td>4</td><td>1</td><td></td></tr> </table>	5	1	7	5	-	2	2	6		2	9	1		4	1		<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>2</td><td>9</td><td>1</td><td>4</td></tr> <tr><td>+</td><td>2</td><td>2</td><td>6</td></tr> <tr><td></td><td>5</td><td>1</td><td>7</td></tr> <tr><td></td><td>5</td><td>1</td><td>5</td></tr> </table>	2	9	1	4	+	2	2	6		5	1	7		5	1	5
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-	2	2	6																															
	2	9	1																															
	4	1																																
2	9	1	4																															
+	2	2	6																															
	5	1	7																															
	5	1	5																															
(i)	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>8</td><td>3</td><td>4</td><td>6</td></tr> <tr><td>-</td><td>4</td><td>7</td><td>5</td></tr> <tr><td></td><td>3</td><td>5</td><td>9</td></tr> <tr><td></td><td>2</td><td>9</td><td>4</td></tr> </table>	8	3	4	6	-	4	7	5		3	5	9		2	9	4	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>3</td><td>5</td><td>9</td><td>4</td></tr> <tr><td>+</td><td>4</td><td>7</td><td>5</td></tr> <tr><td></td><td>8</td><td>3</td><td>4</td></tr> <tr><td></td><td>6</td><td>3</td><td>4</td></tr> </table>	3	5	9	4	+	4	7	5		8	3	4		6	3	4
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	3	5	9																															
	2	9	4																															
3	5	9	4																															
+	4	7	5																															
	8	3	4																															
	6	3	4																															
(j)	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>7</td><td>5</td><td>3</td><td>2</td></tr> <tr><td>-</td><td>3</td><td>7</td><td>1</td></tr> <tr><td></td><td>3</td><td>8</td><td>1</td></tr> <tr><td></td><td>6</td><td>1</td><td></td></tr> </table>	7	5	3	2	-	3	7	1		3	8	1		6	1		<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>3</td><td>8</td><td>1</td><td>6</td></tr> <tr><td>+</td><td>3</td><td>7</td><td>1</td></tr> <tr><td></td><td>7</td><td>5</td><td>3</td></tr> <tr><td></td><td>7</td><td>5</td><td>2</td></tr> </table>	3	8	1	6	+	3	7	1		7	5	3		7	5	2
7	5	3	2																															
-	3	7	1																															
	3	8	1																															
	6	1																																
3	8	1	6																															
+	3	7	1																															
	7	5	3																															
	7	5	2																															

Practice Exercise 4.5

.....

1. (a) Actual difference

<input type="checkbox"/>	5	14
5	6	4
-	2	3
	3	2
	7	

Estimated difference

6	0	0
-	2	0
	4	0
	0	

(b) Actual difference

$$\begin{array}{r} \boxed{5} \quad \boxed{16} \quad \boxed{14} \quad \boxed{13} \\ 6 \quad 7 \quad 5 \quad 3 \\ - 4 \quad 8 \quad 6 \quad 9 \\ \hline 1 \quad 8 \quad 8 \quad 4 \end{array}$$

Estimated difference

$$\begin{array}{r} 6 \quad 8 \quad 0 \quad 0 \\ - 4 \quad 9 \quad 0 \quad 0 \\ \hline 1 \quad 9 \quad 0 \quad 0 \end{array}$$

2. (a) Actual difference

$$\begin{array}{r} 7 \quad 6 \quad 0 \quad 3 \\ - 4 \quad 2 \quad 6 \quad 0 \\ \hline 3 \quad 3 \quad 4 \quad 3 \end{array}$$

Estimated difference

$$\begin{array}{r} 8 \quad 0 \quad 0 \quad 0 \\ - 4 \quad 0 \quad 0 \quad 0 \\ \hline 4 \quad 0 \quad 0 \quad 0 \end{array}$$

(b) Actual difference

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

Estimated difference

$$\begin{array}{r} 0 \quad 0 \quad 0 \quad 0 \\ - 5 \quad 0 \quad 0 \quad 0 \\ \hline 5 \quad 0 \quad 0 \quad 0 \end{array}$$

Practice Exercise 4.6

- (a) $60 - 10 = 50$ (b) $50 - 20 = 30$ (c) $40 - 10 = 30$ (d) $30 - 20 = 10$ (e) $80 - 30 = 50$ (f) $100 - 50 = 50$ (g) $600 - 100 = 500$ (h) $800 - 100 = 700$ (i) $900 - 100 = 800$ (j) $1000 - 300 = 700$ (k) $600 - 300 = 300$ (l) $700 - 500 = 200$ (m) $6584 - 1000 = 5584$ (n) $6475 - 1000 = 5475$ (o) $7475 - 2000 = 5475$ (p) $4675 - 3000 = 1675$ (q) $5756 - 3000 = 2756$ (r) $6475 - 4000 = 2475$ (s) $7674 - 4000 = 3674$ (t) $8475 - 1000 = 7475$ (u) $9997 - 6000 = 3997$

Practice Exercise 4.7

$$\boxed{2} \quad \boxed{11} \quad \boxed{13} \quad \boxed{15}$$

1. Number of mangoes in a basket = $3 \quad 2 \quad 4 \quad 5$
Number of mangoes were distributed = $- 1 \quad 2 \quad 8 \quad 8$
Number of mangoes in basket were left = $\underline{\quad 1 \quad 9 \quad 5 \quad 7 \quad}$
So, 1957 mangoes were left.

$$\boxed{4} \quad \boxed{9} \quad \boxed{9} \quad \boxed{10}$$

2. Saurabh had money in the bank = ₹ $5 \quad 0 \quad 0 \quad 0$
Saurabh gave money his sister = - ₹ $2 \quad 3 \quad 4 \quad 5$
Saurabh had left money = $\underline{\quad 2 \quad 6 \quad 5 \quad 5 \quad}$
So, Sarabh had ₹ 2655 left.

[1] [9] [9] [10]

$$\begin{array}{rcl}
 3. \text{ Ratana gave the shopkeeper} & = & ₹ 2000 \\
 \text{Ratana purchased books and clothes} & = & - ₹ 1235 \\
 \text{Ratana will, get book.} & = & \hline
 & & 0765
 \end{array}$$

So, Ratana will get back money is ₹ 765.

$$\begin{array}{rcl}
 4. \text{ Total pages in a book} & = & 6473 \\
 \text{Number of coloured pages} & = & - 3120 \\
 \text{Number of white pages} & = & \hline
 & & 3353
 \end{array}$$

So, the white pages in the book is = 3353.

$$\begin{array}{rcl}
 5. \text{ Aman earns in a month} & = & ₹ 8000 \\
 \text{Aman saves every month} & = & - ₹ 5000 \\
 \text{Aman spend every month} & = & \hline
 & & ₹ 3000
 \end{array}$$

So, Aman-spend in every month = 3000.

$$\begin{array}{rcl}
 6. \text{ Number of sweets were bought on Independence day} & = & 1256 \\
 \text{Number of sweets were distributed on Independence day} & = & - 934 \\
 \text{Number of sweets were left on Independence day} & = & \hline
 & & 322
 \end{array}$$

So, 322 sweets are left.

Practice Exercise 4.8

[4] [10] [4] [10]

$$\begin{array}{rcl}
 1. \text{ Manan had money in the bank} & = & ₹ 5050 \\
 \text{He gave to his sister} & = & - ₹ 1233 \\
 \text{Money left in the bank} & = & \hline
 & & ₹ 3817
 \end{array}$$

$$\begin{array}{rcl}
 \text{Money left in the manan Account} & = & ₹ 3817 \\
 \text{He spend money} & = & - ₹ 1100 \\
 \text{So, money left in the Manan's Account} & = & \hline
 & & 2717
 \end{array}$$

[4] [12]

$$\begin{array}{rcl}
 2. \text{ Anita received amount from her father} & = & ₹ 5250 \\
 \text{Anita spent on clothes} & = & - ₹ 3300 \\
 \text{Amount left} & = & \hline
 & & ₹ 1950
 \end{array}$$

[8] [14] [10]

$$\begin{array}{rcl}
 \text{Amount left on Anita} & = & ₹ 1950 \\
 \text{She spend on books} & = & - ₹ 875 \\
 \text{Amount left} & = & \hline
 & & 1075
 \end{array}$$

So, Amount left on Anita = ₹ 1075

8 | 12

$$\begin{array}{rcl}
 3. \text{ Rajan has marbles} & = & 1 \ 8 \ 9 \ 2 \text{ marbles} \\
 \text{He gave to Ashok} & = & - 3 \ 6 \ 8 \text{ marbles} \\
 \text{Rajan has left marbles} & = & \underline{1 \ 5 \ 2 \ 4}
 \end{array}$$

14 | 11 | 14

$$\begin{array}{rcl}
 \text{So, Rajan has marbles} & = & 1 \ 5 \ 2 \ 4 \text{ marbles} \\
 \text{He gave to Rohann} & = & - 5 \ 6 \ 6 \text{ marbles} \\
 & & \underline{9 \ 5 \ 8}
 \end{array}$$

So, Rajan has left marbles = 958

7 | 9 | 9 | 10

$$\begin{array}{rcl}
 4. \text{ Number of bags of rice in a godown} & = & 8 \ 0 \ 0 \ 0 \\
 \text{On the first day bags removed} & = & - 2 \ 5 \ 3 \ 8 \\
 \text{Bags left in the godown} & = & \underline{5 \ 4 \ 6 \ 2}
 \end{array}$$

5 | 12

$$\begin{array}{rcl}
 \text{Bags left in the godown on the first day} & = & 5 \ 4 \ 6 \ 2 \\
 \text{Bags removed in the second day} & = & - 1 \ 2 \ 3 \ 4 \\
 \text{Bags left in the godown} & = & \underline{4 \ 2 \ 2 \ 8}
 \end{array}$$

3 | 11 | 11 | 18

$$\begin{array}{rcl}
 \text{Bags left in the godown on the second day} & = & 4 \ 2 \ 2 \ 8 \\
 \text{Bags removed in the third day} & = & - 1 \ 7 \ 8 \ 9 \\
 \text{Bags left in the godown} & = & \underline{2 \ 4 \ 3 \ 9}
 \end{array}$$

So, the Bags were left in the godown = 2439.

Mental math zone

1. False (b) True (c) False (d) False (e) True

2. (a)

5	6	
-	2	3
3		3

(b)

14	16		
1	5	6	
-	8	9	
6			7

(c)

5	15	
6	5	
-	2	6
3		9

(d)

4	17			
3	5	7		
-	2	8		
3			2	9

(e)

3	10	13			
4	1	3			
-	1	5	6		
2				5	7

(f)

4	12				
7	5	2			
-	3	4	6		
4				0	6

3. (a) (b) (c)
- (d) (e) (f)
- (g) (h) (i)
- (j)

4. (a) (b) (c)
- (d) (e) (f)
- (g) (h) (i)
- (j)

Multiple Choice Questions MCQs

1. $70 - 10 = 60$

2.

4	9	9	10
5	0	0	0
- 4	2	2	5
7 7 5			

3.

7	5
+ 2	5
1 0 0	

1	0	0
- 3	0	
7 0		

4.

2	6
+ 2	4
5 0	

5	0
- 1	0
4 0	

5.

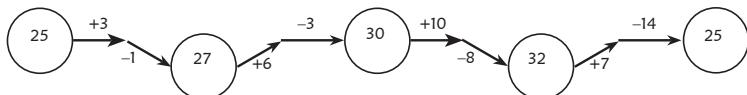
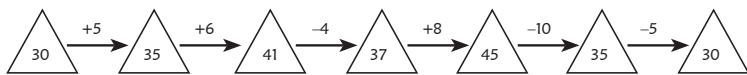
9	10		
1	0	0	0
- 5	5	0	
4 5 0			

6.

9	6	3	0
- 5	0	0	0
4 6 3 0			

Mental math zone

.....



Practice Exercise 5.1

.....

1. (a) $2 + 2 + 2 + 2 + 2 + 2 = 2 \times 6 = 12$ (b) $3 + 3 + 3 + 3 + 3 = 3 \times 5 = 15$ (c) $10 + 10 + 10 + 10 = 10 \times 4 = 40$ (d) $30 + 30 + 30 + 30 = 30 \times 4 = 120$

2. (a)

3	2
x	2
6	4

(b)

3	2	3
x	3	
9 6 9		

(b)

4	3	3
x	2	
8 6 6		

(e)

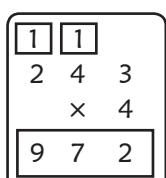
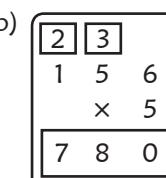
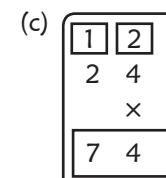
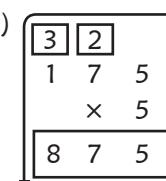
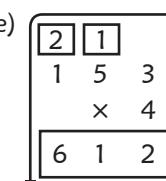
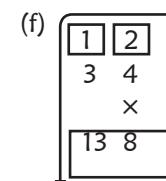
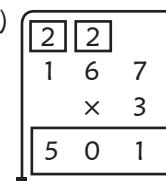
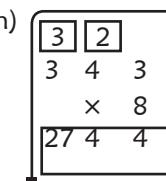
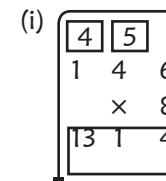
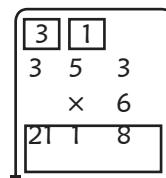
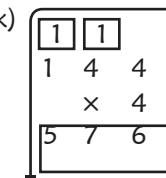
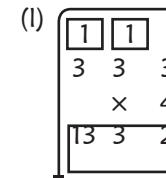
3	3	4
x	2	
6 6 8		

Practice Exercise 5.2

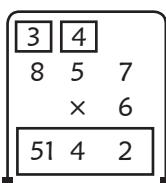
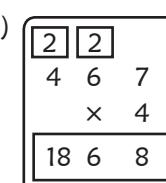
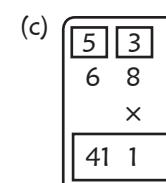
Note – 1. When a number is multiplied by 1, the product is the number itself **2.** When a number is multiplied by zero, the product is always zero. **3.** Number can be multiplied in any order the product remains the same.

1. (a) $125 \times 0 = 0$ (b) $135 \times 1 = 135$ (c) $0 \times 1250 = 0$ (d) $1 \times 1100 = 1100$ (e) $0 \times 3333 = 0$ (f) $4512 \times 1 = 4512$ (g) $35 \times 25 = 25 \times 35$ (h) $12 \times 18 \times 0 = 0$ (i) $150 \times 180 = 180 \times 150$ (j) $11 \times 12 \times 5 = 5 \times 11 \times 12$ (k) $35 \times 0 \times 452 = 0$ (l) $16 \times 165 \times 1 = 1 \times 165 \times 16$

Practice Exercise 5.3

1. (a)  (b)  (c) 
 (d)  (e)  (f) 
 (g)  (h)  (i) 
 (j)  (k)  (l) 

Practice Exercise 5.4

1. (a)  (b)  (c) 

(d)

4	3	
7	9	6
× 5		
39 8 0		

(e)

6	7	
8	7	9
× 8		
70 3 2		

(f)

8	2	
7	9	3
× 9		
71 3 7		

Practice Exercise 5.5

Note – While multiplying a number by 10, 100, or 1000, we just put one, two or three zeroes after the number.

1. (a) $3 \times 10 = 30$
- (b) $30 \times 25 = 750$
- (c) $60 \times 5 = 300$
- (d) $25 \times 40 = 1000$
- (e) $4 \times 100 = 400$
- (f) $700 \times 55 = 38500$
- (g) $35 \times 200 = 7000$
- (h) $25 \times 300 = 7500$
- (i) $28 \times 70 = 1960$
- (j) $58 \times 10 = 580$
- (k) $35 \times 100 = 3500$
- (l) $45 \times 400 = 18000$
- (m) $25 \times 200 = 5000$
- (n) $52 \times 2600 = 31200$
- (o) $34 \times 4100 = 139400$

Practice Exercise 5.6

(a)

3	2		
× 4 0			
<hr/>			
0 0			
+ 1	2	8	×
<hr/>			
1 2 8 0			

(b)

3			
5	6		
× 5 0			
<hr/>			
0 0			
+ 2	8	0	×
<hr/>			
2 8 0 0			

(c)

3			
7	4		
× 9 0			
<hr/>			
0 0			
+ 6	6	6	×
<hr/>			
6 6 6 0			

(d)

4			
3	8		
× 5 0			
<hr/>			
0 0			
+ 1	9	0	×
<hr/>			
1 9 0 0			

(e)

3			
6	5		
× 7 0			
<hr/>			
0 0			
+ 4	5	5	×
<hr/>			
4 5 5 0			

(f)

2			
6	8		
× 3 0			
<hr/>			
0 0			
+ 2	0	4	×
<hr/>			
2 0 4 0			

$$\begin{array}{r}
 (g) \quad \boxed{3} \\
 & 8 \ 5 \\
 & \times \ 6 \ 0 \\
 \hline
 & 0 \ 0 \\
 + & 5 \ 1 \ 0 \times \\
 \hline
 & 5 \ 1 \ 0 \ 0
 \end{array}$$

$$\begin{array}{r}
 (h) \\
 \boxed{1} \\
 9 \quad 5 \\
 \times \quad 2 \quad 0 \\
 \hline
 0 \quad 0 \\
 + \quad 1 \quad 9 \quad 0 \quad \times \\
 \hline
 1 \quad 9 \quad 0 \quad 0
 \end{array}$$

(i)

4	
7	
6	
$\times \quad 8 \quad 0$	
0 0	
+	6 0 8 \times
6 0 8 0	

Practice Exercise 5.7

(a)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1	
		4	3
		x	3 5
<hr/>			
	2	1	5
+ 1	2	9	x
<hr/>			
1	5	0	5

(b)

<input type="text"/>	<input type="text"/>	<input type="text"/> 1	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/> 3	<input type="text"/>
		6 5	
	x 2 7		
	4 5 5		
+ 1	3 0	x	
	<input type="text"/> 1 7 5	<input type="text"/> 5	

