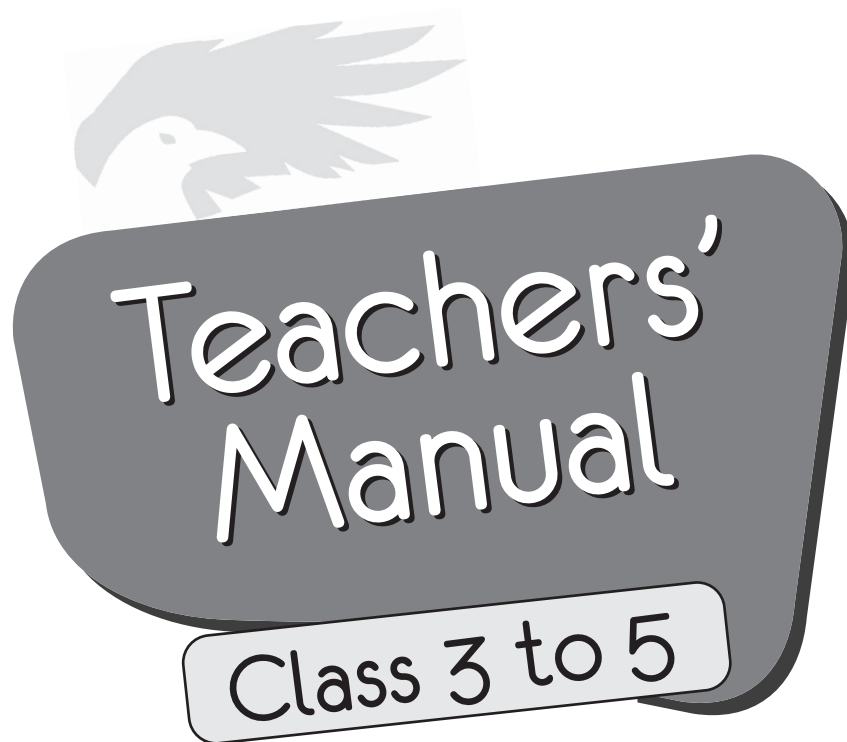
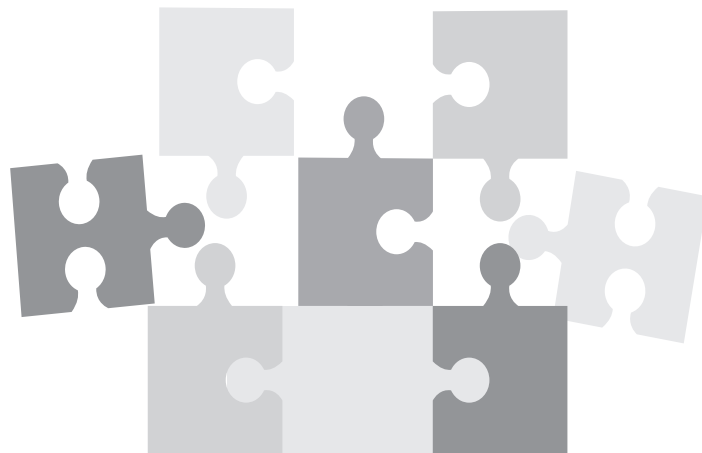




Mathematics



Mathematics - 3

1. Numbers Upto 999

Exercise-1.1

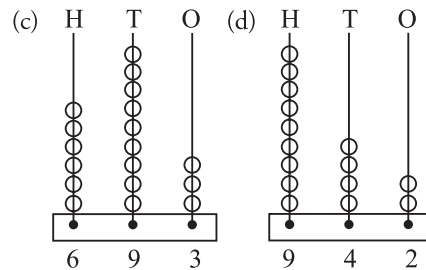
- $400 + 40 + 6 =$

H	T	O
4	4	6
 - $200 + 30 + 5 =$

H	T	O
2	3	5
- 826 827 828 829 830 831 832 833 834 835
 - 572 573 574 575 576 577 578 579 580 581
- 154, 153, 152, 151, 150, 149, 148, 147, 146, 145
 - 437, 436, 435, 434, 433, 432, 431, 430, 429, 428
- $672 = \boxed{6}$ hundreds + $\boxed{7}$ tens + $\boxed{2}$ ones
 - $777 = \boxed{7}$ hundreds + $\boxed{7}$ tens + $\boxed{7}$ ones
 - $905 = \boxed{9}$ hundreds + $\boxed{0}$ tens + $\boxed{5}$ ones
- $564 =$ Five hundreds sixty four
 - $682 =$ Six hundreds eighty two
 - $713 =$ Seven hundreds thirteen
 - $838 =$ Eight hundreds thirty eight
- 892 (b) 999 (c) 147
- 200; Two hundreds
 - 400; Four hundreds
 - 500; Five hundreds
- 20 tens = 2 hundreds = 200
 - 70 tens = 7 hundreds = 700

Exercise-1.2

- | | | |
|---|---|---|
| H | T | O |
| 2 | 3 | 5 |
 - | | | |
|---|---|---|
| H | T | O |
| 4 | 0 | 8 |



- 827 Place Value Face Value
7 = 7 7
 - 547
5 = 500 5
- $347 = 300 + 40 + 7$
 - $748 = 700 + 40 + 8$
- $400 + 8 = 408$ (b) $600 + 40 = 640$
 - $900 + 80 + 9 = 989$
 - $800 + 70 + 2 = 872$

5.	Abacus			Columns			Expmded form
	Fig			H	T	O	
	H	T	O	2	3	5	200 + 30 + 5

- 353 Place Value Face Value
3 = 3 3
5 = 50 5
3 = 300 3

Exercise-1.3

- 540 $\boxed{541}$ (b) 989 $\boxed{990}$
 - $\boxed{899}$ 900 (d) 248 $\boxed{249}$ 250
 - $\boxed{733}$ 734 (f) 399 $\boxed{400}$ 401
- 200, 240, 330, 760, 800, 980
 - 821, 785, 654, 543, 458, 3
- 287 and 290; $\boxed{288}$ $\boxed{289}$
 - 415 and 418; $\boxed{416}$ $\boxed{417}$

2 Answer Key 3 to 5

(c) 977 and 980; $\boxed{978}$ $\boxed{979}$

(d) 468 and 471; $\boxed{469}$ $\boxed{470}$

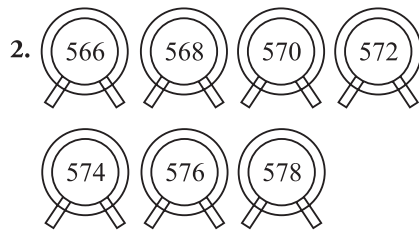
4. (a) $214 > 95$ (b) $509 < 590$

(c) $394 > 349$ (d) $404 = 404$

(e) $372 < 375$ (f) $894 < 896$

Exercise-1.4

1. Do your self.



Pattern $\Rightarrow$ Previous number + 2

3. (a)

57	33
47	<u>22</u>
	51

 (b)

<u>34</u>	41
77	51
	93

(c)

73	91
<u>60</u>	49
	17

 (d)

53	<u>44</u>
45	47
	49

4. (a)

28	<u>25</u>
50	34
	46

 (b)

38	60
<u>31</u>	56
	72

(c)

<u>35</u>	80
32	58
	<u>79</u>

 (d)

32	64
78	<u>27</u>
	<u>39</u>

5. (a) April is fourth month of the year.
 (b) The third month of the year is march.
 (c) The second month of the years is February.
 (d) The fifth month of the years is may and June is the sixth month of the year.

BRUSH UP YOUR CONCEPTS

Tricky Numbers

1. 103, 993
 103 = One hundred three

993 = Nine hundred ninety three

Greatest number = 993

Smallest number = 103

2. 101, 901

901 = Nine hundred one

101 = One hundred one

Greatest number = 901

Smallest number = 101

3. 3 numbers just before 899 are :

896, 897, 898

896 = Eight hundred ninety six

897 = Eight hundred ninety seven

898 = Eight hundred ninety eight

3 numbers just after 899 are :

900, 901, 902

900 = Nine hundred

901 = Nine hundred one

902 = Nine hundred two

Challenge :

1. (a) BAT $\boxed{109}$ (b) RUN $\boxed{703}$
 (c) DAD $\boxed{303}$ (d) FEW $\boxed{542}$
 (e) ZOO $\boxed{544}$ (f) JOY $\boxed{944}$

2. (a) One hundred nine
 (b) Seven hundred three
 (c) Three hundred three
 (d) Five hundred forty two
 (e) Five hundred forty four.
 (f) Nine hundred forty four.

3. Greatest number; 944

Smallest number; 109

2. Addition

Exercise-2.1

1. (a) $359 + 4 = \boxed{363}$ (b) $789 + 5 = \boxed{794}$
 (c) $618 + 2 = \boxed{620}$ (d) $599 + 2 = \boxed{601}$
 (e) $263 + 7 = \boxed{270}$ (f) $699 + 4 = \boxed{703}$

Answer Key 3 to 5

3

2. (a)

	H	T ₁	0
		1	
+	7	1	7
			4
	7	2	1

(b)

	H	T ₁	0
		1	
+	5	2	7
			8
	5	3	5

(c)

	H	T ₁	0
		1	
+	3	5	8
			3
	3	6	1

(d)

	H	T	0
		1	
	9	8	8
+			8
	9	9	6

(e)

	H	T	0
		.	
	9	5	0
+			5
	9	5	5

(f)

	H	T	0
	9	0	4
+			3
	9	0	7

(g)

	H	T	0
	2	5	0
+			5
	2	5	5

(h)

	H	T	0
		1	
	9	1	3
+			7
	9	2	0

Exercise-2.2

1. (a)

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

(b)

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

(c)

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

(d)

	H	T	0
	1	1	
	8	8	8
+		7	8
	9	6	6

2. (a) $184 + 212 = \boxed{396}$

(b) $537 + 120 = \boxed{657}$

(c) $451 + 111 = \boxed{562}$

(d) $725 + 140 = \boxed{865}$

(e) $146 + 124 = \boxed{270}$

(f) $321 + 119 = \boxed{440}$

3. (a) $82 + 235 = \boxed{317}$

(b) $328 + 90 = \boxed{418}$

4 Answer Key 3 to 5

4. (a) $424 + 59 = 479$ False
 (b) $368 + 24 = 382$ False
 (c) $531 + 98 = 629$ True
 (d) $743 + 53 = 796$ True