(c)

<input type="text"/>	<input type="text"/>	<input checked="" type="text"/> 3	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input checked="" type="text"/> 2	<input type="text"/>
		8 5	
	x 6 4		
		3 4 0	
+ 5	1	0	x
		5 4 4 0	

(e)

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/> 2	<input type="text"/>
		9	4
	x	2	5
		4	7
		0	
+ 1	8	8	x
		2	3
		5	0

(f)

$$\begin{array}{r}
 \begin{array}{|c|c|c|c|c|} \hline
 & & 3 & & \\ \hline
 & & 2 & & \\ \hline
 & & & 5 & 5 \\ \hline
 \times & 7 & 4 & & \\ \hline
 2 & 2 & 0 & & \\ \hline
 + & 3 & 8 & 5 & x \\ \hline
 4 & 0 & 7 & 0 & \\ \hline
 \end{array}
 \end{array}$$

(g)

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

(h)

		2	
		1	
	7	5	
	x	4	3
	2	2	5
+ 3	0	0	x
	3	2	2
			5

Practice Exercise 5.8

(a)

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

$$\begin{array}{r}
 \text{(b)} \\
 \begin{array}{r}
 \boxed{} & \boxed{1} & \boxed{1} & \boxed{} \\
 \boxed{} & \boxed{1} & \boxed{1} & \boxed{} \\
 2 & 4 & 3 \\
 \times & 4 & 4 \\
 \hline
 9 & 7 & 2 \\
 + & 9 & 7 & 2 \\
 \hline
 1 & 0 & 6 & 9 & 2
 \end{array}
 \end{array}$$

(c)

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

(d)

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

(e)

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

(f)

	2	3	
	2	3	
	3	3	5
	x	6	6
+	2	0	1
	2	0	1
	1	0	x
	2	2	1
	1	0	

(g)

	1	5	
	4	2	8
	x	1	7
+	2	9	9
	4	2	8
	7	2	7
	6		

(h)

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

Practice Exercise 5.9

1. Find out between which two numbers the products should be, then multiply.

(a) 35×5

Solution – 35 is between 30 and 40

$$30 \times 5 = 150 ; 40 \times 5 = 200$$

So, 35×5 would be between 200 and 150 .

$$\text{So, } 35 \times 5 = 175, \text{ which is between } 200 \text{ and } 150.$$

3	5
x	5
17	5

(b) 42×6

Solution – 42 is between 40 and 45

$$40 \times 6 = 240 ; 45 \times 6 = 270$$

So, 42×6 , would be between 270 and 240 .

$$\text{So, } 42 \times 6 = 252, \text{ which is between } 270 \text{ and } 240.$$

4	2
x	6
25	2

(c) 26×5

Solution – 26 is between 20 and 30

$$20 \times 5 = 100 ; 30 \times 5 = 150$$

So, 26×5 would be between 150 and 100 .

$$\text{So, } 26 \times 5 = 130, \text{ which is between } 150 \text{ and } 100.$$

2	6
x	5
13	0

(d) 25×4

Solution – 25 is between 20 and 30

$$20 \times 4 = 80 ; 30 \times 4 = 120$$

So, 25×4 would be between 120 and 80 .

$$\text{So, } 25 \times 4 = 100, \text{ which is between } 120 \text{ and } 80.$$

2	5
x	4
10	0

(e) 185×5

Solution – 185 is between 180 and 190

$$180 \times 5 = 900 ; 190 \times 5 = 950$$

So, 185×5 would be between 950 and 900.

$$\text{So, } 185 \times 5 = 925, \text{ which is between 950 and 900.}$$

(f) 148×5

Solution – 148 is between 145 and 150

$$145 \times 5 = 725 ; 150 \times 5 = 750$$

So, 148×5 would be between 750 and 725.

$$\text{So, } 148 \times 5 = 740, \text{ which is between 750 and 725.}$$

(g) 128×7

Solution – 128 is between 125 and 130

$$125 \times 7 = 875 ; 130 \times 7 = 910$$

So, 128×7 would be between 910 and 875.

$$\text{So, } 128 \times 7 = 896, \text{ which is between 910 and 875.}$$

(h) 125×3

Solution – 125 is between 120 and 130

$$120 \times 3 = 360 ; 130 \times 3 = 390$$

So, 125×3 would be between 390 and 360.

$$\text{So, } 125 \times 3 = 375, \text{ which is between 390 and 360.}$$

(i) 142×8

Solution – 142 is between 140 and 145

$$140 \times 8 = 1120 ; 145 \times 8 = 1160$$

So, 142×8 would be between 1160 and 1120.

$$\text{So, } 142 \times 8 = 1136, \text{ which is between 1160 and 1120.}$$

(j) 172×6

Solution – 172 is between 170 and 175

$$170 \times 6 = 1020 ; 175 \times 6 = 1050$$

So, 172×6 would be between 1050 and 1020.

$$\text{So, } 172 \times 6 = 1032, \text{ which is between 1050 and 1020.}$$

(k) 154×6

Solution – 154 is between 150 and 155

$$150 \times 6 = 900 ; 155 \times 6 = 930$$

So, 154×6 would be between 930 and 900.

$$\text{So, } 154 \times 6 = 924, \text{ which is between 930 and 900.}$$

(l) 147×5

Solution – 147 is between 145 and 190

$$145 \times 5 = 725 ; 150 \times 5 = 750$$

So, 147×5 would be between 750 and 725.

$$\text{So, } 147 \times 5 = 735, \text{ which is between 750 and 725.}$$

$$\begin{array}{r} 1 & 8 & 5 \\ \times & 5 \\ \hline 9 & 2 & 5 \end{array}$$

$$\begin{array}{r} 1 & 4 & 8 \\ \times & 5 \\ \hline 7 & 4 & 0 \end{array}$$

$$\begin{array}{r} 1 & 2 & 8 \\ \times & 7 \\ \hline 8 & 9 & 6 \end{array}$$

$$\begin{array}{r} 1 & 2 & 5 \\ \times & 3 \\ \hline 3 & 7 & 5 \end{array}$$

$$\begin{array}{r} 1 & 4 & 2 \\ \times & 8 \\ \hline 11 & 3 & 6 \end{array}$$

$$\begin{array}{r} 1 & 7 & 2 \\ \times & 6 \\ \hline 10 & 3 & 2 \end{array}$$

$$\begin{array}{r} 1 & 5 & 4 \\ \times & 6 \\ \hline 9 & 2 & 4 \end{array}$$

$$\begin{array}{r} 1 & 4 & 7 \\ \times & 5 \\ \hline 7 & 3 & 5 \end{array}$$

2. Estimate the product and then multiply

(a) 27×18

Solution – Round 27 up to 30

Round 18 up to 20

$$30 \times 20 = 600$$

The product would be around 600.

$$27 \times 18 = 486, \text{ which is close to } 600.$$

5	2	7
	x	1 8

2	1	6
+ 2	7	x

4	8	6

(b) 45×63

Solution – Round 45 up to 50

Round 63 up to 60

$$50 \times 60 = 3000$$

The product would be around 3000.

$$45 \times 63 = 2835, \text{ which is close to } 3000.$$

3	1	4	5
	x	6 3	

1	3	5	
+ 2	7	0	x

2	8	3	5

(c) 84×49

Solution – Round 84 up to 80

Round 49 up to 50

$$80 \times 50 = 4000$$

The product would be around 4000.

$$84 \times 49 = 4116, \text{ which is close to } 4000.$$

1	3	8	4
	x	4 9	

7	5	6	
+ 3	3	6	x

4	1	1	6

(d) 65×27

Solution – Round 65 up to 70

Round 27 up to 30

$$70 \times 30 = 2100$$

The product would be around 2100.

$$65 \times 27 = 1755, \text{ which is close to } 2100.$$

3	6	5	
	x	2 7	

4	5	5	
+ 1	3	0	x

1	7	5	5

(e) 62×34

Solution – Round 62 up to 60

Round 34 up to 30

$$60 \times 30 = 1800$$

The product would be around 1800.

$$62 \times 34 = 2108, \text{ which is close to } 1800.$$

6	2		
	x 3 4		

2	4	8	
+ 1	8	6	x

2	1	0	8

(f) 17×35

Solution – Round 17 up to 20

Round 35 up to 30

$$20 \times 30 = 600$$

The product would be around 600.

$$17 \times 35 = 595, \text{ which is close to } 600.$$

2	3	1	7
	x	3 5	

8	5		
+ 5	1	x	

5	9	5	

(g) 42×54

Solution – Round 42 up to 40

Round 54 up to 50

$$40 \times 50 = 2000$$

The product would be around 2000.

$$42 \times 54 = 2268, \text{ which is close to } 2000.$$

4	2			
×	5	4		
<hr/>				
1	6	8		
+	2	1	0	×
<hr/>				
2	2	6	8	

(h) 45×25

Solution – Round 45 up to 50

Round 25 up to 30

$$50 \times 30 = 1500$$

The product would be around 1500.

$$45 \times 25 = 1125, \text{ which is close to } 1500.$$

1	2		
4	5		
<hr/>			
×	2	5	
<hr/>			
2	2	5	
+	9	0	×
<hr/>			
1	1	2	5

(i) 26×62

Solution – Round 26 up to 30

Round 62 up to 60

$$30 \times 60 = 1800$$

The product would be around 1800.

$$26 \times 62 = 1612, \text{ which is close to } 1800.$$

3				
1				
2	6			
<hr/>				
×	6	2		
<hr/>				
5	2			
+	1	5	6	×
<hr/>				
1	6	1	2	

(j) 56×26

Solution – Round 56 up to 60

Round 26 up to 30

$$60 \times 30 = 1800$$

The product would be around 1800.

$$56 \times 26 = 1456, \text{ which is close to } 1800.$$

1	3			
5	6			
<hr/>				
×	2	6		
<hr/>				
3	3	6		
+	1	1	2	×
<hr/>				
1	4	5	6	

(k) 89×93

Solution – Round 89 up to 90

Round 93 up to 90

$$90 \times 90 = 8100$$

The product would be around 8100.

$$89 \times 93 = 8277, \text{ which is close to } 8100.$$

8				
2				
8	9			
<hr/>				
×	9	3		
<hr/>				
2	6	7		
+	8	0	1	×
<hr/>				
8	2	7	7	

(l) 55×90

Solution – Round 55 up to 60

Round 90 up to 90

$$60 \times 90 = 5400$$

The product would be around 5400.

$$55 \times 90 = 4950, \text{ which is close to } 5400.$$

4				
5	5			
<hr/>				
×	9	0		
<hr/>				
0	0			
+	4	9	5	×
<hr/>				
4	9	5	0	

Practice Exercise 5.10

$$\begin{array}{rcl}
 1. \text{ One packet has toffees} & = & 5 \ 5 \\
 30 \text{ packet has toffees} & = & \times 3 \ 0 \\
 & & 0 \ 0 \\
 & & + 16 \ 5 \times \\
 & & \hline
 & & 16 \ 5 \ 0
 \end{array}$$

So, 30 packets have 1650 toffees.

$$\begin{array}{rcl}
 2. \text{ Number of beads in 1 string} & = & 6 \ 3 \\
 \text{Number of beads in 23 strings} & = & \times 2 \ 3 \\
 & & 1 \ 8 \ 9 \\
 & & + 12 \ 6 \times \\
 & & \hline
 \text{Number of beads in 23 string} & = & 14 \ 4 \ 9
 \end{array}$$

So, 23 strings have 1449 beads.

$$\begin{array}{rcl}
 3. \text{ Number of pages in 1 magazine} & = & 5 \ 8 \\
 \text{Number of pages in 32 magazines} & = & \times 3 \ 2 \\
 & & 1 \ 1 \ 6 \\
 & & + 17 \ 4 \times \\
 & & \hline
 \text{Number of pages in 32 magazines} & = & 18 \ 5 \ 6
 \end{array}$$

So, 32 magazines have 1856 pages.

$$\begin{array}{rcl}
 4. \text{ Number of photographs in 1 album} & = & 7 \ 5 \\
 \text{Number of photographs in 26 album} & = & \times 2 \ 6 \\
 & & 4 \ 5 \ 0 \\
 & & + 15 \ 0 \times \\
 & & \hline
 \text{Number of photographs in 26 album} & = & 19 \ 5 \ 0
 \end{array}$$

So, 26 albums have 1950 photographs.

$$\begin{array}{rcl}
 5. \text{ One tricycle costs} & = & ₹ 5 \ 3 \ 7 \\
 35 \text{ tricycle costs} & = & \times 3 \ 5 \\
 & & 2 \ 6 \ 8 \ 5 \\
 & & + 16 \ 1 \ 1 \times \\
 & & \hline
 \text{Cost of 35 tricycle} & = & 18 \ 7 \ 9 \ 5
 \end{array}$$

So, 35 tricycle cost = ₹ 18795

122

$$\begin{array}{rcl}
 6. \text{ One day has hours} & = & 2 \quad 4 \\
 365 \text{ days have hours} & = & \times \quad 3 \quad 6 \quad 5 \\
 & & \hline
 & & 1 \quad 2 \quad 0 \\
 & & + \quad 14 \quad 4 \quad \times \\
 & & \quad 72 \quad \times \quad \times \\
 \text{Number of hours in 365 days} & = & \hline
 & & 87 \quad 6 \quad 0
 \end{array}$$

So, 365 days have 8760 hours.

1
24

$$\begin{array}{rcl}
 7. \text{ Number of oranges in one sack} & = & 2 \quad 2 \quad 5 \\
 \text{Number of oranges in 39 sacks} & = & \times \quad 3 \quad 9 \\
 & & \hline
 & & 20 \quad 2 \quad 5 \\
 & & + \quad 67 \quad 5 \quad \times \\
 \text{Number of oranges in 39 sacks} & = & \hline
 & & 87 \quad 7 \quad 5
 \end{array}$$

So, 39 sacks have 8775 oranges.

Mental math zone

1. (a) $5 + 5 + 5 + 5 + 5 = 5 \times 5 = 25$ (b) $15 + 15 + 15 + 15 = 15 \times 4 = 60$ (c) $25 + 25 + 25 + 25 + 25 = 25 \times 5 = 125$ (d) $53 + 53 + 53 = 53 \times 3 = 159$ (e) $375 + 375 + 375 + 375 = 375 \times 4 = 1500$

2. (a) $3 \times 8 = 24$ (b) $6 \times 5 = 30$ (c) $9 \times 5 = 45$ (d) $7 \times 2 = 14$ (e) $8 \times 6 = 48$ (f) $989 \times 1 = 989$ (g) $7 \times 7 = 49$ (h) $729 \times 10 = 7290$ (i) $99 \times 100 = 9900$

3. (a) $125 \times 0 = 0$ (b) $205 \times 1 = 205$ (c) $0 \times 1125 = 0$ (d) $1 \times 236 = 236$ (e) $0 \times 1375 = 0$ (f) $355 \times 0 = 0$ (g) $3764 \times 1 = 3764$ (h) $1576 \times 0 = 0$ (i) $92 \times 30 = 30 \times 92$ (j) $18 \times 17 \times 1 = 306$ (k) $33 \times 1 = 1 \times 33$ (l) $25 \times 27 \times 0 = 0$ (m) $36 \times 0 \times 75 = 0$ (n) $16 \times 27 \times 18 = 18 \times 27 \times 16$ (o) $13 \times 15 \times 8 = 13 \times 8 \times 15$ (p) $12 \times 15 \times 0 = 0$

Multiple Choice Questions MCQs

1

1. $32 \times 15 = 480$
 2. $48 \times 10 = 480$
 3. $8 \times 7 = 56$, then 56 is called product.
 4. $36 \times 100 = 3600$
 5. $85 \times 1000 = 85000$
- | | |
|--|---|
| | 3 2 |
| | $\times \quad 1 \quad 5$ |
| | <hr/> |
| | 1 6 0 |
| | $\quad 3 \quad 2 \quad \times$ |
| | <hr/> |
| | 4 8 0 |

Practice Exercise 6.1

1. (a) $16 \div 2 = 8$ (b) $18 \div 3 = 6$ (c) $28 \div 4 = 7$ (d) $35 \div 5 = 7$

- (e) $48 \div 6 = 8$ (f) $24 \div 3 = 8$ (g) $30 \div 3 = 10$ (h) $64 \div 8 = 8$ (i)
 $45 \div 9 = 5$ (j) $36 \div 9 = 4$ (k) $81 \div 9 = 9$ (l) $80 \div 10 = 8$

2. Write the dividend, division and quotient. The first one has been done for you:

		Dividend	Divisor	Quotient
(a)	$15 \div 3 = 5$	15	3	5
(b)	$42 \div 7 = 6$	42	7	6
(c)	$72 \div 9 = 8$	72	9	8
(d)	$40 \div 8 = 5$	40	8	5
(e)	$27 \div 3 = 9$	27	3	9

3. Complete the multiplication and division facts. The first has been done for you:

(a)	$5 \times 7 = 35$	$7 \times 5 = 35$	$35 \div 5 = 7$	$35 \div 7 = 5$
(b)	$8 \times 4 = 32$	$4 \times 8 = 32$	$32 \div 8 = 4$	$32 \div 4 = 8$
(c)	$4 \times 7 = 28$	$7 \times 4 = 28$	$28 \div 4 = 7$	$28 \div 7 = 4$
(d)	$7 \times 8 = 56$	$8 \times 7 = 56$	$56 \div 8 = 7$	$56 \div 7 = 8$
(e)	$9 \times 8 = 72$	$8 \times 9 = 72$	$72 \div 8 = 9$	$72 \div 9 = 8$

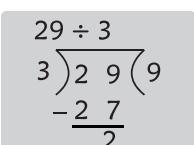
Practice Exercise 6.2

1. (a) $35 \div 35 = 1$ (b) $24 \div 1 = 24$ (c) $0 \div 305 = 0$
(d) $236 \div 1 = 236$ (e) $125 \div 125 = 1$ (f) $0 \div 675 = 0$
(g) $875 \div 875 = 1$ (h) $0 \div 1275 = 0$ (i) $2570 \div 1 = 2570$ (j) $565 \div 565 = 1$ (k) $170 \div 1 = 170$ (l) $0 \div 656 = 0$