Exercise-2.3

1. addends of the given addition are :

- (a) $996 - 496 = 500$
 (b) $802 - 700 = 102$
 (c) $502 - 400 = 102$
 (d) $867 - 767 = 100$
 (e) $658 - 500 = 158$
 (f) $797 - 300 = 497$

2. (a) $345 + 550$
 $= \boxed{300} + \boxed{40} + \boxed{5} + \boxed{500} + \boxed{50} + \boxed{0}$
 $= \boxed{300} + \boxed{500} + \boxed{40} + \boxed{50} + \boxed{5} + \boxed{0}$
 $= \boxed{800} + \boxed{90} + \boxed{5}$
 $= \boxed{895}$
 (b) $703 + 292$
 $= \boxed{700} + \boxed{0} + \boxed{3} + \boxed{200} + \boxed{90} + \boxed{2}$
 $= \boxed{700} + \boxed{200} + \boxed{0} + \boxed{90} + \boxed{3} + \boxed{2}$
 $= \boxed{900} + \boxed{90} + \boxed{5}$
 $= \boxed{995}$

3. (a)

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

(b)

	H	T	0
	0	0	
	6	0	2
+	2	2	7
	8	2	9

(c)

	H	T	0
	0	0	
	2	0	4
+	5	7	2
	7	7	6

(d)

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

4. (a)

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

(b)

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

(c)

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

(d)

	H	T	0
	2	2	4
	1	4	3
	3	6	7

Exercise-2.4

1. In a ball pool,
 Number of red balls = 554
 Number of blue balls = + 378
 Total number of balls = 932
2. In a farm number of mango trees = 336
 In a farm number of neem trees = + 443
 Total number of trees in a farm = 779

Answer Key 3 to 5 5

3. Number of voters in a village = 512
 Number of voters in another village = + 237
 Total number of voters in two villages = 749
4. No. of cow grazing in the field = 207
 No. of buffaloes grazing in the field = + 312
 No. of animals are grazing in the field = 519
5. Number of mud houses = 546
 Number of pucca houses = + 384
 Total number of houses = 930

BRUSH UP YOUR CONCEPTS

Jack Ride

- The distance need to cover to arrive at the traffic lights by Jack = 21 km.
- The distance need to cover to arrive at the second road segn = $21 + 45 = 66$ km
- The distance from the traffic light to the end of the road = $45 + 56 = 101$ km.
- Total length of the road
 $= 21 + 45 + 56$
 $= 122$ km.

Pyramid Maths

1542													
772		770											
404		368		332									
211		193		175		157							
110		101		92		83		74					
60		50		51		41		42		32			
50		10		40		11		30		12		20	

Mental Maths

In Horizontal addition.

$$\begin{aligned}
 1 + A + 4 + 4 &= 16 \\
 \Rightarrow 9 + A &= 16 \\
 \Rightarrow A &= 16 - 9 \\
 &= 7 \\
 2 + B + C + 1 &= 14 \\
 \Rightarrow 3 + B + C &= 14 \\
 \Rightarrow B + C &= 11 \quad \dots(1)
 \end{aligned}$$

In vertical addition

$$\begin{aligned}
 A + B + 3 + 3 &= 16 \\
 \Rightarrow A + B + 6 &= 16 \\
 \Rightarrow 7 + B + 6 &= 16 \quad [\because A = 7] \\
 \Rightarrow 13 + B &= 16 \\
 \Rightarrow B &= 16 - 13 \\
 \Rightarrow B &= 3
 \end{aligned}$$

Put the value of B in eqn (i), we get

$$\begin{aligned}
 3 + C &= 11 \\
 \Rightarrow C &= 11 - 3 = 8
 \end{aligned}$$

In vertical addition

$$\begin{aligned}
 4 + C + 3 + F &= 20 \\
 \Rightarrow 4 + 8 + 3 + F &= 20 \quad [\because C = 8] \\
 \Rightarrow 15 + F &= 20 \\
 \Rightarrow F &= 20 - 15 = 5 \\
 4 + 1 + E + 8 &= 16 \\
 \Rightarrow 13 + E &= 16 \\
 \Rightarrow E &= 16 - 13 = 3
 \end{aligned}$$

And $1 + 2 + D + 4 = 8$

$$\begin{aligned}
 \Rightarrow 7 + D &= 8 \\
 \Rightarrow D &= 8 - 7 = 1
 \end{aligned}$$

Hence, A = 7, B = 3, C = 8, D = 1, E = 3, and F = 5.