Practice Exercise 6.3

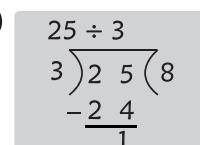
Divide

(b) $29 \div 3$



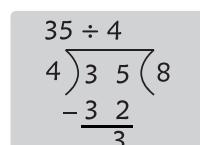
Quotient = 9
Remainder = 2

(c) $25 \div 3$



Quotient = 8
Remainder = 1

(d) $35 \div 4$



Quotient = 8
Remainder = 3

(e) $27 \div 4$

$$\begin{array}{r} 27 \\ 4) 27 \\ -2 \quad 4 \\ \hline 3 \end{array}$$

Quotient = **6**
Remainder = **3**

(f) $38 \div 6$

$$\begin{array}{r} 38 \\ 6) 38 \\ -3 \quad 6 \\ \hline 2 \end{array}$$

Quotient = **6**
Remainder = **2**

(g) $60 \div 8$

$$\begin{array}{r} 60 \\ 8) 60 \\ -5 \quad 6 \\ \hline 4 \end{array}$$

Quotient = **7**
Remainder = **4**

(h) $50 \div 7$

$$\begin{array}{r} 50 \\ 7) 50 \\ -4 \quad 9 \\ \hline 1 \end{array}$$

Quotient = **7**
Remainder = **1**

(i) $75 \div 9$

$$\begin{array}{r} 75 \\ 9) 75 \\ -7 \quad 2 \\ \hline 3 \end{array}$$

Quotient = **8**
Remainder = **3**

Practice Exercise 6.4

(a) $130 \div 10 \rightarrow \frac{130}{10} = \frac{13}{1} = \mathbf{13}$ (b) $330 \div 10 \rightarrow \frac{330}{10} = \frac{33}{1} = \mathbf{33}$
 (c) $250 \div 10 \rightarrow \frac{250}{10} = \frac{25}{1} = \mathbf{25}$ (d) $1700 \div 10 \rightarrow \frac{1700}{10} = \frac{170}{1} = \mathbf{170}$
 (e) $1750 \div 10 \rightarrow \frac{1750}{10} = \frac{175}{1} = \mathbf{175}$ (f) $8350 \div 10 \rightarrow \frac{8350}{10} = \frac{835}{1} = \mathbf{835}$
 (g) $3500 \div 100 \rightarrow \frac{3500}{100} = \frac{35}{1} = \mathbf{35}$
 (h) $5000 \div 100 \rightarrow \frac{5000}{100} = \frac{50}{1} = \mathbf{50}$ (i) $2300 \div 100 \rightarrow \frac{2300}{100} = \frac{23}{1} = \mathbf{23}$
 (j) $6000 \div 1000 \rightarrow \frac{6000}{1000} = \frac{6}{1} = \mathbf{6}$ (k) $8000 \div 1000 \rightarrow \frac{8000}{1000} = \frac{8}{1} = \mathbf{8}$

(l) $3400 \div 100 \rightarrow \frac{3400}{100} = \frac{34}{1} = \mathbf{34}$
 (m) $880 \div 20 \rightarrow \frac{880}{20} = \frac{88}{2} = \mathbf{44}$

$$\begin{array}{r} 88 \\ 2) 88 \\ -8 \quad \downarrow \\ 8 \\ \hline 8 \\ \times \end{array}$$

(n) $1800 \div 300 \rightarrow \frac{1800}{300} = \frac{18}{3} = \mathbf{6}$

$$\begin{array}{r} 18 \\ 3) 18 \\ -1 \quad 8 \\ \hline \times \end{array}$$

- (o) $3200 \div 800 \rightarrow \frac{3200}{800} = \frac{32}{8} = \rightarrow$
- $$8 \overline{)3\ 2}(4$$

$$\underline{3\ 2}$$

$$\times$$
- $= 4$
- (p) $6600 \div 200 \rightarrow \frac{6600}{200} = \frac{66}{2} = \rightarrow$
- $$2 \overline{)6\ 6}(33$$

$$\underline{6\ 6}$$

$$\times$$
- $= 33$
- (q) $8400 \div 120 \rightarrow \frac{8400}{120} = \frac{840}{12} = \rightarrow$
- $$12 \overline{)8\ 4\ 0}(70$$

$$\underline{8\ 4}$$

$$0$$

$$\underline{0}$$

$$\times$$
- $= 70$
- (r) $4200 \div 600 \rightarrow \frac{4200}{600} = \frac{42}{6} = \rightarrow$
- $$6 \overline{)4\ 2}(7$$

$$\underline{4\ 2}$$

$$\times$$
- $= 7$

Practice Exercise 6.5

- (a)
- $$2 \overline{)4\ 4\ 8}$$

$$\underline{4\ 4}$$

$$\downarrow$$

$$\underline{4}$$

$$\downarrow$$

$$\underline{8}$$

$$\underline{8}$$

$$\times$$
- (b)
- $$3 \overline{)3\ 6\ 9}$$

$$\underline{3\ 6}$$

$$\downarrow$$

$$\underline{6}$$

$$\downarrow$$

$$\underline{9}$$

$$\underline{9}$$

$$\times$$
- (c)
- $$4 \overline{)8\ 4\ 8}$$

$$\underline{8\ 4}$$

$$\downarrow$$

$$\underline{4}$$

$$\downarrow$$

$$\underline{8}$$

$$\underline{8}$$

$$\times$$
- (d)
- $$2 \overline{)8\ 8\ 8}$$

$$\underline{8\ 8}$$

$$\downarrow$$

$$\underline{8}$$

$$\downarrow$$

$$\underline{8}$$

$$\underline{8}$$

$$\times$$
- (e)
- $$3 \overline{)6\ 3\ 3}$$

$$\underline{6\ 3}$$

$$\downarrow$$

$$\underline{3}$$

$$\downarrow$$

$$\underline{3}$$

$$\underline{3}$$

$$\times$$
- (f)
- $$4 \overline{)2\ 4\ 8}$$

$$\underline{2\ 4}$$

$$\downarrow$$

$$\underline{8}$$

$$\downarrow$$

$$\underline{8}$$

$$\underline{8}$$

$$\times$$

Practice Exercise 6.6

(b) $3129 \div 3$

$$\begin{array}{r}
 1\ 0\ 4\ 3 \\
 3) 3\ 1\ 2\ 9 \\
 \downarrow \quad \downarrow \quad \downarrow \\
 1\ 2 \\
 - 1\ 2 \\
 \hline 9 \\
 - 9 \\
 \hline \times
 \end{array}$$

(c) $8168 \div 8$

$$\begin{array}{r}
 1\ 0\ 2\ 1 \\
 8) 8\ 1\ 6\ 8 \\
 \downarrow \quad \downarrow \quad \downarrow \\
 1\ 6 \\
 - 1\ 6 \\
 \hline 8 \\
 - 8 \\
 \hline \times
 \end{array}$$

(d) $7427 \div 7$

$$\begin{array}{r}
 1\ 0\ 6\ 1 \\
 7) 7\ 4\ 2\ 7 \\
 \downarrow \quad \downarrow \quad \downarrow \\
 4\ 2 \\
 - 4\ 2 \\
 \hline 7 \\
 - 7 \\
 \hline \times
 \end{array}$$

(e) $5105 \div 5$

$$\begin{array}{r}
 1\ 0\ 2\ 1 \\
 5) 5\ 1\ 0\ 5 \\
 \downarrow \quad \downarrow \quad \downarrow \\
 0\ 1\ 0 \\
 - 1\ 0 \\
 \hline 5 \\
 - 5 \\
 \hline 5 \\
 \hline \times
 \end{array}$$

(f) $3693 \div 3$

$$\begin{array}{r}
 1\ 2\ 3\ 1 \\
 3) 3\ 6\ 9\ 3 \\
 \downarrow \quad \downarrow \quad \downarrow \\
 6 \\
 - 6 \\
 \hline 9 \\
 - 9 \\
 \hline 3 \\
 - 3 \\
 \hline \times
 \end{array}$$

(g) $9279 \div 9$

$$\begin{array}{r}
 1\ 0\ 3\ 1 \\
 9) 9\ 2\ 7\ 9 \\
 \downarrow \quad \downarrow \quad \downarrow \\
 2\ 7 \\
 - 2\ 7 \\
 \hline 9 \\
 - 9 \\
 \hline \times
 \end{array}$$

Practice Exercise 6.7

- (a) **$85 \div 10$** ; The last digit 5 of 85 is the remainder (R). The remaining part 8 of the number is the quotient (Q); $85 \div 10 = 8$ (Q), 5 (R) (b) **$486 \div 10$** ; The last digit 6 of 486 is the remainder (R). The remaining part 48 of the number is the quotient (Q). $486 \div 10 = 48$ (Q), 6 (R) (c) **$535 \div 100$** ; The number formed by the last two digits at ones and tens place is the remainder (R) = 35; The remaining part 5 of the number is the quotient (Q) = 5 (d) **$695 \div 100$** ; The number formed by the last two digits at ones and tens place is the remainder (R) = 95. The remaining part 6 of the number is the quotient (Q) = 6 (e) **$4443 \div 10$** ; The last digit 3 of 4443 is the remainder (R); The remaining part 444 of the number is the quotient (Q). $4443 \div 10 = 444$ (Q), 3 (R). (f) **$7635 \div 100$** The number formed by the last two digits at ones and tens place is the remainder (R) = 35; The remaining part 76 of the number is the quotient (Q) = 76 (g) **$6835 \div 100$** The number formed by the last two digits at ones and tens place is the remainder (R) = 35; The remaining part 68 of the number is the quotient (Q) = 68. (h) **$8485 \div 100$** The number formed by the last two digits at ones and tens place is the remainder (R) = 85; The remaining part 84 of the number is the quotient (Q)

= 84. (i) **$3746 \div 100$** ; The number formed by the last two digits at ones and tens place is the remainder (R) = 46. The remaining part 37 of the number is the quotient (Q) = 37. (j) **$574 \div 10$** ; The last digit 4 of 574 is the remainder (R). The remaining part 57 of the number is the quotient (Q). $574 \div 10 = 57$ (Q), 4 (R).

Practice Exercise 6.8

(a)

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

Quotient = 382
Remainder = 1

(b)

$$\begin{array}{r} 1\ 3\ 1 \\ 6) 7\ 8\ 9 \\ - 6 \\ \hline 1\ 8 \\ - 1\ 8 \\ \hline 9 \\ - 6 \\ \hline 3 \end{array}$$

Quotient = 131
Remainder = 3

(c)

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

Quotient = 78
Remainder = 7

(d)

$$\begin{array}{r} 9\ 1 \\ 7) 6\ 4\ 3 \\ - 6\ 3 \\ \hline 1\ 3 \\ - 7 \\ \hline 6 \end{array}$$

Quotient = 91
Remainder = 6

(e)

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

Quotient = 241
Remainder = 3

(f)

$$\begin{array}{r} 1\ 9\ 1 \\ 3) 5\ 7\ 5 \\ - 3 \\ \hline 2\ 7 \\ - 2\ 7 \\ \hline 5 \\ - 3 \\ \hline 2 \end{array}$$

Quotient = 191
Remainder = 2

(g)

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

Quotient = 1136
Remainder = 5

(h)

$$\begin{array}{r} 1\ 1\ 5\ 9 \\ 8) 9\ 2\ 7\ 9 \\ - 8 \\ \hline 1\ 2 \\ - 8 \\ \hline 4\ 7 \\ - 4\ 0 \\ \hline 7\ 9 \\ - 7\ 2 \\ \hline 7 \end{array}$$

Quotient = 1159
Remainder = 7

(i)

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

Quotient = 855
Remainder = 1

Practice Exercise 6.9

(a)

$$\begin{array}{r}
 1 \ 5 \ 3 \\
 11) 1 \ 6 \ 9 \ 3 \\
 - 1 \ 1 \quad \downarrow \\
 \hline
 5 \ 9 \quad \downarrow \\
 5 \ 5 \quad \downarrow \\
 \hline
 4 \ 3 \\
 - 3 \ 3 \\
 \hline
 10
 \end{array}$$

Quotient = 153
Remainder = 10

(b)

$$\begin{array}{r}
 1 \ 3 \ 0 \\
 14) 1 \ 8 \ 2 \ 9 \\
 - 1 \ 4 \quad \downarrow \\
 \hline
 4 \ 2 \quad \downarrow \\
 4 \ 2 \quad \downarrow \\
 \hline
 9
 \end{array}$$

Quotient = 130
Remainder = 9

(c)

$$\begin{array}{r}
 3 \ 9 \ 9 \\
 12) 4 \ 7 \ 9 \ 8 \\
 - 3 \ 6 \quad \downarrow \\
 \hline
 1 \ 1 \ 9 \quad \downarrow \\
 1 \ 0 \ 8 \quad \downarrow \\
 \hline
 1 \ 1 \ 8 \\
 - 1 \ 0 \ 8 \\
 \hline
 1 \ 0
 \end{array}$$

Quotient = 399
Remainder = 10

(d)

$$\begin{array}{r}
 2 \ 4 \ 2 \\
 15) 3 \ 6 \ 4 \ 9 \\
 - 3 \ 0 \quad \downarrow \\
 \hline
 6 \ 4 \quad \downarrow \\
 - 6 \ 0 \quad \downarrow \\
 \hline
 4 \ 9 \\
 3 \ 0 \\
 \hline
 1 \ 9
 \end{array}$$

Quotient = 242
Remainder = 19

(e)

$$\begin{array}{r}
 7 \ 1 \ 3 \\
 13) 9 \ 2 \ 8 \ 1 \\
 - 9 \ 1 \quad \downarrow \\
 \hline
 1 \ 8 \\
 - 1 \ 3 \\
 \hline
 5 \ 1 \\
 5 \ 1
 \end{array}$$

Quotient = 713
Remainder = 51

(f)

$$\begin{array}{r}
 2 \ 3 \ 6 \\
 12) 2 \ 8 \ 3 \ 5 \\
 - 2 \ 4 \quad \downarrow \\
 \hline
 4 \ 3 \\
 - 3 \ 6 \quad \downarrow \\
 \hline
 7 \ 5 \\
 7 \ 2 \\
 \hline
 3
 \end{array}$$

Quotient = 236
Remainder = 3

Practice Exercise 6.10

1. Ayesha has pictures = 625

Ayesha sticks pictures in Page = 5

Ayesha need page = $625 \div 5$

so, Ayesha need = 125 pages

$$\begin{array}{r}
 1 \ 2 \ 5 \\
 5) 6 \ 2 \ 5 \\
 - 5 \quad \downarrow \\
 \hline
 1 \ 2 \\
 - 1 \ 0 \quad \downarrow \\
 \hline
 2 \ 5 \\
 2 \ 5 \\
 \hline
 \times
 \end{array}$$

2. Ravi has balls = 492

He pack ball in one box = 4

He need boxes = $492 \div 4$

So, Ravi need = 123 boxes

$$\begin{array}{r}
 1 \ 2 \ 3 \\
 4) 4 \ 9 \ 2 \\
 - 4 \quad \downarrow \\
 \hline
 9 \\
 - 8 \quad \downarrow \\
 \hline
 1 \ 2 \\
 1 \ 2 \\
 \hline
 \times
 \end{array}$$

3. Number of wheels = 168

One tricycle have wheels = 3

Number of tricycle have the given

wheels = $168 \div 3$

= 56 tricycle

$$\begin{array}{r} 56 \\ 3 \overline{)168} \\ -15 \\ \hline 18 \\ -18 \\ \hline \end{array}$$

4. 8 Clock cost = ₹ 1000

1 Clock cost = ₹ $1000 \div 8 = ₹ 125$

So, 1 clock cost = ₹ 125

$$\begin{array}{r} 125 \\ 8 \overline{)1000} \\ -8 \\ \hline 20 \\ -16 \\ \hline 40 \\ -40 \\ \hline \end{array}$$

5. ₹ 825 are to be divided equally among

5 children

1 child get rupees = ₹ $825 \div 5$

So, 1 child get ₹ 165

$$\begin{array}{r} 165 \\ 5 \overline{)825} \\ -5 \\ \hline 32 \\ -30 \\ \hline 25 \\ -25 \\ \hline \end{array}$$

6. Fruit seller buy apples = 508

He arranges in 8 boxes = $508 \div 8$

So, 4 apples are left over.

$$\begin{array}{r} 63 \\ 8 \overline{)508} \\ -48 \\ \hline 28 \\ -24 \\ \hline 4 \end{array}$$

7. 7 eggs purchased by 1 customer

861 eggs purchased by = $861 \div 7$

= 123

So, 861 eggs purchased by 123 customers.

$$\begin{array}{r} 123 \\ 7 \overline{)861} \\ -7 \\ \hline 16 \\ -14 \\ \hline 21 \\ -21 \\ \hline \end{array}$$

8. Weight of 5 players = 260kg

Weight of 1 player = $260 \div 5$

= 52 kg

So, each player weight = 52 kg

$$\begin{array}{r} 52 \\ 5 \overline{)260} \\ -25 \\ \hline 10 \\ -10 \\ \hline \end{array}$$

9. An auditorium has to be filled = 374 chairs
6 rows in auditorium = $374 \div 6$

So, 2 chairs are extra.

$$\begin{array}{r} 6 \ 2 \\ 6) 3 \ 7 \ 4 \\ \underline{-3 \ 6} \\ \ 1 \ 4 \\ -1 \ 2 \\ \underline{\ 2} \end{array}$$

10. Mona drives 15 km in 1 litre petrol
petrol consume in 540 km = $540 \div 15$
= 36 litre

So, petrol consumed in 540 km is 36 litre.

$$\begin{array}{r} 3 \ 6 \\ 15) 5 \ 4 \ 0 \\ \underline{-4 \ 5} \\ \ 9 \ 0 \\ -9 \ 0 \\ \underline{\times} \end{array}$$

11. In orchard the number of trees = 300

Number of rows = 12

So, number of trees in one row
= $300 \div 12$

So, the number of trees in the row = 25 trees

$$\begin{array}{r} 2 \ 5 \\ 12) 3 \ 0 \ 0 \\ \underline{-2 \ 4} \\ \ 6 \ 0 \\ -6 \ 0 \\ \underline{\times} \end{array}$$

12. Number of people in a train = 390

Number of compartments = 13

So, number of people are in
each compartment = $390 \div 13$
So, 30 people are in each compartment

$$\begin{array}{r} 3 \ 0 \\ 13) 3 \ 9 \ 0 \\ \underline{-3 \ 9} \\ \ 0 \\ \underline{0} \end{array}$$

13. Number of children = 300

Number of children in 1 group = 20

So, number of group = $300 \div 20$

$$= 15$$

So, number of groups = 15

$$\begin{array}{r} 1 \ 5 \\ 20) 3 \ 0 \ 0 \\ \underline{-2 \ 0} \\ \ 1 \ 0 \ 0 \\ -1 \ 0 \ 0 \\ \underline{\times} \end{array}$$

14. 15 Video games cost = ₹ 2250

1 Video games costs = $2250 \div 15$

$$= 150$$

So, 1 video game costs = ₹ 150

$$\begin{array}{r} 1 \ 5 \ 0 \\ 15) 2 \ 2 \ 5 \ 0 \\ \underline{-1 \ 5} \\ \ 7 \ 5 \\ -7 \ 5 \\ \underline{0} \end{array}$$

15. Some ice creams cost = ₹ 1130

1 ice-cream costs = ₹ 5

Number of ice creams = $1130 \div 5 = 226$

So, number of ice-creams = 226

$$\begin{array}{r} 2\ 2\ 6 \\ 5) 1\ 1\ 3\ 0 \\ -1\ 0 \\ \hline 1\ 3 \\ 1\ 0 \\ \hline 3\ 0 \\ 3\ 0 \\ \hline \times \end{array}$$

16. 10 suits cost = ₹ 1100

1 suit costs = ₹ $1100 \div 10$

$$= ₹ 110$$

So, 1 suits cost = ₹ 110

$$\begin{array}{r} 1\ 1\ 0 \\ 10) 1\ 1\ 0\ 0 \\ -1\ 0 \\ \hline 1\ 0 \\ 1\ 0 \\ \hline 0 \\ 0 \\ \hline \end{array}$$

17. Total weight of rice = 180 kg

Each bag contains = 3 kg

So, number of bags = $180 \div 3 = 60$

So, 60 bags contain 180 kg rice.

$$\begin{array}{r} 6\ 0 \\ 3) 1\ 8\ 0 \\ -1\ 8 \\ \hline 0 \\ 0 \\ \hline \end{array}$$

Practice Exercise 6.11

Note (I) A number which when divided by 2 leaves no remainder is called an **even number**. (II) A number which when divided by 2 leaves a remainder is called an **odd number**.

Check whether even or odd by **division method**.

- (a) odd (b) even (c) even (d) odd (e) even (f) even (g) odd (h) odd
 (i) odd (j) even.

Mental math zone

State true and false:

- (a) True (b) True (c) False (d) True

Divide the following:

- (a) $84 \div 10$; Q = 8; R = 4 (b) $870 \div 10$; Q = 87; R = 0 (c) $640 \div 10$; Q = 64; R = 0 (d) $965 \div 10$; Q = 96; R = 5 (e) $1230 \div 100$; Q = 12; R = 30 (f) $1735 \div 100$; Q = 17; R = 35 (g) $3450 \div 100$; Q = 34; R = 50 (h) $2578 \div 10$; Q = 257; R = 8

Multiple Choice Questions MCQs

1. 850 **2.** $96 \div 7$

$$\begin{array}{r} 7) 9 \ 6 \\ - 7 \\ \hline 2 \ 6 \\ - 2 \ 1 \\ \hline 5 \end{array}$$

Remainder = **5**

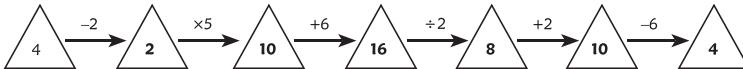
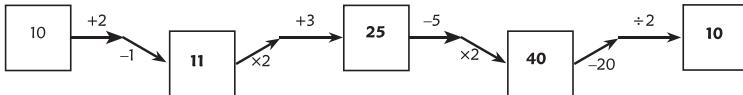
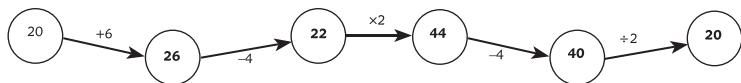
3. $0 \div 15 = 0$ **4.** $96 \div 8 \longrightarrow = 12$

$$\begin{array}{r} 1 \ 2 \\ 8) 9 \ 6 \\ - 8 \\ \hline 1 \ 6 \\ - 1 \ 6 \\ \hline x \end{array}$$

5. $135 \div 9 \longrightarrow = 45$

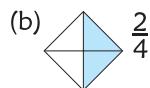
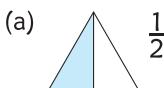
$$\begin{array}{r} 1 \ 5 \\ 9) 1 \ 3 \ 5 \\ - 9 \\ \hline 4 \ 5 \\ - 4 \ 5 \\ \hline x \end{array}$$

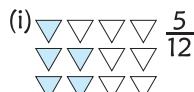
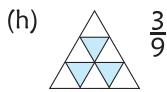
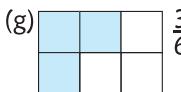
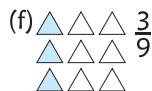
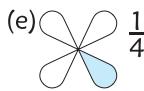
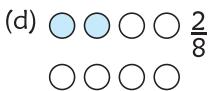
Activity WIZARD



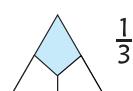
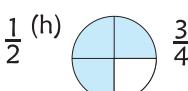
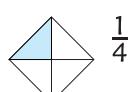
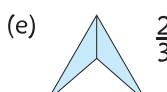
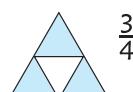
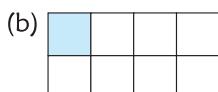
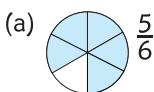
Practice Exercise 7.1

1. Write the fraction for the shaded part.



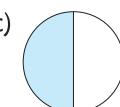
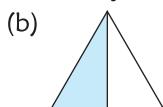
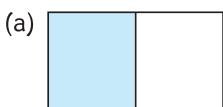


2. Shade for the given fraction:

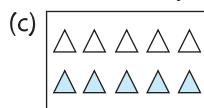
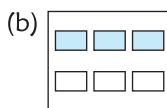
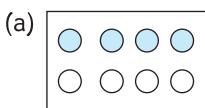


Practice Exercise 7.2

1. Colour one-half of the shapes:



2. Colour one-half of the collections. One is done for you:

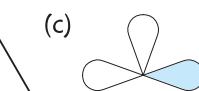
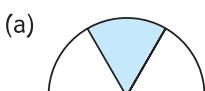


$$\frac{1}{2} \text{ of } 8 = 8 \div 2 = 4$$

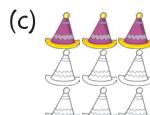
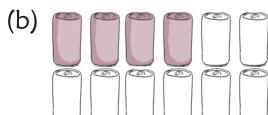
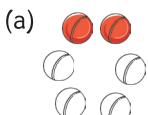
$$\frac{1}{2} \text{ of } 6 = 6 \div 2 = 3$$

$$\frac{1}{2} \text{ of } 10 = 10 \div 2 = 5$$

3. Colour one third of the shapes:



4. Colour one third of the collections:

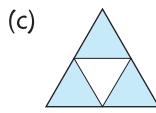
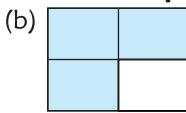
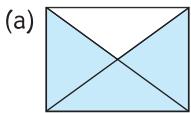


$$\frac{1}{3} \text{ of } 6 = 6 \div 3 = 2$$

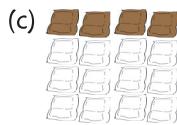
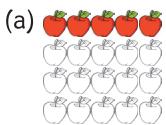
$$\frac{1}{3} \text{ of } 12 = 12 \div 3 = 4$$

$$\frac{1}{3} \text{ of } 9 = 9 \div 3 = 3$$

5. Colour three-fourth of the shapes:



6. Colour one-fourth of the collection.

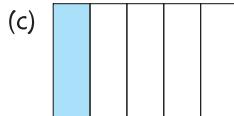
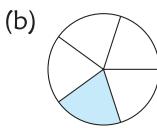
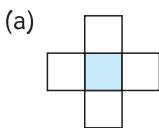


$$\frac{1}{4} \text{ of } 20 = 20 \div 4 = 5$$

$$\frac{1}{4} \text{ of } 8 = 8 \div 4 = 2$$

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

7. Colour one fifth of the shapes :



8. Colour one-fifth of the collection.



$$\frac{1}{5} \text{ of } 15 = 15 \div 5 = 3$$

$$\frac{1}{5} \text{ of } 25 = 25 \div 5 = 5$$

$$\frac{1}{5} \text{ of } 10 = 10 \div 5 = 2$$

Practice Exercise 7.3

.....

1. Complete the table.

Figure	Shaded parts Numerator	Total parts Denominator	Fraction of Shaded parts
(a)	5	8	$\frac{5}{8}$
(b)	3	8	$\frac{3}{8}$
(c)	2	7	$\frac{2}{7}$
(d)	3	8	$\frac{3}{8}$
(e)	5	12	$\frac{5}{12}$

2. Write the correct fraction in each case.

(a) Write the fraction with 7 as the numerator and 15 as the denominator. $\frac{7}{15}$

(b) Ananya filled 4 glasses with water out of total 9 glasses. The fraction of glasses which were filled is $\frac{4}{9}$

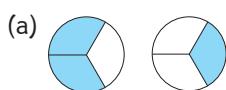
(c) Vandana has 12 pens out of which 5 are blue. The fraction of pens which are blue is $\frac{5}{12}$

(d) Raju completed 4 out of 9 sums in Maths. The fraction of sums not completed is $\frac{4}{9}$

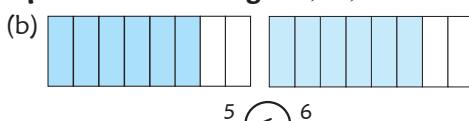
(e) Raman coloured 7 out of 8 candles in the picture. The fraction of candles which were coloured is $\frac{7}{8}$

Practice Exercise 7.4

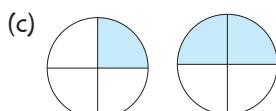
Write the fractions and put the correct sign <, >, =



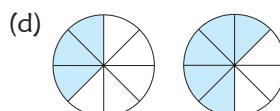
$$\frac{2}{3} \text{ } \bigcirc \text{ } \frac{1}{3}$$



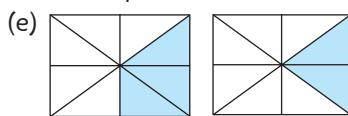
$$\frac{5}{8} \text{ } \bigcirc \text{ } \frac{6}{8}$$



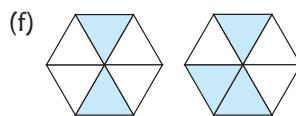
$$\frac{1}{4} \text{ } \bigcirc \text{ } \frac{2}{4}$$



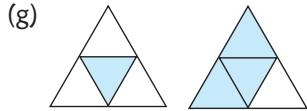
$$\frac{3}{8} \text{ } \bigcirc \text{ } \frac{5}{8}$$



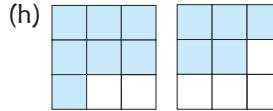
$$\frac{3}{8} \text{ } \bigcirc \text{ } \frac{2}{8}$$



$$\frac{2}{6} \text{ } \bigcirc \text{ } \frac{3}{6}$$



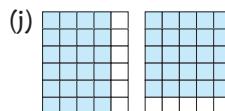
$$\frac{1}{4} \text{ } \bigcirc \text{ } \frac{3}{4}$$



$$\frac{7}{9} \text{ } \bigcirc \text{ } \frac{5}{9}$$



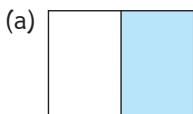
$$\frac{2}{6} \text{ } \bigcirc \text{ } \frac{2}{6}$$



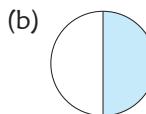
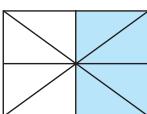
$$\frac{24}{30} \text{ } \bigcirc \text{ } \frac{25}{30}$$

Practice Exercise 7.5

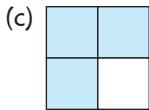
1. Colour the equivalent fractions.



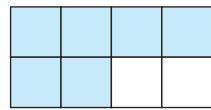
$$\frac{1}{2} = \frac{4}{8}$$



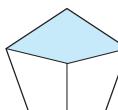
$$\frac{1}{2} = \frac{2}{4}$$



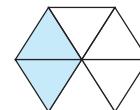
$$\frac{3}{4} = \frac{6}{8}$$



(d)



$$\frac{1}{3} = \frac{2}{6}$$



1. Arrange in ascending order:

(a) $\frac{4}{7}, \frac{6}{7}, \frac{1}{7}, \frac{3}{7} \rightarrow \frac{1}{7}, \frac{3}{7}, \frac{4}{7}, \frac{6}{7}$ (b) $\frac{2}{9}, \frac{7}{9}, \frac{1}{9}, \frac{4}{9} \rightarrow \frac{1}{9}, \frac{2}{9}, \frac{4}{9}, \frac{7}{9}$ (c) $\frac{10}{11}, \frac{7}{11}, \frac{5}{11}, \frac{3}{11} \rightarrow \frac{3}{11}, \frac{5}{11}, \frac{7}{11}, \frac{10}{11}$

2. Arrange in descending order:

(a) $\frac{2}{25}, \frac{3}{25}, \frac{11}{25}, \frac{10}{25} \rightarrow \frac{11}{25}, \frac{10}{25}, \frac{3}{25}, \frac{2}{25}$ (b) $\frac{11}{13}, \frac{2}{13}, \frac{7}{13}, \frac{3}{13} \rightarrow \frac{11}{13}, \frac{7}{13}, \frac{3}{13}, \frac{2}{13}$

(c) $\frac{6}{7}, \frac{5}{7}, \frac{4}{7}, \frac{3}{7} \rightarrow \frac{6}{7}, \frac{5}{7}, \frac{4}{7}, \frac{3}{7}$

3. Arrange in ascending order:

(a) $\frac{5}{7}, \frac{4}{7}, \frac{2}{7}, \frac{3}{7} \rightarrow \frac{2}{7}, \frac{3}{7}, \frac{4}{7}, \frac{5}{7}$ (b) $\frac{1}{8}, \frac{3}{8}, \frac{7}{8}, \frac{4}{8} \rightarrow \frac{1}{8}, \frac{3}{8}, \frac{4}{8}, \frac{7}{8}$ (c) $\frac{1}{9}, \frac{3}{9}, \frac{2}{9}, \frac{5}{9} \rightarrow \frac{1}{9}, \frac{2}{9}, \frac{3}{9}, \frac{5}{9}$

4. Arrange in descending order:

(a) $\frac{8}{15}, \frac{11}{15}, \frac{7}{15}, \frac{13}{15} \rightarrow \frac{13}{15}, \frac{11}{15}, \frac{8}{15}, \frac{7}{15}$ (b) $\frac{5}{7}, \frac{5}{8}, \frac{5}{9}, \frac{5}{6} \rightarrow \frac{5}{6}, \frac{5}{7}, \frac{5}{8}, \frac{5}{9}$

(c) $\frac{2}{5}, \frac{10}{7}, \frac{11}{7}, \frac{12}{7} \rightarrow \frac{12}{7}, \frac{11}{7}, \frac{10}{7}, \frac{2}{5}$ (d) $\frac{7}{10}, \frac{7}{9}, \frac{7}{8}, \frac{7}{11} \rightarrow \frac{7}{8}, \frac{7}{9}, \frac{7}{10}, \frac{7}{11}$

Practice Exercise 7.7

1. Complete the series of equivalent fraction:

(a) $\frac{5}{6}, \frac{10}{12}, \frac{15}{18}, \frac{20}{24}, \frac{25}{30}, \frac{30}{36}$ (b) $\frac{2}{11}, \frac{4}{22}, \frac{6}{33}, \frac{8}{44}, \frac{10}{55}, \frac{12}{66}$ (c) $\frac{6}{7}, \frac{12}{14}, \frac{18}{21}, \frac{24}{28}, \frac{30}{35}$

- $\frac{36}{42}$ (d) $\frac{1}{2}, \frac{2}{4}, \frac{3}{6}, \frac{4}{8}, \frac{5}{10}, \frac{6}{12}, \frac{7}{14}$ (e) $\frac{2}{3}, \frac{4}{6}, \frac{6}{9}, \frac{8}{12}, \frac{10}{15}, \frac{12}{18}, \frac{14}{21}$ (f) $\frac{1}{5}, \frac{2}{10}, \frac{3}{15}, \frac{4}{20}$
 • $\frac{5}{25}, \frac{6}{30}, \frac{7}{35}$ (g) $\frac{2}{7}, \frac{4}{14}, \frac{6}{21}, \frac{8}{28}, \frac{10}{35}, \frac{12}{42}, \frac{14}{49}$ (h) $\frac{3}{4}, \frac{6}{8}, \frac{9}{12}, \frac{12}{26}, \frac{15}{20}, \frac{18}{24}, \frac{21}{28}$

2. Find the missing part of these equivalent fractions:

$$\begin{array}{llllll} \text{(a)} \frac{1}{7} = \frac{5}{\boxed{35}} & \text{(b)} \frac{2}{3} = \frac{10}{\boxed{15}} & \text{(c)} \frac{7}{11} = \frac{35}{\boxed{55}} & \text{(d)} \frac{3}{8} = \frac{12}{\boxed{32}} & \text{(e)} \frac{6}{15} = \frac{12}{\boxed{30}} & \text{(f)} \frac{4}{7} = \\ \frac{16}{\boxed{28}} & \text{(g)} \frac{2}{5} = \frac{10}{\boxed{25}} & \text{(h)} \frac{4}{7} = \frac{24}{\boxed{42}} & \text{(i)} \frac{6}{10} = \frac{60}{\boxed{100}} & \text{(j)} \frac{2}{9} = \frac{4}{\boxed{18}} & \text{(k)} \frac{1}{4} = \frac{6}{\boxed{24}} & \text{(l)} \frac{4}{5} \\ = \frac{8}{\boxed{10}} & \text{(m)} \frac{9}{11} = \frac{18}{\boxed{22}} & \text{(n)} \frac{3}{8} = \frac{12}{\boxed{32}} & \text{(o)} \frac{5}{12} = \frac{20}{\boxed{48}} \end{array}$$