Addition challenge

- 627
- 533
- 123
- 942
- (a) 1160 (b) 1065
- (c) 1569 (d) 656
- (e) 2225

3. Subtraction

Exercise-3.1

1. (a)
- | | | | |
|---|---|---|---|
| | H | T | 0 |
| | 5 | 6 | 8 |
| - | | . | 8 |
| | 5 | 6 | 0 |
- (b)
- | | | | |
|---|---|---|---|
| | H | T | 0 |
| | 3 | 4 | 7 |
| - | | | 6 |
| | 3 | 4 | 1 |

6 Answer Key 3 to 5

(c)

	H	T	0
.	8	7	4
–			2
	8	7	2

(d)

	H	T	0
	5	3	8
–			7
	5	3	1

2. (a) $247 - 9 = \boxed{238}$ (b) $559 - 5 = \boxed{554}$

(c) $695 - 7 = \boxed{688}$ (d) $537 - 1 = \boxed{536}$

(e) $522 - 8 = \boxed{514}$ (f) $582 - 3 = \boxed{579}$

(g) $729 - 6 = \boxed{723}$ (h) $542 - 5 = \boxed{537}$

(i) $702 - 9 = \boxed{693}$ (j) $265 - 9 = \boxed{256}$

(k) $830 - 7 = \boxed{823}$ (l) $491 - 9 = \boxed{482}$

Exercise-3.2

1. (a)

	H	T	0
	2	3	5
–		1	0
	2	2	5

(b)

	H	T	0
	6	9	1
–		9	0
	6	0	1

(c)

	H	T	0
	3	6	2
–		4	0
	3	2	2

2. (a) $293 - 64 = 229$ (b) $851 - 46 = 805$

(c) $740 - 19 = 721$

3. (a)

	H	T	0
	0	13	
	1	3	5
–		7	5
	0	6	0

(b)

	H	T	0
		3	14
	2	4	4
–		1	9
	2	2	5

(c)

	H	T	0
	6	12	10
	7	3	0
–		3	9
	6	9	1

4. (a) $488 - 55 = 433$

(b) $500 - 85 = 415$.

Exercise-3.3

1. (a) $615 - 400 \equiv 215$

(b) $350 - 200 \leq 160$

(c) $377 - 150 \geq 200$

(d) $270 - 130 \geq 100$

2. (a) $\boxed{400} - 112 = 288$

$\therefore \boxed{} = 288 + 112 = 400.$

(b) $\boxed{588} - 301 = 287$

$\therefore \boxed{} = 287 + 301 = 588$

(c) $980 - \boxed{358} = 622$

$\therefore 980 - 622 = \boxed{}$

$\Rightarrow \boxed{} = 358$

$$(d) \quad 644 - \boxed{314} = 330$$

$$\therefore 644 - 330 = \boxed{}$$

$$\Rightarrow 314 = \boxed{}$$

$$\Rightarrow \boxed{} = 314$$

3. (a)

	H	T	0
	7	2	9
–	3	2	0
	4	0	9

(b)

	H	T	0
	4	6	9
–	1	1	0
	3	5	9

(c)

	H	T	0
	7	5	5
–	5	4	0
	2	1	5

4. (a)

	H	T	0
	7	5	2
–	3	3	5
	4	1	7

(b)

	H	T	0
		7	12
	5	8	2
–	2	2	5
	3	5	7

(c)

	H	T	0
		3	14
	4	4	4
–	1	3	5
	3	0	9

Answer Key 3 to 5

7

5. (a)

	H	T	0
	4	<u>8</u>	7
–	2	3	5
	<u>2</u>	5	2

(b)

	H	T	0
	2	6	9
–	5	2	<u>1</u>
	4	<u>4</u>	8

(c)

	H	T	0
	8	8	<u>4</u>
–	4	<u>2</u>	1
	<u>4</u>	6	3

Exercise-3.4

1. Number of trees in forest = 192

$$\text{Number of trees fell down} = \underline{-98}$$

$$\text{Number of trees left in the forest} = \underline{94}$$

2. Number of oranges bought by a fruit seller = 124

$$\text{Number of oranges sold by a fruit seller} = \underline{-79}$$

$$\text{Number of oranges are left with fruit seller} = \underline{45}$$

3. Number of red beads has Tejas = 167

$$\text{Number of red beads has Ajay} = \underline{-89}$$

$$\text{Number of beads does Tejas} = \underline{78}$$

have more than Ajay

4. Number of red roses and white roses = 182

$$\text{Number of red roses} = \underline{-89}$$

$$\text{Number of white roses} = \underline{93}$$

BRUSH UP YOUR CONCEPTS

	5	7	<u>8</u>
–	4	3	6
	<u>1</u>	<u>4</u>	2

	9	6	8
–	<u>5</u>	6	7
	4	<u>0</u>	<u>1</u>

<u>2</u>	3	<u>5</u>
	2	4
2	<u>1</u>	1

	4	2	7
–	2	0	<u>2</u>
	<u>2</u>	9	5

8 Answer Key 3 to 5

	7	0	7
-	1	7	8
	5	2	9

	7	8	4
-	3	9	6
	3	8	8

	4	6	1
-		6	0
	4	0	1

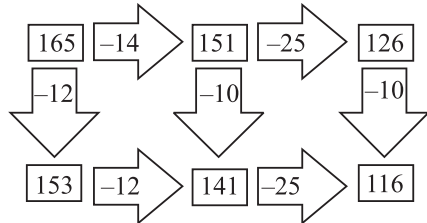
	6	4	2
-	4	0	9
	2	4	0

	5	2	3
-	2	1	8
	3	7	2

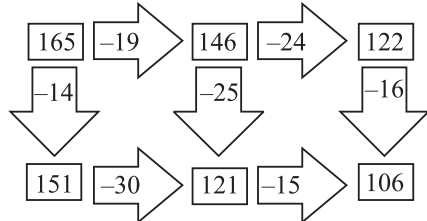
	7	9	5
	4	0	2
	3	8	6

Challenge :