Practice Exercise 7.8
••••••••••••

1. Fill in the blanks:

$$\begin{array}{rcl} \text{(a)} \begin{array}{|c|c|c|}\hline \textcolor{orange}{\square} & & \end{array} + \begin{array}{|c|c|c|}\hline \textcolor{orange}{\square} & & \end{array} = \begin{array}{|c|c|c|}\hline \textcolor{orange}{\square} & \textcolor{orange}{\square} & \end{array} \\ \frac{1}{3} + \frac{1}{3} = \frac{2}{3} \end{array}$$

$$\begin{array}{rcl} \text{(b)} \begin{array}{|c|c|c|c|c|}\hline \textcolor{yellow}{\square} & \textcolor{yellow}{\square} & & & \end{array} + \begin{array}{|c|c|c|c|c|}\hline \textcolor{yellow}{\square} & \textcolor{yellow}{\square} & \textcolor{yellow}{\square} & \textcolor{yellow}{\square} & \end{array} = \begin{array}{|c|c|c|c|c|}\hline \textcolor{yellow}{\square} & \textcolor{yellow}{\square} & \textcolor{yellow}{\square} & \textcolor{yellow}{\square} & \textcolor{yellow}{\square} \end{array} \\ \frac{2}{6} + \frac{3}{6} = \frac{5}{6} \end{array}$$

$$\begin{array}{rcl} \text{(c)} \begin{array}{|c|c|c|c|}\hline \textcolor{blue}{\square} & \textcolor{blue}{\square} & & \end{array} + \begin{array}{|c|c|c|c|}\hline \textcolor{blue}{\square} & & & \end{array} = \begin{array}{|c|c|c|c|c|}\hline \textcolor{blue}{\square} & \textcolor{blue}{\square} & \textcolor{blue}{\square} & \textcolor{blue}{\square} & \end{array} \\ \frac{4}{10} + \frac{2}{10} = \frac{6}{10} \end{array}$$

$$\begin{array}{rcl} \text{(d)} \begin{array}{|c|c|c|}\hline \textcolor{purple}{\square} & \textcolor{purple}{\square} & \textcolor{purple}{\square} \end{array} + \begin{array}{|c|c|}\hline \textcolor{purple}{\square} & \textcolor{purple}{\square} \end{array} = \begin{array}{|c|c|c|c|}\hline \textcolor{purple}{\square} & \textcolor{purple}{\square} & \textcolor{purple}{\square} & \end{array} \\ \frac{3}{9} + \frac{2}{9} = \frac{5}{9} \end{array}$$

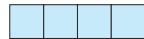
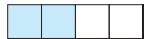
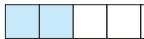
2. Fill in the blanks:

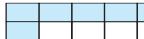
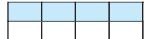
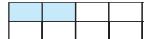
$$\begin{array}{llll} \text{(a)} \frac{2}{7} + \frac{1}{7} = \frac{3}{7} & \text{(b)} \frac{4}{13} + \frac{2}{13} = \frac{6}{13} & \text{(c)} \frac{3}{9} + \frac{4}{9} = \frac{7}{9} & \text{(d)} \frac{2}{6} + \frac{3}{6} = \frac{5}{6} \\ \text{(e)} \frac{3}{11} + \frac{7}{11} = \frac{10}{11} & \text{(f)} \frac{5}{8} + \frac{0}{8} = \frac{5}{8} & \text{(g)} \frac{3}{7} + \frac{1}{7} = \frac{4}{7} & \text{(h)} \frac{4}{17} + \frac{8}{17} = \frac{12}{17} \\ \text{(i)} \frac{5}{19} + \frac{6}{19} = \frac{11}{19} \end{array}$$

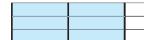
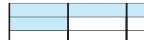
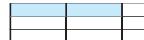
Practice Exercise 7.9
••••••••••••

1. Fill in the blanks:

$$\begin{array}{rcl} \text{(a)} \begin{array}{|c|c|c|}\hline \textcolor{lightblue}{\square} & \textcolor{lightblue}{\square} & \textcolor{lightblue}{\square} \end{array} - \begin{array}{|c|c|c|}\hline \textcolor{lightblue}{\square} & & \end{array} = \begin{array}{|c|c|c|}\hline \textcolor{lightblue}{\square} & & \end{array} \\ \frac{2}{3} - \frac{1}{3} = \frac{1}{3} \end{array}$$

(b)  -  = 
 $\frac{4}{6}$ - $\frac{2}{6}$ = $\frac{2}{6}$

(c)  -  = 
 $\frac{6}{10}$ - $\frac{4}{10}$ = $\frac{2}{10}$

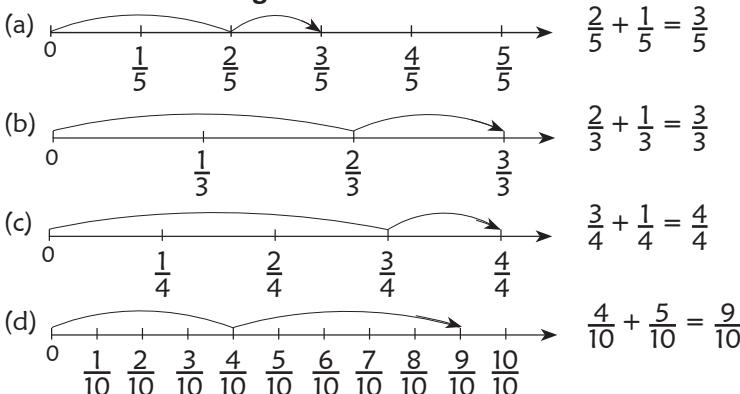
(d)  -  = 
 $\frac{6}{9}$ - $\frac{4}{9}$ = $\frac{2}{9}$

2. Fill in the blanks:

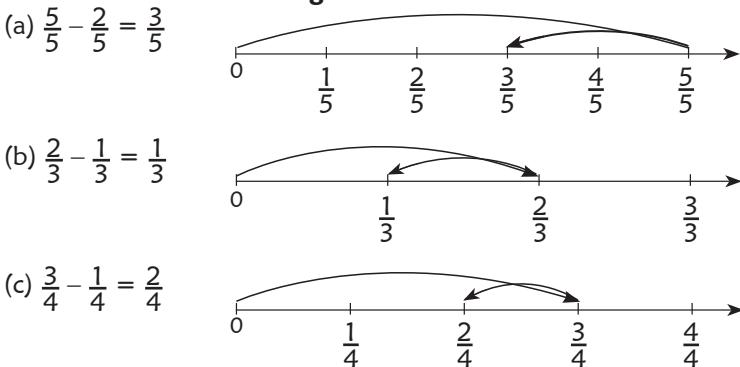
(a) $\frac{6}{7} - \frac{4}{7} = \frac{2}{7}$ (b) $\frac{7}{9} - \frac{5}{9} = \frac{2}{9}$ (c) $\frac{6}{17} - \frac{4}{17} = \frac{2}{17}$ (d) $\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$ (e) $\frac{3}{8} - \frac{1}{8} = \frac{2}{8}$ (f) $\frac{5}{7} - \frac{4}{7} = \frac{1}{7}$ (g) $\frac{5}{15} - \frac{1}{15} = \frac{4}{15}$ (h) $\frac{4}{16} - \frac{3}{16} = \frac{1}{16}$ (i) $\frac{14}{17} - \frac{10}{17} = \frac{4}{17}$

Practice Exercise 7.10
 •••••••••••••••

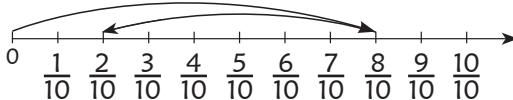
1. Add the following on the number line:



2. Subtract the following on the number line:



$$(d) \frac{8}{10} - \frac{6}{10} = \frac{2}{10}$$



Practice Exercise 7.11

1. Total mark = 20

Kanishka got marks = 17

Fraction of marks get by Kanishka = $\frac{17}{20}$

2. Yash had toffees = 6

Yash ate $\frac{1}{2}$ of toffees = $\frac{1}{2} \times 6 = 3$ toffees

So, Yash ate 3 toffees.

3. A book containing pages = 33

Aditi read pages = 23

Fraction of the book did Aditi read = $\frac{23}{33}$

4. Sunny ate the cake = $\frac{3}{8}$

Manny ate the cake = $\frac{2}{8}$

Who ate more = $\frac{3}{8} - \frac{2}{8} = \frac{1}{8}$

Sunny ate $\frac{1}{8}$ more of the cake.

5. Vandu completed her work = $\frac{3}{5}$

Vinni completed her work = $\frac{3}{4}$

who completed more work = $\frac{3}{4} - \frac{3}{5} = \frac{15-12}{20} = \frac{3}{20}$

Vinni completed $\frac{3}{20}$ more work.

6. Alisha ran = $\frac{1}{4}$ of the field

then she ran = $\frac{2}{4}$ of the field

So, How much ran by Alisha = $\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$

Mental math zone

1. Complete the table:

(a)	$\frac{1}{2}$ of 12 = $12 \div 2 = 6$	(b)	$\frac{1}{2}$ of 16 = $16 \div 2 = 8$
-----	---------------------------------------	-----	---------------------------------------

(c)	$\frac{1}{3}$ of 18 = $18 \div 3 = 6$	(d)	$\frac{1}{3}$ of 39 = $39 \div 3 = 13$
(e)	$\frac{1}{5}$ of 35 = $35 \div 5 = 7$	(f)	$\frac{1}{3}$ of 45 = $45 \div 3 = 15$
(g)	$\frac{1}{5}$ of 70 = $70 \div 5 = 14$	(h)	$\frac{1}{2}$ of 30 = $30 \div 2 = 15$
(i)	$\frac{1}{4}$ of 32 = $32 \div 4 = 8$	(j)	$\frac{1}{6}$ of 66 = $66 \div 6 = 11$

2. Complete the table:

	Fraction	Fractional numbers	Fraction	Fractional number
(a)	$\frac{3}{5}$	three - fifths	(e) $\frac{11}{20}$	eleven - twentieths
(b)	$\frac{2}{9}$	two - ninths	(f) $\frac{3}{13}$	three - thirteenths
(c)	$\frac{5}{6}$	five - sixths	(g) $\frac{8}{17}$	eight - seventeenths
(d)	$\frac{7}{8}$	seven - eights	(h) $\frac{4}{7}$	four - sevenths

3. Compare the fraction by using <, >, or =.

(a) $\frac{7}{11} > \frac{3}{11}$ (b) $\frac{1}{6} < \frac{1}{5}$ (c) $\frac{7}{13} = \frac{7}{13}$ (d) $\frac{1}{3} < \frac{1}{2}$ (e) $\frac{4}{9} = \frac{4}{9}$ (f) $\frac{7}{19} = \frac{7}{19}$

Multiple Choice Questions MCQs

1. Two-fifths = $\frac{2}{5}$ 2. $\frac{1}{2}$ of 24 = $\frac{1}{2} \times 24 = 12$ 3. Five-ninths = $\frac{5}{9}$
 4. Three-fifths = $\frac{3}{5}$ 5. $\frac{1}{5}$ of 40 = $\frac{1}{5} \times 40 = 8$

Activity wizard

- How many toffees are there in all? = 12

Colour half ($\frac{1}{2}$) of them pink = $\frac{1}{2} \times 12 = 6$

So, colour 6 toffees pink.

- Colour one forth ($\frac{1}{4}$) of them yellow

$$= \frac{1}{4} \times 12 = 3$$

So, colour 3 toffees yellow.

Colour the rest blue.

= Total toffees - (pink + yellow)

$$12 - (6+3)$$

$$12 - 9 = 3$$

So, colour of 3 toffees blue.

- How many toffees are pink ? = 6 toffees
- How many toffees are yellow ? = 3 toffees
- How many toffees are blue ? = 3 toffees

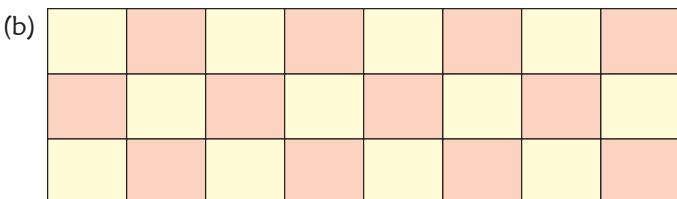
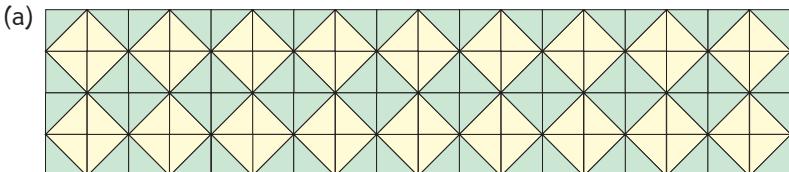
Practice Exercise 8.1

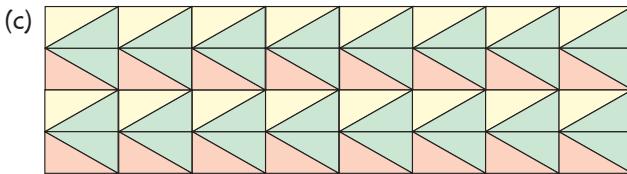
1. Some patterns are given below. Study them carefully and complete them :



Practice Exercise 8.2

1. Colour and the complete the tile pattern:





Practice Exercise 8.3

1. Observe the following number patterns. Extend them in the blanks:

- (a) 20, 22, 24, 26, **28, 30, 32, 34** (b) 2, 6, 3, 9, 4, 12, 5, 15, **6, 18, 7, 21** (c) 60, 55, 50, 45, **40, 35, 30, 25** (d) 1000, 950, 800, 750, **700, 650, 600, 550** (e) 1, 10, 100, 2, 20, 200, **3, 30, 300**

2. Find the rule of the pattern and write the next number:

- (a) 5, 10, 15, 20, 25, **30** (b) 25, 36, 49, 64, 81, **100** (c) 120, 100, 80, 60, 40, **20** (d) 208, 216, 224, 232, 240, **248** (e) ABC, BCD, CDE, DEF, EFG, **FGH**

3. Sum of odd numbers:

- (a) $1 + 3 + 5 + 7 + 9 + 11 = 6 \times 6 = 36$ (b) $1 + 3 + 5 + 7 + 9 + 11 + 13 = 7 \times 7 = 49$ (c) $1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 = 8 \times 8 = 64$ (d) $1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 = 9 \times 9 = 81$

Mental math zone

1. Continue the pattern:

- (a) (b) (c)

- (d) + - +

2. Continue the pattern:

- (a) 9, 11, 13 (b) 50, 60, 70 (c) 35, 40, 45 (d) 10, 5, 0 (e) 60, 50, 40

3. Think and continue the pattern:

- | | | | | |
|---------|-----|-----|-----|-----|
| (a) 100 | 150 | (b) | 100 | 99 |
| 200 | 250 | | 200 | 199 |
| 300 | 350 | | 300 | 299 |
| 400 | 450 | | 400 | 399 |

4. Complete the following patterns:

- (a) 10 (b) 13 (c) 32 (d) 45 (e) 100

5. Look at the patterns and complete the series:

- (a) (b) (c)

Multiple Choice Questions



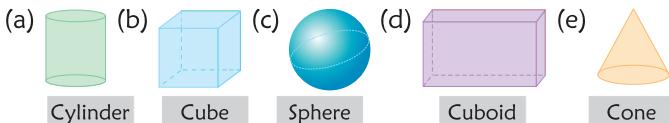
2. $66 + 1 = 67; 67 \times 2 = 134$



Practice Exercise 9.1

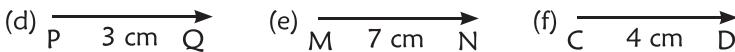
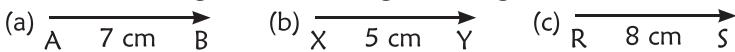
1. do yourself 2. do yourself 3. Count the different shapes and write in the space given: circle 9; Rectangle 9; Squares 2; Triangles 7

4. Match the 3-D or solid shapes to their names:



Practice Exercise 9.2

1. Draw line segments of the given length:



(i) longest segment = \overline{RS} = 8 cm (ii) Shortest segment = \overline{PQ} = 3 cm

2. Measure the length of live segments with the help of a ruler:

(a) $\overline{MN} = 4.5$ cm (b) $\overline{PQ} = 4$ cm (c) $\overline{AB} = 6.5$ cm (d) $\overline{XY} = 4.5$ cm

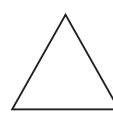
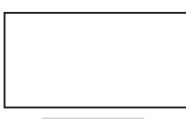
3. Measure the length of the sides of the given figure:

(a) $\overline{AB} = 3$ cm, $\overline{BC} = 1.5$ cm, $\overline{CD} = 4.5$ cm, $\overline{DA} = 2.5$ cm (b) $\overline{XY} = 3$ cm, $\overline{YZ} = 3.5$ cm, $\overline{ZX} = 3$ cm

Practice Exercise 9.3

1. Fill in the blanks:

(a) no (b) triangle (c) rectangle (d) equal (e) 4 (f) no, no (g) triangle (h) 4



3. Count and write:

(a) 8 (b) 12

Practice Exercise 9.4

Write the name of the shape it resembles. Label the surface plane or curved :

(a) Name— **sphere**, surface— **curved** surface (b) Name— **cone**, surface

curved surface (c) Name— **cuboid**, surface— **plane surface** (d)
 Name— **cube**, surface— **plane surface** (e) Name— **cuboid**, surface
plane surface (f) Name— **cylinder**, surface **curved surface**.