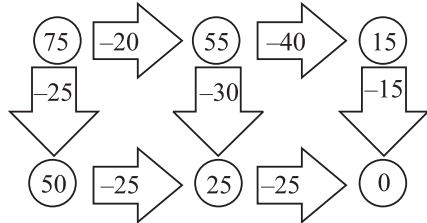
(a)



(b)



(c)



(d) $5 \times 6 = \boxed{6} \times 5 = \boxed{30}$

(e) $9 \times 7 = \boxed{7} \times 9 = \boxed{63}$

(f) $7 \times 8 = 8 \times \boxed{7} = \boxed{56}$

2. (a) $\boxed{45} \rightarrow \boxed{54} \rightarrow \boxed{63} \rightarrow \boxed{72} \rightarrow \boxed{81} \rightarrow \boxed{90} \rightarrow \boxed{99}$

(b) $\boxed{24} \rightarrow \boxed{30} \rightarrow \boxed{36} \rightarrow \boxed{42} \rightarrow \boxed{48} \rightarrow \boxed{54} \rightarrow \boxed{60}$

(c) $\boxed{56} \rightarrow \boxed{48} \rightarrow \boxed{40} \rightarrow \boxed{32} \rightarrow \boxed{24} \rightarrow \boxed{16} \rightarrow \boxed{8}$

(d) $\boxed{56} \rightarrow \boxed{49} \rightarrow \boxed{42} \rightarrow \boxed{35} \rightarrow \boxed{28} \rightarrow \boxed{21} \rightarrow \boxed{14}$

3.

	Multiplier	Multiplicand	Product
$9 \times 3 = \underline{27}$	9	3	27
$5 \times 7 = \underline{35}$	5	7	35
$6 \times 9 = \underline{54}$	6	9	54

Exercise-4.2

1. (a) $3 \times \boxed{5} = 5 \times \boxed{3} = \boxed{15}$

(b) $2 \times 9 = \boxed{9} \times 2 = \boxed{18}$

(c) $\boxed{4} \times 7 = \boxed{7} \times 4 = \boxed{28}$

(d) $5 \times \boxed{8} = 8 \times \boxed{5} = 40$

2. (a) $2 \times 3 = 6$

(b) $7 \times 2 = 14$

(c) $6 \times 5 = 30$

(d) $8 \times 5 = 40$

(e) $3 \times 8 = 24$

(f) $9 \times 4 = 36$

3. (a) $4 \times 6 = 24$

(b) $10 \times 3 = 30$

(c) $5 \times 8 = 40$

(d) $3 \times 7 = 21$

(e) $2 \times 9 = 18$

Exercise-4.3

1. (a)

	T	0
		2
×		5
	1	0

(b)

	T	0
	1	1
×		4
	4	4

4. Multiplication

Exercise-4.1

1. (a) $6 \times 2 = \boxed{2} \times 6 = \boxed{12}$

(b) $\boxed{3} \times 7 = 7 \times 3 = \boxed{21}$

(c) $3 \times \boxed{6} = 6 \times 3 = \boxed{18}$

(c)

	T	0
		6
×		7
	4	2

(d)

	T	0
	1	0
×		5
	5	0

(e)

	T	0
		8
×		7
	5	6

(f)

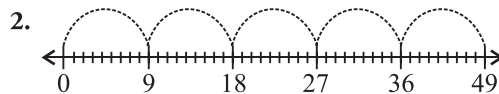
	T	0
		9
×		5
	4	5

(g)

	T	0
	1	0
×		4
	4	0

(h)

	T	0
		7
×		3
	2	1



$$\boxed{9} \times \boxed{5} = \boxed{45}$$



$$\boxed{7} \times \boxed{6} = \boxed{42}$$



$$\boxed{7} \times \boxed{8} = \boxed{56}$$

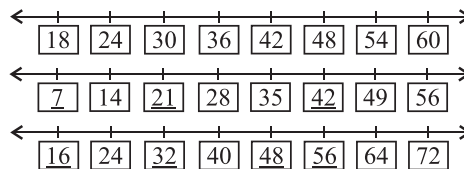
Exercise-4.4

- Number of children ride in each car = 3
Number of cars = 3
Number of children are going to the teddy bear factory = $3 \times 3 = 9$
- Number of children ride in each van
number of vans = 5×3
Number of children are going to see the elephant seals = 15
- Number of bangles in each pair = 2
Number of pair of bangles bought by Mina = 6
Number of bangles are there in all = $2 \times 6 = 12$
- Number of wheels has a car = 4
Number of cars = 5
Total number of wheels in 5 cars = $4 \times 5 = 20$.