Mental math zone

Complete the table:

S.N.	Object	Number of Faces	Number of Edges	Number of Vertices
(a)		6	12	8
(b)		1	—	—
(c)		3	2	—
(d)		6	12	8
(e)		2	1	1
(f)		2	1	1

Multiple Choice Questions MCQs

1. 4 2. cone 3. cube 4. cylinder.

Practice Exercise 10.1

Fill in the blanks:

- (a) metre (b) metre (c) metre (d) centimetre (e) centimetre
 (f) kilometre (g) 1000.

Practice Exercise 10.2

1. (a) 3 cm (b) 7 cm (c) 6 cm (d) 6 cm

Practice Exercise 10.3

Note – 1 m = 100 cm.

1. (a) $7 \text{ m} = 7 \times 100 = 700 \text{ cm}$ (b) $15 \text{ m} = 15 \times 100 = 1500 \text{ cm}$
 (c) $33 \text{ m} = 33 \times 100 = 3300 \text{ cm}$ (d) $45 \text{ m} = 45 \times 100 = 4500 \text{ cm}$
 (e) $5 \text{ m } 19 \text{ cm} = (5 \times 100 + 19) = (500 + 19) = 519 \text{ cm}$ (f) $18 \text{ m } 20 \text{ cm} = (18 \times 100 + 20) \text{ cm} = (1800 + 20) \text{ cm} = 1820 \text{ cm}$.

2. Change into M:

Note – 1 km = 1000 m.

- (a) 5 km = 5×1000 m = 5000 m (b) 7 km = 7×1000 m = 7000 m
(c) 9 km = 9×1000 m = 9000 m (d) 8 km = 8×1000 m = 8000 m
(e) 6 km 16 m = $(6 \times 1000 + 16)$ m = $(6000 + 16)$ m = 6016 m
(f) 8 km 315 m = $(8 \times 1000 + 315)$ m = $8000 + 315$ = 8315 m

3. Change into M and Cm:

- (a) 528 cm = 5 m 28 cm (b) 346 cm = 3 m 46 cm (c) 683 cm = 6 m 83 cm (d) 7532 cm = 75 m 32 cm (e) 5135 cm = 51 cm 35 cm (f) 8765 cm = 87 m 65 cm.

4. Change into Km and M:

- (a) 1234 m = 1 km 234 m (b) 3812 = 3 km 812 m (c) 8603 m = 8 km 603 m (d) 4500 m = 4 km 500 m (e) 8355 m = 8 km 355 m (f) 9769 m = 9 km 769 m

Practice Exercise 10.4

1. Add:

(a)

m	cm
<input type="text"/>	<input type="text"/>
42	21
+ 32	35
74 56	

(b)

m	cm
<input type="text"/> 11	<input type="text"/> 1
78	19
+ 22	88
101 07	

(c)

m	cm
<input type="text"/>	<input type="text"/>
234	36
+ 23	40
257 76	

(d)

km	m
<input type="text"/>	<input type="text"/>
50	114
+ 3	214
53 328	

(e)

km	m
<input type="text"/> 11	<input type="text"/> 1
28	337
+ 11	817
40 154	

(f)

km	cm
<input type="text"/> 1	<input type="text"/> 11
39	276
+ 28	424
67 700	

Practice Exercise 10.5

1. Subtract:

(a)

m	cm
<input type="text"/> 2 <input type="text"/> 17	<input type="text"/> 11 <input type="text"/> 18
3 8	2 8
- 1 8	7 9
1 9 4 9	

(b)

m	cm
<input type="text"/> 5 <input type="text"/> 12	<input type="text"/> 12 <input type="text"/> 17
6 3	3 7
- 2 6	8 8
3 6 4 9	

(c)

m	cm
<input type="text"/> 6 <input type="text"/> 15	<input type="text"/> 9 <input type="text"/> 10
7 6	0 0
- 2 8	9 9
4 7 0 1	

(d)	km	m
	8	15 15 16
	9	6 6 6
-	5	7 8 7
	3	8 7 9

(e)	km	cm
	7	11 12 14
	8	2 3 4
-	5	5 6 7
	2	6 6 7

(f)	km	m
	5	9 9 13
	6	0 0 3
-	2	1 3 4
	3	8 6 9

Practice Exercise 10.6

		m	cm
1. Length of the yellow ribbon	=	35	60
Length of the blue ribbon	=	+ 23	29
Total length of the ribbon	=	58	89

Hence, the total length of the ribbon bought by Sara is 58 m 89 cm.

$$\begin{array}{rcl}
 \text{2. Rohan covered the distance to the market} & = & 3\ 6\ 7 \text{ m} \\
 \text{Rohan covered the distance to the market from his home} & = & +\ 3\ 6\ 7 \text{ m} \\
 \text{Total distance covered by Rohan} & = & \hline
 & & 7\ 3\ 4 \text{ m}
 \end{array}$$

So, the total length covered by Rohan = 734 m.

		m	cm
	=		1
3. A tailor made 1st curtain	=	2	4 3
A tailor made 2nd curtain	=	4	1 1
A tailor made 3rd curtain	=	+ 5	1 9
Total length of all the 3 curtains	=	11	7 3

Hence, the total length of all 3 curtains is 11 m 73 cm.

	m	cm
4. Total length of the ribbon	=	8 7 3 1
Total length of the ribbon used	=	<u>- 4 3 2 1</u>
Length of the ribbon left	=	4 4 1 0

Hence, the length of the ribbon left is 44 m 10 cm.

		m	cm
		2	15
5. Length of the cloth	=	2 9	3 5
Cloth used for making curtain	=	— 2 1	1 9
Length of the cloth left	=	8	1 6

Hence, the length of the cloth left with Rita is 8 m 16 cm.

	m	cm
	6	14
6. The length of the thread	= 9 7	7 4
Length of used thread	= - 5 6	3 8
Length of the thread left	= <hr/> 4 1	3 6

Hence, the length of the thread left with tailor is 41 m 36 cm.

Mental math zone

1. Complete the following:

- (a) 848 cm (b) 5 km 700 m (c) 7 m 80 cm (d) 6470 m

2. Do it yourself.

3. Write the correct symbol (a) < (b) < (c) = (d) > (e) < (f) < (g)
= (h) < (i) = (j) =

Multiple Choice Questions MCQs

1. None of these 2. 8560 cm 3. km

Practice Exercise 11.1

1. Measure the weight of the following items using non-standard units:

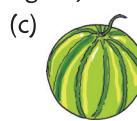
- (a) 12 balls (b) 9 pencil 2. Do yourself 3. Which Unit of weight (kg or g) is to be used for the following objects.



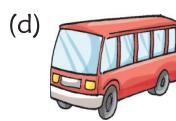
g



g



kg



kg

4. Circle the most suitable answer:

- (a) 750 g (b) 10 kg (c) 50 g (d) 12 kg

Practice Exercise 11.2

1. Convert kilograms into grams:

Note – 1 kilogram (kg) = 1000 grams (g); To convert kg in g, we multiply by 1000.

- (a) 6 kg = $6 \times 1000 = 6000$ g (b) 5 kg = $5 \times 1000 = 5000$ g. (c) 4 kg = $4 \times 1000 = 4000$ g. (d) 9 kg = $9 \times 1000 = 9000$ g. (e) 2 kg 923 g = $(2 \times 1000 + 923)$ g = $(2000 + 923)$ g = 2923 g. (f) 3 kg 436 g = $(3 \times 1000 + 436)$ g = $(3000 + 436)$ g = 3436 g. (g) 4 kg 111 g = $(4 \times 1000 + 111)$ g = $(4000 + 111)$ g = 4111 g. (h) 5 kg 320 g = $(5 \times 1000 + 320)$ g = $(5000 + 320)$ g = 5320 g. (i) 2 kg 253 g = $(2 \times 1000 + 253)$ g = $(2000 + 253)$ g = 2253 g. (j) 3 kg 85 g = $(3 \times 1000 + 85)$ g = $(3000 + 85)$ g = 3085 g. (k) 4 kg 27 g =

$$(4 \times 1000 + 27) \text{ g} = (4000 + 27) \text{ g} = 4027 \text{ g.}$$

$$(\text{l}) 5 \text{ kg } 476 \text{ g} = (5 \times 1000 + 476) \text{ g} = (5000 + 476) \text{ g} = 5476 \text{ g.}$$

2. Convert grams into kilograms:

Note – To convert g into kg, we divided by 1000.

$$(\text{a}) 5000 \text{ g} = (5000 \div 1000) \text{ kg} = 5 \text{ kg}$$

$$(\text{b}) 6000 \text{ g} = (6000 \div 1000) \text{ kg} = 6 \text{ kg}$$

$$(\text{c}) 7000 \text{ g} = (7000 \div 1000) \text{ kg} = 7 \text{ kg}$$

$$(\text{d}) 3000 \text{ g} = (3000 \div 1000) \text{ kg} = 3 \text{ kg}$$

$$(\text{e}) 3700 \text{ g} = (3700 \div 1000) \text{ kg} \rightarrow$$

$$= 3 \text{ kg } 700 \text{ g.}$$

$$\begin{array}{r} 3 \\ 1000) 3\ 7\ 0\ 0 \\ \underline{-}\ 3\ 0\ 0\ 0 \\ \hline 7\ 0\ 0 \end{array}$$

$$(\text{f}) 3794 \text{ g} = (3794 \div 1000) \text{ kg} \rightarrow$$

$$= 3 \text{ kg } 794 \text{ g.}$$

$$\begin{array}{r} 3 \\ 1000) 3\ 7\ 9\ 4 \\ \underline{-}\ 3\ 0\ 0\ 0 \\ \hline 7\ 9\ 4 \end{array}$$

$$(\text{g}) 1329 \text{ g} = (1329 \div 1000) \text{ kg} \rightarrow$$

$$= 1 \text{ kg } 329 \text{ g.}$$

$$\begin{array}{r} 1 \\ 1000) 1\ 3\ 2\ 9 \\ \underline{-}\ 1\ 0\ 0\ 0 \\ \hline 3\ 2\ 9 \end{array}$$

$$(\text{h}) 4743 = (4743 \div 1000) \text{ kg} \rightarrow$$

$$= 4 \text{ kg } 743 \text{ g}$$

$$\begin{array}{r} 4 \\ 1000) 4\ 7\ 4\ 3 \\ \underline{-}\ 4\ 0\ 0\ 0 \\ \hline 7\ 4\ 3 \end{array}$$

$$(\text{i}) 4003 \text{ g} = (4003 \div 1000) \text{ kg} \rightarrow$$

$$4 \text{ kg } 3 \text{ g.}$$

$$\begin{array}{r} 4 \\ 1000) 4\ 0\ 0\ 3 \\ \underline{-}\ 4\ 0\ 0\ 0 \\ \hline 3 \end{array}$$

$$(\text{j}) 2886 \text{ g} = (2886 \div 1000) \text{ kg} \rightarrow$$

$$= 2 \text{ kg } 886 \text{ g.}$$

$$\begin{array}{r} 2 \\ 1000) 2\ 8\ 8\ 6 \\ \underline{-}\ 2\ 0\ 0\ 0 \\ \hline 8\ 8\ 6 \end{array}$$

$$(\text{k}) 2248 = (2248 \div 1000) \text{ kg} \rightarrow$$

$$2 \text{ kg } 248 \text{ g}$$

$$\begin{array}{r} 2 \\ 1000) 2\ 2\ 4\ 8 \\ \underline{-}\ 2\ 0\ 0\ 0 \\ \hline 2\ 4\ 8 \end{array}$$

(l) $5476 \text{ g} = (5476 \div 1000) \text{ kg} \rightarrow$
 $= 5 \text{ kg } 476 \text{ g.}$

$$\begin{array}{r} 5 \\ 1000) 5\ 4\ 7\ 6 \\ \underline{5\ 0\ 0\ 0} \\ 4\ 7\ 6 \\ \underline{\times} \end{array}$$

Practice Exercise 11.3

1. Add the following:

(a)

kg	g
<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
66	3 4 4
+ 21	2 4 2
87 5 8 6	

(b)

kg	g
<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
35	6 2 6
+ 13	2 6 9
48 8 9 5	

(c)

kg	g
<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
26	8 2 5
+ 63	1 4 3
89 9 6 8	

(d)

kg	g
<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
36	8 1 1
+ 43	1 5 9
79 9 7 0	

(e)

kg	g
<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
73	4 8 3
+ 29	2 9 2
102 7 7 5	

(f)

kg	g
<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
65	2 8 5
+ 16	4 9 3
81 7 7 8	

2. Subtract the following:

(a)

kg	g
<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
60	4 7 8
- 30	2 5 5
30 2 2 3	

(b)

kg	g
<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
65	8 3 3
- 24	1 1 2
41 7 2 1	

(c)

kg	g
<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
614	6 12
74	4 7 2
- 46	2 3 8
28 2 3 4	

(d)

kg	g
<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
213	5 14
33	6 4 8
- 16	3 5 4
17 2 9 4	

(f)

kg	g
<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
517	12 9 13
68	3 0 3
- 29	9 2 5
38 3 7 8	

(g)

kg	g
<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
614	5 12 12
74	6 3 2
- 39	1 8 5
35 4 4 7	

Practice Exercise 11.4

	kg	g
	<input type="text" value="1"/>	
1. Mother bought potatoes	= 5	6 3 2
mother bought tomatoes	= + 4	4 3 4
Total weight of vegetable	= <u>10</u>	<u>0 6 6</u>

Hence, the total weight of vegetable bought by mother is 10 kg 066 g.

	kg	g
	<input type="text" value="1"/>	<input type="text" value="1"/> <input type="text" value="1"/>
2. Riya carries books weighing	= 2	5 0 3
Riya carries note book weighing	= 3	2 4 9
Riya carries pencil box weighing	= +	4 5 0
Total weight of the bag	= <u>6</u>	<u>2 0 2</u>

Hence, Riya carries total weight of the bag is 6 kg 202 g.

	kg	g
	<input type="text" value="1"/>	
3. Navin bought atta	= 2	3 0 0
Navin bought maida	= 7	4 0 0
Navin bought dal	= + 6	3 7 5
	<u>16</u>	<u>0 7 5</u>

Navin, bought total weight of things 16 kg 075 g.

	kg	g
	<input type="text" value=""/>	<input type="text" value=""/>
4. A fruit seller has orange	= 6 5	5 0 0
A fruit seller has spoiled orange	= - 3 5	1 2 5
weight of good orange	= <u>3 0</u>	<u>3 7 5</u>

Hence, the fruits seller had good oranges is 30 kg 375 g.

	kg	g
	<input type="text" value=""/>	<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/>
5. Rahul weight	→ = 6 5	7 5 0
Yash weight	→ = - 5 4	2 5 0
	<u>= 1 1</u>	<u>5 0 0</u>

So, Rahul weight more than Yash 11 Kg 500 g.

Mental math zone

1. Which Unit of weight (kg or g) is to be used for the following objects:

(a) kg (b) g (c) g (d) g 2. Write <, > or =. (a) > (b) = (c) = (d) <

3. Fill in the boxes:

- (a) 7 kg (b) 6 kg 745 g (c) 1740 g (d) o (e) 500 g.

Multiple Choice Questions MCQs

1. 2050 g 2. kilogram 3. 5 kg.

Activity Wizard

Arrange the following according to their weights in ascending and descending order.

Ascending order – 15 g, 150 g, 300 g, 2 kg, 9 kg.

Descending order – 9 kg, 2 kg, 300 g, 150 g, 15 g.

Practice Exercise 12.1

1. Convert litres into millilitres:

Note – 1 litre (l) = 1000 millilitres

To convert l into ml, we multiply by 1000.

- (a) $3 \text{ l} = 3 \times 1000 = 3000 \text{ ml}$ (b) $4 \text{ l} = 4 \times 4000 = 4000 \text{ ml}$
(c) $7 \text{ l} = 7 \times 1000 = 7000 \text{ ml}$ (d) $9 \text{ l} = 9 \times 1000 = 9000 \text{ ml}$
(e) $6 \text{ l } 430 \text{ ml} = (6 \times 1000 + 430) \text{ ml} = (6000 + 430) \text{ ml} = 6430 \text{ ml}$
(f) $3 \text{ l } 175 \text{ ml} = (3 \times 1000 + 175) \text{ ml} = (3000 + 175) \text{ ml} = 3175 \text{ ml}$
(g) $6 \text{ l } 224 \text{ ml} = (6 \times 1000 + 224) \text{ ml} = (6000 + 224) \text{ ml} = 6224 \text{ ml}$
(h) $8 \text{ l } 625 \text{ ml} = (8 \times 1000 + 625) \text{ ml} = (8000 + 625) \text{ ml} = 8625 \text{ ml}$
(i) $4 \text{ l } 187 \text{ ml} = (4 \times 1000 + 187) \text{ ml} = (4000 + 187) \text{ ml} = 4187 \text{ ml}$
(j) $9 \text{ l } 256 \text{ ml} = (9 \times 1000 + 256) \text{ ml} = (9000 + 256) \text{ ml} = 9256 \text{ ml}$
(k) $2 \text{ l } 25 \text{ ml} = (2 \times 1000 + 25) \text{ ml} = (2000 + 25) \text{ ml} = 2025 \text{ ml}$
(l) $3 \text{ l } 87 \text{ ml} = (3 \times 1000 + 87) \text{ ml} = (3000 + 87) \text{ ml} = 3087 \text{ ml}$

2. Convert millilitres into litres:

Note – convert ml into l, we divide by 1000

- (a) $1000 \text{ ml} = (1000 \div 1000) \text{ l} = 1 \text{ l}$ (b) $6000 \text{ ml} = (6000 \div 1000) \text{ l} = 6 \text{ l}$
(c) $2000 \text{ ml} = (2000 \div 1000) \text{ l} = 2 \text{ l}$ (d) $8000 \text{ ml} = (8000 \div 1000) \text{ l} = 8 \text{ l}$

(e) $7900 \text{ ml} = (7900 \div 1000) \text{ l} \rightarrow$
 $= 7 \text{ l } 900 \text{ ml}$

$$\begin{array}{r} 7 \\ 1000) 7\ 9\ 0\ 0 \\ \underline{-}\ 7\ 0\ 0\ 0 \\ \underline{\underline{9\ 0\ 0}} \end{array}$$

(f) $8460 \text{ ml} = (8460 \div 1000) \text{ l} \rightarrow$
 $= 8 \text{ l } 460 \text{ ml}$

$$\begin{array}{r} 8 \\ 1000) 8\ 4\ 6\ 0 \\ \underline{-}\ 8\ 0\ 0\ 0 \\ \underline{\underline{4\ 6\ 0}} \end{array}$$

$$(g) 2749 \text{ ml} = (2749 \div 1000) \text{ ml} \rightarrow \\ = 2 \text{ l } 749 \text{ ml}$$

$$\begin{array}{r} 2 \\ 1000 \overline{)2\ 7\ 4\ 9} \\ 2\ 0\ 0\ 0 \\ \hline 7\ 4\ 9 \end{array}$$

$$(h) 3984 \text{ ml} = (3984 \div 1000) \text{ ml} \rightarrow \\ = 3 \text{ l } 984 \text{ ml}$$

$$\begin{array}{r} 3 \\ 1000 \overline{)3\ 9\ 8\ 4} \\ 3\ 0\ 0\ 0 \\ \hline 9\ 8\ 4 \end{array}$$

$$(i) 4053 \text{ l } (4053 \div 1000) \text{ ml} \rightarrow \\ = 4 \text{ l } 53 \text{ ml}$$

$$\begin{array}{r} 4 \\ 1000 \overline{)4\ 0\ 5\ 3} \\ 4\ 0\ 0\ 0 \\ \hline 5\ 3 \end{array}$$

$$(j) 9011 \text{ ml} = (9011 \div 1000) \text{ ml} \rightarrow \\ = 9 \text{ l } 11 \text{ ml}$$

$$\begin{array}{r} 9 \\ 1000 \overline{)9\ 0\ 1\ 1} \\ 9\ 0\ 0\ 0 \\ \hline 1\ 1 \end{array}$$

$$(k) 7009 \text{ ml} = (7009 \div 1000) \text{ ml} \rightarrow \\ = 7 \text{ l } 9 \text{ ml}$$

$$\begin{array}{r} 7 \\ 1000 \overline{)7\ 0\ 0\ 9} \\ 7\ 0\ 0\ 0 \\ \hline 9 \end{array}$$

$$(l) 2005 \text{ ml} = (2005 \div 1000) \text{ ml} \rightarrow \\ = 2 \text{ l } 5 \text{ ml}$$

$$\begin{array}{r} 2 \\ 1000 \overline{)2\ 0\ 0\ 5} \\ 2\ 0\ 0\ 0 \\ \hline 5 \end{array}$$

Practice Exercise 12.2

1. Add:

$$(a) \begin{array}{r} l \quad \text{ml} \\ 16 \quad 354 \\ + 22 \quad 123 \\ \hline 38 \quad 477 \end{array}$$

$$(b) \begin{array}{r} l \quad \text{ml} \\ 13 \quad 375 \\ + 53 \quad 612 \\ \hline 66 \quad 987 \end{array}$$

$$(c) \begin{array}{r} l \quad \text{ml} \\ 26 \quad 740 \\ + 43 \quad 258 \\ \hline 69 \quad 998 \end{array}$$

<i>l</i>	<i>ml</i>
1	1
54	096
+ 27	143
81	239

<i>l</i>	<i>ml</i>
1	1
46	723
+ 24	138
70	861

<i>l</i>	<i>ml</i>
28	934
+ 16	249
45	183

2. Subtraction:

<i>l</i>	<i>ml</i>
4 15	3 13
55	743
- 29	307
26	436

<i>l</i>	<i>ml</i>
8 17	3 15 14
97	464
- 59	178
38	286

<i>l</i>	<i>ml</i>
3 13	7 9 10
43	800
- 16	387
27	413

Practice Exercise 12.3

<i>l</i>	<i>ml</i>
1	

1. Ananya purchased coconut oil = 1 8 8 3 4

Ananya purchased ground nut = + 3 1 5 3

Total oil purchased = 2 1 9 8 7

Hence, the total oil purchased by Ananya is 21 l 987 ml

<i>l</i>	<i>ml</i>
1	1

2. A cow gives milk in the morning = 1 4 6 2 8

A cow gives milk in the evening = + 1 3 1 7 6

Total milk in a day = 2 7 8 0 4

Hence, Total milk does it give in a day = 27 l 804 ml

<i>l</i>	<i>ml</i>
1	1

3. Ajay brought papsi = 4 2 7 0

Ajay brought mirinda = 2 3 0 0

Ajay brought limca = + 1 8 3 0

Total quantity of cold drinks = 8 4 0 0

Hence, Total quantity of cold drinks bought by Ajay is 8 l 400 ml.

<i>l</i>	<i>ml</i>
6	14 10

4. Total cough syrup = 7 5 0

cough syrup used = - 2 7 5

syrup left in bottle = 4 7 5

Hence, syrup left in medicine bottle is 475 ml.

$$\begin{array}{rcl}
 & \begin{array}{c} l \\ ml \end{array} & \\
 & \boxed{1} \boxed{17} & \boxed{2} \boxed{16} \\
 \text{5. Total petrol in car} & = & 2 \ 7 \quad 5 \ 3 \ 6 \\
 \text{petrol used in the Journey} & = & - 1 \ 9 \quad 2 \ 1 \ 7 \\
 \text{petrol left} & = & \underline{0 \ 8 \quad 3 \ 1 \ 9}
 \end{array}$$

Hence, the petrol left in car is 8 l 319 ml.

$$\begin{array}{rcl}
 & \begin{array}{c} l \\ ml \end{array} & \\
 & \boxed{15} & \boxed{6} \boxed{4} \boxed{10} \\
 \text{6. A bucket capacity} & = & 15 \quad 7 \ 5 \ 0 \\
 \text{Another bucket capacity} & = & - 9 \quad 3 \ 7 \ 5 \\
 \text{How much more capacity} & = & \underline{6 \quad 3 \ 7 \ 5}
 \end{array}$$

Hence, 6 l 375 ml more capacity of the big bucket.

Mental math zone

1. Which Unit of capacity (l, ml) to be used for the following objects:

(a) ml (b) l (c) ml (d) ml

2. Write <, > or =: (a) = (b) > (c) = (d) <

3. Fill in the boxes:

(a) 300 ml (b) 11 l 180 ml (c) 6500 ml (d) 6 l 570 ml

Multiple Choice Questions MCQs

1. Millilitre 2. 1500 ml 3. 1 l 4. 500 ml

Practice Exercise 13.1

Complete the table:

(a)		₹ 25	Twenty five rupees
(b)		₹ 30.50	Thirty rupees fifty paise
(c)		₹ 130	One hundred thirty rupees
(d)		₹ 2502	Two thousand five hundred and two rupees
(e)		₹ 170.50	One hundred seventy rupees fifty paise

Practice Exercise 13.2

1. Convert into paise:

Note – 1 Re = 100 paise.

Convert rupees into paise, we multiply the rupees by 100

(a) ₹ 14 = $14 \times 100 = 1400$ p (b) ₹ 17.25 = $17 \times 100 + 25 = 1700$

$+ 25 = 1725$ p (c) ₹ 7.75 = $7 \times 100 + 75 = 700 + 75 = 775$ p
 (d) ₹ 55.50 = $55 \times 100 + 50 = 5500 + 50 = 5550$ p (e) ₹ 46 = $46 \times 100 = 4600$ p (f) ₹ 89.65 = $89 \times 100 + 65 = 8900 + 65 = 8965$ p
 (g) ₹ 200 = $200 \times 100 = 20000$ p (h) ₹ 425.75 = $425 \times 100 + 75 = 42500 + 75 = 42575$ p (i) ₹ 19.75 = $19 \times 100 + 75 = 1900 + 75 = 1975$ p

2. Convert into rupees and paise:

Note – count 2 numbers to the left and put a dot to separate rupees and paise

(a) 156 p = ₹ 1.56 (b) 290 p = ₹ 2.90 (c) 3980 p = ₹ 39.80 (d) 455 p = ₹ 4.55 (e) 1775 p = ₹ 17.75 (f) 8750 p = ₹ 87.50 (g) 760 p = ₹ 7.60 (h) 2600 p = ₹ 26.00 (i) 2575 p = ₹ 25.75

Practice Exercise 13.3

1. Add the following:

(a)	<table border="1"> <tr><td>₹ 42</td><td>.</td><td>60</td></tr> <tr><td>+ ₹ 36</td><td>.</td><td>30</td></tr> <tr><td>₹ 78</td><td>.</td><td>90</td></tr> </table>	₹ 42	.	60	+ ₹ 36	.	30	₹ 78	.	90	(b)	<table border="1"> <tr><td>1</td><td>1</td></tr> <tr><td>₹ 96</td><td>.</td><td>75</td></tr> <tr><td>+ ₹ 74</td><td>.</td><td>40</td></tr> <tr><td>₹ 171</td><td>.</td><td>15</td></tr> </table>	1	1	₹ 96	.	75	+ ₹ 74	.	40	₹ 171	.	15	(c)	<table border="1"> <tr><td>₹ 200</td><td>.</td><td>15</td></tr> <tr><td>+ ₹ 65</td><td>.</td><td>33</td></tr> <tr><td>₹ 265</td><td>.</td><td>48</td></tr> </table>	₹ 200	.	15	+ ₹ 65	.	33	₹ 265	.	48					
₹ 42	.	60																																					
+ ₹ 36	.	30																																					
₹ 78	.	90																																					
1	1																																						
₹ 96	.	75																																					
+ ₹ 74	.	40																																					
₹ 171	.	15																																					
₹ 200	.	15																																					
+ ₹ 65	.	33																																					
₹ 265	.	48																																					
(d)	<table border="1"> <tr><td>1</td><td>1</td></tr> <tr><td>₹ 450</td><td>.</td><td>92</td></tr> <tr><td>+ ₹ 39</td><td>.</td><td>65</td></tr> <tr><td>₹ 490</td><td>.</td><td>57</td></tr> </table>	1	1	₹ 450	.	92	+ ₹ 39	.	65	₹ 490	.	57	(e)	<table border="1"> <tr><td>1</td></tr> <tr><td>₹ 960</td><td>.</td><td>00</td></tr> <tr><td>+ ₹ 49</td><td>.</td><td>00</td></tr> <tr><td>₹ 1009</td><td>.</td><td>00</td></tr> </table>	1	₹ 960	.	00	+ ₹ 49	.	00	₹ 1009	.	00	(f)	<table border="1"> <tr><td>1</td><td>1</td></tr> <tr><td>₹ 752</td><td>.</td><td>58</td></tr> <tr><td>+ ₹ 36</td><td>.</td><td>47</td></tr> <tr><td>₹ 789</td><td>.</td><td>05</td></tr> </table>	1	1	₹ 752	.	58	+ ₹ 36	.	47	₹ 789	.	05		
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+ ₹ 36	.	47																																					
₹ 789	.	05																																					
(g)	<table border="1"> <tr><td>1</td><td>1</td><td>1</td></tr> <tr><td>₹ 990</td><td>.</td><td>42</td></tr> <tr><td>+ ₹ 39</td><td>.</td><td>70</td></tr> <tr><td>₹ 1030</td><td>.</td><td>12</td></tr> </table>	1	1	1	₹ 990	.	42	+ ₹ 39	.	70	₹ 1030	.	12	(h)	<table border="1"> <tr><td>1</td><td>1</td><td>1</td></tr> <tr><td>₹ 480</td><td>.</td><td>59</td></tr> <tr><td>+ ₹ 58</td><td>.</td><td>62</td></tr> <tr><td>₹ 539</td><td>.</td><td>21</td></tr> </table>	1	1	1	₹ 480	.	59	+ ₹ 58	.	62	₹ 539	.	21	(i)	<table border="1"> <tr><td>1</td></tr> <tr><td>₹ 161</td><td>.</td><td>13</td></tr> <tr><td>+ ₹ 154</td><td>.</td><td>00</td></tr> <tr><td>₹ 315</td><td>.</td><td>13</td></tr> </table>	1	₹ 161	.	13	+ ₹ 154	.	00	₹ 315	.	13
1	1	1																																					
₹ 990	.	42																																					
+ ₹ 39	.	70																																					
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+ ₹ 58	.	62																																					
₹ 539	.	21																																					
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₹ 161	.	13																																					
+ ₹ 154	.	00																																					
₹ 315	.	13																																					

2. Subtract the following:

(a)	<table border="1"> <tr><td>6</td><td>14</td></tr> <tr><td>₹ 75</td><td>.</td><td>63</td></tr> <tr><td>- ₹ 39</td><td>.</td><td>70</td></tr> <tr><td>₹ 35</td><td>.</td><td>93</td></tr> </table>	6	14	₹ 75	.	63	- ₹ 39	.	70	₹ 35	.	93	(b)	<table border="1"> <tr><td>12</td></tr> <tr><td>₹ 120</td><td>.</td><td>15</td></tr> <tr><td>- ₹ 30</td><td>.</td><td>10</td></tr> <tr><td>₹ 90</td><td>.</td><td>05</td></tr> </table>	12	₹ 120	.	15	- ₹ 30	.	10	₹ 90	.	05	(c)	<table border="1"> <tr><td>13</td><td>5</td><td>5</td></tr> <tr><td>₹ 136</td><td>.</td><td>65</td></tr> <tr><td>- ₹ 45</td><td>.</td><td>36</td></tr> <tr><td>₹ 91</td><td>.</td><td>29</td></tr> </table>	13	5	5	₹ 136	.	65	- ₹ 45	.	36	₹ 91	.	29
6	14																																					
₹ 75	.	63																																				
- ₹ 39	.	70																																				
₹ 35	.	93																																				
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₹ 120	.	15																																				
- ₹ 30	.	10																																				
₹ 90	.	05																																				
13	5	5																																				
₹ 136	.	65																																				
- ₹ 45	.	36																																				
₹ 91	.	29																																				

(d)	<table border="1"> <tr><td>3</td><td>10</td></tr> <tr><td>₹ 80</td><td>. 40</td></tr> <tr><td>- ₹ 50</td><td>. 33</td></tr> <tr><td>₹ 30</td><td>. 07</td></tr> </table>	3	10	₹ 80	. 40	- ₹ 50	. 33	₹ 30	. 07
3	10								
₹ 80	. 40								
- ₹ 50	. 33								
₹ 30	. 07								

(e)	<table border="1"> <tr><td>7</td><td>13</td></tr> <tr><td>1</td><td>15</td></tr> <tr><td>₹ 983</td><td>. 25</td></tr> <tr><td>- ₹ 76</td><td>. 18</td></tr> <tr><td>₹ 907</td><td>. 07</td></tr> </table>	7	13	1	15	₹ 983	. 25	- ₹ 76	. 18	₹ 907	. 07
7	13										
1	15										
₹ 983	. 25										
- ₹ 76	. 18										
₹ 907	. 07										

(f)	<table border="1"> <tr><td>3</td><td>17</td><td>2</td></tr> <tr><td>13</td><td></td><td></td></tr> <tr><td>₹ 473</td><td>. 35</td><td></td></tr> <tr><td>- ₹ 82</td><td>. 90</td><td></td></tr> <tr><td>₹ 390</td><td>. 45</td><td></td></tr> </table>	3	17	2	13			₹ 473	. 35		- ₹ 82	. 90		₹ 390	. 45	
3	17	2														
13																
₹ 473	. 35															
- ₹ 82	. 90															
₹ 390	. 45															

Practice Exercise 13.4

.....

[6] [10]

1. Sam had

$$= ₹ 9 \ 3 . \ 7 \ 0$$

He spent

$$= - ₹ 4 \ 3 . \ 4 \ 5$$

money is left

$$= \underline{\underline{₹ 5 \ 0 . \ 2 \ 5}}$$

Hence, money left with sam is ₹ 50.25.

[7] [17]

2. Reena gave money to the shop keeper = ₹ 8 7 . 7 5

Reena bought a bag for = - ₹ 3 8 . 2 5

Shopkeeper return the money = ₹ 4 9 . 5 0

Hence, Shopkeeper return the money to Reena is ₹ 49.50

[6] [14] [4] [10]

3. Raman had total money = ₹ 7 4 . 5 0

He spend = - ₹ 1 9 . 2 5

How much money left = ₹ 5 5 . 2 5

Hence, money is left with Raman is ₹ 55.25

4. Neha had in her bank account = ₹ 2 51 . 6 5

She deposited in her account = + ₹ 35 . 3 0

Total money in her account = ₹ 2 86 . 9 5

Hence, total money in Neha account is ₹ 286.95

5. Sharon had in her purse = ₹ 2 2 5

She received from her mother = + ₹ 1 6 7

Total money in her purse = ₹ 3 9 2

Hence, total money in her purse is ₹ 392.

Mental math zone

.....

1. Fill in the boxes with required number of coins or notes

(a) 2 (b) 5, 2 (c) 5

2. Write the following in words

(a) ₹ 74.38 = Seventy four rupees thirty eight paise. (b) 96.03 = Ninety six rupees and three paise.