BRUSH UP YOUR CONCEPTS

Observe the pattern

Fill in the blanks



Comprehension Math

Row 1:

	T	0		T	0		T	0		T	0
		9	×		8	×		8	×		8
		6	×		9	×		5	×		6
×	5	4		7	2		4	0		4	8

	T	0
		8
×		3
	2	4

10 Answer Key 3 to 5

Row 2:

×	T	0	×	T	0	×	T	0	×	T	0
		9			9			7			2
		3			9			8			9
	2	7		8	1		5	6		1	8

×	T	0
		4
		8
	3	2

Row 3:

×	T	0	×	T	0	×	T	0	×	T	0
		9			9			2			8
		8			0			8			8
	7	2			0		1	6		6	4

×	T	0
		6
		9
	5	4

Row 4:

×	T	0	×	T	0	×	T	0	×	T	0
		9			9			1			8
		4			7			9			4
	3	6		6	3			9		3	2

×	T	0
		0
		8
		0

Row 5:

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

×	T	0
		5
		9
	4	5

- (a) Since $4 \times 6 = 24$, So in row 1, product of 8×3 is same as product of 4×6 .
- (b) Since, $3 \times 6 = 18$, So, in row 2, product of 2×9 is same as product of 3×6 .
- (c) Since, $4 \times 4 = 16$, so in the row, 3 product of 2×8 is same as the product as 4×4 .
- (d) Since, $3 \times 3 = 9$, so in the row, 4 product of 1×9 same as the product of 3×3 .
- (e) Since, $4 \times 2 = 8$, so in the row, 5 product of 1×8 is same as the product of 4×2 .

Incorrect Product Challenge

$8 \times 8 = 64 \rightarrow$ Correct, $6 \times 6 = 36 \rightarrow$ Correct
 $9 \times 5 = 95 \rightarrow$ Incorrect, $7 \times 7 = 47 \rightarrow$ Incorrect
 $8 \times 9 = 79 \rightarrow$ Incorrect, $9 \times 9 = 89 \rightarrow$ Incorrect
 $9 \times 2 = 16 \rightarrow$ Incorrect, $8 \times 12 = 92 \rightarrow$ Incorrect
 $8 \times 4 = 32 \rightarrow$ Correct, $3 \times 6 = 18 \rightarrow$ Correct
 $7 \times 9 = 63 \rightarrow$ Correct, $9 \times 10 = 90 \rightarrow$ Incorrect
 $9 \times 3 = 27 \rightarrow$ Correct, $6 \times 8 = 48 \rightarrow$ Incorrect
 $7 \times 8 = 56 \rightarrow$ Correct, $6 \times 7 = 42 \rightarrow$ Incorrect
 $6 \times 9 = 54 \rightarrow$ Correct, $3 \times 7 = 21 \rightarrow$ Correct
 $8 \times 5 = 40 \rightarrow$ Incorrect, $7 \times 0 = 0 \rightarrow$ Correct

5. Equal Sharing Exercise-5.1

1. (a) $\boxed{10} \div \boxed{2} = \boxed{5}$

(b) $\boxed{15} \div \boxed{5} = \boxed{3}$

(c) $\boxed{12} \div \boxed{3} = \boxed{4}$

2. (a) $18 \div 9$

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

Since, we have subtracted it two times.

So, $18 \div 9 = 2$.

(b) $44 \div 4$

$$\begin{array}{r} 44 \\ -4 \\ \hline 40 \\ -4 \\ \hline 36 \\ -4 \\ \hline 32 \\ -4 \\ \hline 28 \\ -4 \\ \hline 24 \\ -4 \\ \hline 20 \\ -4 \\ \hline 16 \\ -4 \\ \hline 12 \\ -4 \\ \hline 8 \\ -4 \\ \hline \end{array}$$

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

Since, We have subtracted 11 times

So, $44 \div 4 = 11$

(c) $24 \div 6$

$$\begin{array}{r} 24 \\ -6 \\ \hline 18 \\ -6 \\ \hline 12 \\ -6 \\ \hline 6 \\ -6 \\ \hline 0 \end{array}$$

Since, We have subtracted 4 times.

So, $24 \div 6 = 4$.

(d) $40 \div 10$

$$\begin{array}{r} 40 \\ -10 \\ \hline 30 \\ -10 \\ \hline 20 \\ -10 \\ \hline 10 \\ -10 \\ \hline 0 \end{array}$$

Sinc, We have substracted 4 times

So, $40 \div 10 = 4$.

3. (a) $\boxed{20} \div \boxed{5} = \boxed{4}$

(b) $\boxed{12} \div \boxed{3} = \boxed{4}$

Exercise-5.2

1. (a) $\boxed{4} \times \boxed{4} = \boxed{16}$ OR $\boxed{16} \div \boxed{4} = \boxed{4}$

(b) $\boxed{10} \times \boxed{3} = \boxed{30}$ OR $\boxed{30} \div \boxed{3} = \boxed{10}$

2. (a) $\boxed{4} \times \boxed{8} = \boxed{32}$

$\boxed{32} \div \boxed{8} = \boxed{4}$

(b) $\boxed{5} \times \boxed{3} = \boxed{15}$

$\boxed{15} \div \boxed{3} = \boxed{5}$

$\rightarrow \boxed{24} \div \boxed{4} = \boxed{6}$

3. (a) $\boxed{4} \times \boxed{6} = \boxed{24} \rightarrow$

$\rightarrow \boxed{24} \div \boxed{6} = \boxed{4}$

$\rightarrow \boxed{20} \div \boxed{2} = \boxed{10}$

(b) $\boxed{10} \times \boxed{2} = \boxed{20} \rightarrow$

$\rightarrow \boxed{20} \div \boxed{10} = \boxed{2}$

Exercise-5.3

1. (a) $9 \div 9 = \boxed{1}$

(b) $20 \div 10 = \boxed{2}$

(c) $24 \div 1 = \boxed{24}$

2. (a) $50 \div \boxed{10} = 5$

(b) $\boxed{75} \div 1 = 75$

(c) $93 \div \boxed{1} = 93$

3. (a)
$$\begin{array}{r} 7 \\ 2 \overline{) 14} \\ -14 \\ \hline 0 \end{array}$$

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

(c)
$$\begin{array}{r} \boxed{3} \\ 8 \overline{) 24} \\ -24 \\ \hline 0 \end{array}$$

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

4. (a) $20 \div 2 = \boxed{10}$

(b) $28 \div 7 = \boxed{4}$

12 Answer Key 3 to 5

(c) $72 \div 9 = \boxed{8}$

$$\begin{array}{r}
 37 \\
 5. (a) \quad 2 \overline{) 75} \\
 \underline{- 6} \\
 15 \\
 \underline{- 14} \\
 01
 \end{array}$$

Quotient = 37, remainder = 01.

$$\begin{array}{r}
 32 \\
 (b) \quad 3 \overline{) 96} \\
 \underline{- 9} \\
 6 \\
 \underline{- 6} \\
 0
 \end{array}$$

Quotient = 32, remainder = 0.

$$\begin{array}{r}
 13 \\
 (c) \quad 4 \overline{) 52} \\
 \underline{- 4} \\
 12 \\
 \underline{- 12} \\
 0
 \end{array}$$

Quotient = 13, remainder = 0.

$$\begin{array}{r}
 17 \\
 (d) \quad 5 \overline{) 89} \\
 \underline{- 5} \\
 39 \\
 \underline{- 35} \\
 4
 \end{array}$$

Quotient = 17, remainder = 4.

$$\begin{array}{r}
 12 \\
 (e) \quad 6 \overline{) 72} \\
 \underline{- 6} \\
 12 \\
 \underline{- 12} \\
 0
 \end{array}$$

Quotient = 12, remainder = 0.

$$\begin{array}{r}
 10 \\
 (f) \quad 9 \overline{) 90} \\
 \underline{- 9} \\
 0
 \end{array}$$

Quotient = 10, remainder = 0.

Exercise-5.4

1. Number of friends = 4

Number of apples picked by 4 friends = 40

Number of apples will each one get = $40 \div 4 = 10$.

2. Number of pencils = 36

Number of children distributed equally = 9

Number of pencils get each child = $36 \div 9 = 4$.

3. Number of wooden panels required for fencing for square garden = 40

Number of equal sides in a square = 4

Number of panels required for = $40 \div 4$

One side of the square.

= 10

BRUSH UP YOUR CONCEPTS

$\boxed{6} \times 4 = 24$

$7 \times \boxed{3} = 12$

$24 \div \boxed{4} = 6$

$21 \div 3 = \boxed{7}$

Decode → Do, your self.**Comprehension math** → Do, your self.**Match****(A)****(B)**

1. $8 \div 2 = 4$ → (c) $4 \times 2 = 8$

2. $20 \div 4 = 5$ → (d) $5 \times 4 = 20$

3. $18 \div 2 = 9$ → (f) $9 \times 2 = 18$

4. $15 \div 3 = 5$ → (a) $5 \times 3 = 15$

5. $27 \div 3 = 9$ → (b) $9 \times 3 = 15$

6. $16 \div 2 = 8$ → (e) $8 \times 2 = 16$

6. Money**Exercise-6.1**

1. (a) ₹ 230.25 = Two hundred thirty rupees and twenty five paise.

- (b) ₹ 767.75 = Seven hundred sixty seven and seventy five paise.
2. (a) Six hundred rupees and twenty paise = ₹ 600.20
- (b) Five hundred rupees and seventy five paise = ₹ 500.75
3. (a) ₹ 5 = 500 P (b) ₹ 7 = 700 P
4. (a) 725 paise = ₹ 7.25
- (b) 1185 paise = ₹ 11.85
5. (a) 275 P = ₹ 2 and 75 P
- (b) 870 P = ₹ 8 and 70 P
6. (a) ₹ 5 and 70 P = 500 + 70 = 570 P
- (b) ₹ 9 and 40 P = 900 + 40 = 940 P
7. (a) The currency of India is rupees.
- (b) The smaller unit of rupee is paise.
- (c) The symbol of rupees is ₹.