3. Convert rupees into paise:

- (a) ₹ 7 = $7 \times 100 = 700$ p (b) ₹ 18 = $18 \times 100 = 1800$ p (c) ₹ 64.55 = $64.55 \times 100 = 6455$ p (d) ₹ 93.40 = $93.40 \times 100 = 9340$ p

4. Convert paise into rupees:

- (a) 900 p = ₹ 9.00 (b) 2600 p = ₹ 26.00 (c) 7932 p = ₹ 79.32 (d) 9405 p = ₹ 94.05

Multiple Choice Questions MCQs

1. 10 2. ₹ 25 3. ₹ 8.75 4. ₹ 5.50

Activity Wizard

Mohit's bill

S. N. O	Items	Quantity	Cost per item	Total cost
1.	chocolates	2	₹ 25	₹ $25 \times 2 = ₹ 50$
2.	cake	1	₹ 75	₹ $75 \times 1 = ₹ 75$
3.	cold drinks	2	₹ 45	₹ $45 \times 2 = ₹ 90$
Grand Total				₹ 215

Seena's bill

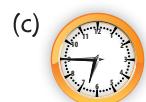
S. N. O	Items	Quantity	Cost per item	Total cost
1.	maggy	2	₹ 20	₹ $20 \times 2 = ₹ 40$
2.	chips	1	₹ 18	₹ $18 \times 1 = ₹ 18$
3.	noodles	2	₹ 35	₹ $35 \times 2 = ₹ 70$
4.	cake	1	₹ 75	₹ $75 \times 1 = ₹ 75$
Grand Total				= ₹ 203

Practice Exercise 14.1

1. Write the time:

- (a) 10 : 00 (b) 10 : 15 (c) 7 : 30 (d) 10 : 50

2. Draw the hand in the clock to indicate the given time.



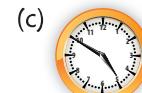
Practice Exercise 14.2

- (a) p.m. (b) a.m. (c) p.m. (d) a.m. (e) p.m. (f) a.m. (g) a.m.

Practice Exercise 14.3

1. (a) 7 : 20 (b) 11 : 40 (c) 5 : 15 (d) 4 : 40 (e) 8 : 15 (f) 2 : 30

2. Draw the hands to indicate the time and also write the time in clouds:



Practice Exercise 14.4

1. Convert into minutes: 1 hour = 60 minutes

Note – convert hours into minutes multiply by 60.

- (a) 8 hours = $8 \times 60 = 480$ minutes (b) 5 hours = $5 \times 60 = 300$ min
(c) 15 hours = $15 \times 60 = 900$ min (d) 4 hours = 45 minutes =
 $(4 \times 60 + 45)$ min = $(240 + 45)$ min = 285 min (e) 15 hours 30
minutes = $(15 \times 60 + 30)$ min = $(900 + 30)$ min = 930 min (f) $4\frac{1}{2}$

hours = $(4 \times 60 + 30)$ min = $(240 + 30)$ min = 270 min (g) 19
hours 35 minutes = $(19 \times 60 + 35)$ min = $(1140 + 35)$ min = 1175
min (h) 6 hours 50 minutes = $(6 \times 60 + 50)$ min = $(360 + 50)$ min
= 410 min (i) 17 hours = (17×60) min = 1020 min

Practice Exercise 14.5

1. Convert into hours: Note = 1 day = 24 hours

- (a) 5 days = 5×24 hours = 120 hours (b) 10 days = 10×24 hours
= 240 hours (c) 14 days = 14×24 hours = 336 hours (d) 25 days =
 25×24 hours = 600 hours (e) 7 days 3 hours = $(7 \times 24 + 3)$ hours
= $(168 + 3)$ hours = 171 hours. (f) 8 days 5 hours = $(8 \times 24 + 5)$
hours = $(192 + 5)$ hours = 197 hours. (g) 24 days 4 hours = $(24 \times$
 $24 + 4)$ hours = $(576 + 4)$ hours = 580 hours. (h) 9 days 2 hours =
 $(9 \times 24 + 2)$ hours = $(216 + 2)$ hours = 218 hours (i) 19 days = $(19 \times$
 $24)$ hours = 456 hours.

2. Convert into months:

Note – 1 year = 12 months; to convert years into months, multiply by 12.

- (a) 5 years = 5×12 month = 60 months (b) 7 years = 7×12 month
= 84 months (c) 8 years 7 months = $(8 \times 12 + 7)$ month = $(96 + 7)$
months = 103 months (d) 10 years 5 months = $(10 \times 12 + 5)$ months
= 125 months. (e) 14 years 2 months = $(14 \times 12 + 2)$ months = 168

+ 2) months = 170 months (f) 18 years 9 months = $(18 \times 12 + 9)$ months = $(216 + 9)$ months = 225 months

3. Convert into days:

To convert years into days, multiply by 365

(a) 4 years = 4×365 days = 1460 days (b) 57 years = 57×365 days = 20805 days. (c) 1 years 28 days = $(1 \times 365 + 28)$ days = $(365 + 28)$ days = 393 days (d) 5 years 150 days = $(5 \times 365 + 150)$ days = $(1825 + 150)$ days = 1975 days. (e) 9 years 240 days = $(9 \times 365 + 240)$ days = $(3285 + 240)$ days = 3525 days

4. 4 days 12 hours convert into hours = $(4 \times 24 + 12)$ hours = 108 hours.

5. Rajeev letter reached her cousin after 6 days. How many hours did it take for the letter to reach Rajeev's cousin ?

So we convert 6 day into hours

6×24 hours = 144 hours

6. A train takes 2 days 3 hours to reach Delhi. it convert into hours. 2 days 3 hours = $(2 \times 24 + 3)$ hours = $(48 + 3)$ hours = 51 hours

7. Rajat age is 12 years 4 month old. it convert into months 12 years 4 months = $(12 \times 12 + 4)$ months = $(144 + 4)$ months = 148 months

8. The construction of a flyover was completed in 4 year 25 days. It convert into days.

4 years 25 days.

it convert into days

$4 \text{ years into days} = (4 \times 365 + 25) \text{ days}$
 $= (1460 + 25) \text{ days} = 1485 \text{ days.}$

Multiple Choice Questions MCQs

1. $2 \times 60 = 120$ minutes 2. quartes to 12 3. 2 4. $5 \times 7 = 35$ days

Activity Wizard

Do yourself.

Practice Exercise 15.1

1. Read the information given in the table regarding favourite cold drink and answer the question:

(a) 10 children (b) 9 children (c) Limca (d) Thumps up.

2. Read the information given in the table regarding favourite activites and answer the question ?

(a) Dance (b) Games (c) music (d) Art and craft

3. Ramya's garden has many flowers. Read the given information and answer the question:

(a) Rose (b) marigold (b) Rose

Practice Exercise 15.2

1. Note – each book stands for 10 books

(a) $5 \times 10 = 50$ books (b) math and science (c) English (d) Hindi

2. Note – each pencil stands for 2 children

(a) $5 \times 2 = 10$ students (b) yellow; $8 \times 2 = 16$ students. (c) Red; $3 \times 2 = 6$ students (d) $20 \times 2 = 40$ students

Practice Exercise 15.3

1. Manan went to the zoo. He saw the following animals:

Animals	Number	Tally marks
Lion	4	
Tiger	6	
Elephant	10	
Snakes	13	III
Giraffe	3	
Zebra	7	

2. Given below is a data of the weather in a city. Read the table and answer the following questions:

(a) 4 days (b) 7 days (c) 5 days (d) yes, 3 days.

Model Test Paper-I

1. (a) $8000 - 1 = 7999$ **2. (a)** 1246, 3175, 9126 **(b)** 3392, 4729, 8086

(c) 1345, 2275, 4676 **(d)** 1940, 5150, 8635 **3.** XXXIX = $10 + 10 + 10$

+ 9 = 39 **4.** even numbers = 604, 778, 682, 550, 406; odd numbers = 315, 761, 493, 877, 399

5. Add the number :

(a)

3	3	4	5
+ 5	4	3	2
8 7 7 7			

(b)

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

(c)

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

(d)

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

6. Subtract the number:

(a)

6	5	0	0
- 2	0	0	
6 3 0 0			

(b)

8	9	4	9
- 5	2	5	
8 4 2 4			

(c)

$$\begin{array}{r}
 4 & 9 & 9 & 9 \\
 - & 2 & 4 & 1 & 0 \\
 \hline
 2 & 5 & 8 & 9
 \end{array}$$

(d)

$$\begin{array}{r}
 3 & 7 & 7 & 5 \\
 - & 3 & 3 & 1 \\
 \hline
 2 & 4 & 4 & 4
 \end{array}$$

7.

	Number	Face Value	Place	Place value
(a)	2786	7	Hundreds	700
(b)	8075	7	Tens	70
(c)	1543	1	Thousands	1000
(d)	3567	5	Hundreds	500
(e)	4617	4	Thousands	4000

$$\begin{array}{r}
 3 & 12 & 14 & 10
 \end{array}$$

8. Total books in the library = 4 3 5 0

No. of books left = $\underline{-} \quad 1 \quad 8 \quad 7 \quad 5$

Books sent out = $\underline{\quad 2 \quad 4 \quad 7 \quad 5 \quad \text{books}}$

$$\begin{array}{r}
 1 & 1 & 1
 \end{array}$$

9. Veeneta bought a red suit for = ₹ 3 4 5 6

Veeneta bought a yellow suit for = + ₹ 1 8 7 5

She spent total money = $\underline{\quad \quad \quad \quad \quad \quad}$ ₹ 5 3 3 1

Model Test Paper-II

1. (a) $236 \times 1 = 236$ (b) $85 \times 57 = 57 \times 85$ (c) $85 \times 0 \times 740 = 0$
 (d) $0 \times 1340 = 0$ (e) $13 \times 19 \times 7 = 7 \times 13 \times 19$ (f) $1 \times 2496 = 2496$
 (g) $190 \times 225 = 225 \times 190$ (h) $17 \times 235 \times 1 = 3995$

2. Multiply

(a)

$$\begin{array}{r}
 \boxed{4} & \boxed{4} & \boxed{\square} \\
 1 & 7 & 8 \\
 \times & 6 \\
 \hline
 10 & 6 & 8
 \end{array}$$

(b)

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

(c)

$$\begin{array}{r}
 \boxed{\square} & \boxed{2} & \boxed{5} & \boxed{\square} \\
 \boxed{\square} & \boxed{1} & \boxed{2} & \boxed{\square} \\
 6 & 3 & 9 \\
 \times & 6 & 3 \\
 \hline
 1 & 9 & 1 & 7 \\
 3 & 8 & 3 & 4 \times \\
 \hline
 4 & 0 & 2 & 5 & 7
 \end{array}$$

(d)

$$\begin{array}{r}
 \boxed{\square} & \boxed{1} & \boxed{\square} \\
 5 & 3 & 9 \\
 \times & 2 \\
 \hline
 1 & 0 & 7 & 8
 \end{array}$$

3. (a) $1500 \div 10$

$$\begin{array}{r} 150 \\ 10) 1500 \\ \underline{-10} \\ \hline 50 \\ \underline{-50} \\ \hline \times \end{array}$$

(b) $8400 \div 120$

$$\begin{array}{r} 70 \\ 120) 8400 \\ \underline{-840} \\ \hline \times \end{array}$$

(c) $6400 \div 800$

$$\begin{array}{r} 8 \\ 800) 6400 \\ \underline{-6400} \\ \hline \times \end{array}$$

(d) $3800 \div 200$

$$\begin{array}{r} 19 \\ 200) 3800 \\ \underline{-400} \\ \hline 1800 \\ \underline{-1800} \\ \hline \times \end{array}$$

(e) $6400 \div 100$

$$\begin{array}{r} 64 \\ 100) 6400 \\ \underline{-600} \\ \hline 400 \\ \underline{-400} \\ \hline \times \end{array}$$

(f) $440 \div 20$

$$\begin{array}{r} 22 \\ 20) 440 \\ \underline{-40} \\ \hline 40 \\ \underline{-40} \\ \hline \times \end{array}$$

4. Divide using the short method:

- (a) $95 \div 10 = Q = 9, R = 5$ (b) $495 \div 100 = Q = 4, R = 95$
 (c) $346 \div 10 = Q = 34, R = 6$ (d) $4536 \div 100 = Q = 45, R = 36$
 (e) $783 \div 100 = Q = 7, R = 83$ (f) $2876 \div 10 = Q = 287, R = 6$

5. (a) $\frac{7}{15}$ (b) $\frac{4}{9}$

6. (a) 25, 36, 49, 64, 81, 100

$$(5 \times 5, 6 \times 6, 7 \times 7, 8 \times 8, 9 \times 9, 10 \times 10)$$

- (b) 15, 16, 18, 21, 25, 30

$$(15 + 1, 16 + 2, 18 + 3, 21 + 4, 25 + 5)$$

(c) ABC BCD CDE DEF EFG FGH


- (d) 208, 216, 224, 232, 240, 248

$$(208 + 8, 216 + 8, 224 + 8, 232 + 8, 240 + 8)$$

7. Johar ran $= \frac{2}{3}$ of the field

And, he ran $= \frac{2}{4}$ of the field

He ran totally $= \frac{2}{3} + \frac{2}{4}$

$$= \frac{8 + 6}{12} = \frac{14}{12} \text{ or}$$

$$= \frac{7}{6} \text{ of the field.}$$

8. 12 video games cost = ₹1800
 1 video game costs is = ₹1800
 12
 So, 1 video game costs ₹150.

9. 1 tricycle costs = ₹ 272
23 tricycles cost

$$\begin{array}{r} 150 \\ 12 \overline{)1800} \\ 12 \\ \hline 60 \\ 60 \\ \hline 0 \\ 0 \\ \hline \times \end{array}$$

$$\begin{array}{r}
 \boxed{} & \boxed{1} & \boxed{} & \boxed{} \\
 & \boxed{2} & \boxed{} & \boxed{} \\
 \hline
 & 2 & 7 & 2 \\
 \times & 2 & 3 \\
 \hline
 & 8 & 1 & 6 \\
 5 & 4 & 4 & \times \\
 \hline
 \boxed{6} & \boxed{2} & \boxed{5} & \boxed{6}
 \end{array}$$

Model Test Paper-III

1. Fill in the following:

- (a) four (b) equal (c) triangle (d) rectangle (e) cm

2. Change into m:

- (a) $8 \text{ km} = 8 \times 1000 \text{ m} = 8000 \text{ m}$
(b) $9 \text{ km } 16 \text{ m} = 9 \times 1000 + 16 \text{ m} = 9000 + 16 = 9016 \text{ m}$

(d) $8 \text{ km } 315 \text{ m} = 8 \times 1000 + 315$

- (a) $1232 \text{ m} = 1 \text{ km } 232 \text{ m}$ (b) $7300 \text{ m} = 7 \text{ km } \times 300 \text{ m}$
 (c) $9654 \text{ m} = 9 \text{ km } \times 654 \text{ m}$ (d) $8603 \text{ m} = 8 \text{ km } \times 603 \text{ m}$

3 Subtract:

(a)	m	cm
	3 11	11 18
	4 8	2 8
-	1 8	7 9
	2 9	4 9

(b)	km	m
	8	10 11 15
	9	1 2 5
-	5	5 6 7
	3	5 5 8

4. Convert gram into kilograms:

- | | |
|-------------------------|------------------------|
| (a) 8700 g = 8 kg 700 g | (b) 1248 g = 1 kg 248g |
| (c) 2476 = 2 kg 476 g | (d) 9743 g = 9 kg 743g |
| (e) 2003 g = 2 kg 3g | (f) 3886 = 3 kg 886g |
| (g) 1000g = 1 kg | (h) 8329 g = 8 kg 329g |

5. Add the following:

kg	g
1	1
53	4 8 3
+ 29	2 9 6
82	7 7 9

kg	g
	1
46	8 1 3
+ 13	1 5 9
59	9 7 2

kg	g
25	6 2 0
+ 43	2 6 9
68	8 8 9

6. $250 \text{ ml} + 750 \text{ ml} = 1000 \text{ ml} = 1 \text{ l}$

7. Total ml of cough syrup = 750 ml
 syrup used = - 275 ml
 syrup left = 475 ml

8. Total thread = 88 m 74 cm
 Tailor used = - 69 m 38 cm
 Thread left = 19 m 36 cm

m	cm
7 18	6 14
8 8	7 4
- 6 9	3 8
1 9	3 6

Model Test Paper-IV

1. Fill in the following:

- (a) ₹ 87 = $87 \times 100 \text{ P} = 8700 \text{ P}$
- (b) ₹ 14 = $14 \times 100 \text{ P} = 1400 \text{ P}$
- (c) ₹ 55.50 = $55.50 \times 100 \text{ P} = 5550 \text{ P}$
- (d) ₹ 875 = $875 \times 100 \text{ P} = 87500 \text{ P}$
- (e) ₹ 425.75 = $425.75 \times 100 \text{ P} = 42575 \text{ P}$
- (f) ₹ 19.75 = $19.75 \times 100 \text{ P} = 1975 \text{ P}$
- (g) ₹ 89.65 = $89.65 \times 100 \text{ P} = 8965 \text{ P}$
- (h) ₹ 300 = $300 \times 100 \text{ P} = 30000 \text{ P}$
- (i) ₹ 892 = $892 \times 100 \text{ P} = 89200 \text{ P}$

2. (a) 2 (b) 5, 2 (c) 6

3. (a) 10 : 00 (b) 7: 30 (c) 11 : 50 (d) 2 : 15

4. (a) 3 days = $3 \times 24 \text{ hours}$

= 72 hours

(b) 25 days = $25 \times 24 \text{ hours}$

= 600 hours

- (c) 19 days $= 19 \times 24$ hours
 $= 456$ hours
- (d) 7 days 3 hours $= (7 \times 24 + 3)$ hours
 $= (168 + 3)$ hours
 $= 171$ hours
- (e) 24 days 4 hours $= (24 \times 24 + 4)$ hours
 $= (576 + 4)$ hours
 $= 580$ hours
- (f) 18 days $= (18 \times 24)$ hours
 $= 432$ hours
- 5.** (a) 9 years $= (9 \times 12)$
 $= 108$ months
- (b) 7 years $= (7 \times 12)$
 $= 84$ months
- (c) 10 years 5 months
 $= (10 \times 12 + 5)$
 $= 120 + 5 = 125$ months
- (d) 18 years 9 months
 $= (18 \times 12 + 9)$
 $= 216 + 9 = 225$ months
- (e) 14 years 5 months
 $= (14 \times 12 + 5)$
 $= 168 + 5 = 173$ months
- (f) 8 years 7 months
 $= (8 \times 12 + 7)$
 $= 96 + 7 = 103$ months
- 6.** (a) sunflower (b) marigold (c) rose
- 7.** 5 days 12 hours
 $= (5 \times 24 + 12)$
 $= (120 + 12) = 132$ hours
- 8.** 12 years 4 months
 $= (12 \times 12 + 4)$ months
 $= (144 + 4)$ months $= 148$ months
- 9.** 6 days $= (6 \times 24) = 144$ hours