Exercise-6.2

1. (a)

+	₹	P
	223	18
	342	30
	565	48
- (b)

+	₹	P
	256	27
	538	90
	795	17
- (c)

+	₹	P
	535	60
	29	42
	565	02
2. (a)

-	₹	P
	64	35
	9	24
	55	11
- (b)

-	₹	P
	438	20
	215	45
	222	75

Answer Key 3 to 5

13

(c)

-	₹	P
	256	27
	123	84
	132	43

3. (a) ₹ 23.60 (b) ₹ 876.12
- ₹ 45.87 - ₹ 788.89
- + ₹ 76.98 ₹ 87.23
- ₹ 146.45

Exercise-6.3

1. Amount of 100 watt bulb = ₹ 42.50
Amount of 120 watt bulb = ₹ 54.70
Amount of 150 watt bulb = + ₹ 78.50
Amount spent in three types = ₹ 175.70
bulb by shubham
2. Amount of 1 kg brinjal = ₹ 28.50
Amount of 1 kg lady finger = ₹ 16.50
Amount of 1 kg pumpkin = + ₹ 22.50
Amount of 3 types vegetables = ₹ 67.50
spent by shubha
3. Cost of a pad = ₹ 365.50
Cost of a pen = + ₹ 548.75
The money spent for pad = ₹ 914.25
and pen by kavya
4. Cost of a doll from shop A = ₹ 667.50
Cost of a doll from shop B = - ₹ 555.50
Difference between the costs of
= ₹ 112.00
two dolls from two shops

BRUSH UP YOUR CONCEPTS

1. 1 rupee has 2 paise coins.
2. 2 rupees has either 2 1 rupee coin or 4 paise coins.
3. There are 3 50 paise coins in 1 rupee 50 paise.
4. There are 2 5 rupee coins in 10 rupees.

How much

756 rupees

Comprehension Math

Amount spent by Preeti for 5 items.

₹ 40.00

14 Answer Key 3 to 5

₹ 12.00

₹ 20.00

₹ 15.00

+ ₹ 5.00

₹ 92.00

Denomination Count

Denomination for pay amount ₹ 466 to purchase a book by Kavya

$$₹ 200 \times 1 = ₹ 200 \quad ₹ 100 \times 2 = ₹ 200$$

$$₹ 50 \times 1 = ₹ 50 \quad ₹ 10 \times 1 = ₹ 10$$

$$₹ 5 \times 1 = ₹ 5 \quad ₹ 1 \times 1 = ₹ 1$$

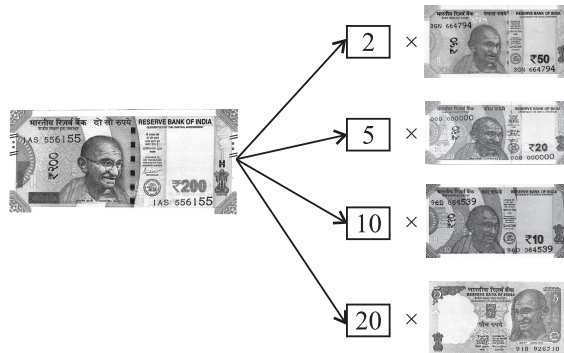
She given amount to shopkeeper = ₹ 500

Amount spent to purchase a book = ₹ 466

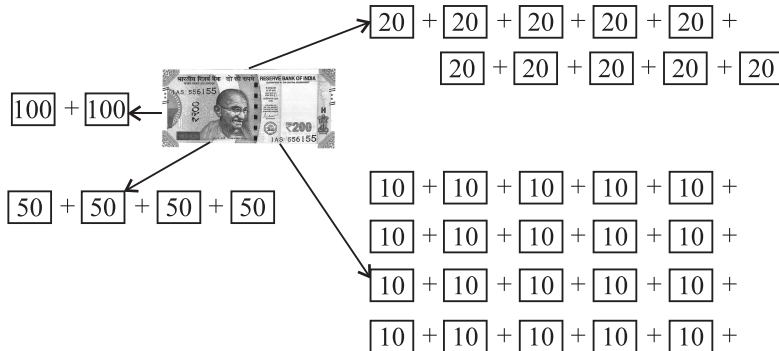
Amount get back from shopkeeper = ₹ 34

Money challenge

1.



2.



7. Measurement

Exercise-7.1

1. Do, yourself,

2. (a) $197 \text{ m } 5 \text{ cm} = 197 \times 100 + 5 = 19700 + 5$
 $= 19705 \text{ cm}$

(b) $12 \text{ m } 80 \text{ cm} = 12 \times 100 + 80 = 1200 + 80$
 $= 1280 \text{ cm}$

(c) $4 \text{ m } 75 \text{ cm} = 4 \times 100 + 75 = 400 + 75$
 $= 475 \text{ cm}$

3. (a) $285 \text{ cm} = \frac{285}{100} = 2.85 \text{ m}$

(b) $900 \text{ cm} = \frac{900}{100} = 9 \text{ m}$

(c) $179 \text{ cm} = \frac{179}{100} = 1.79 \text{ m}$

4. (a) $2 \text{ km } 69 \text{ m} = 2 \times 1000 + 69$
 $= 2000 + 69$
 $= 2069 \text{ m}.$

(b) $52 \text{ km} = 52 \times 1000 = 52000 \text{ m}$

(c) $18 \text{ km } 210 \text{ m} = 18 \times 1000 + 210$
 $= 18000 + 210$
 $= 18210 \text{ m}.$

5. (a) $5111 \text{ m} = \frac{5111}{1000} = 5.111 \text{ km}$

(b) $9210 \text{ m} = \frac{9210}{1000} = 9.210 \text{ km}$

$$(c) 8372\text{m} = \frac{8372}{1000} = 8.372\text{ km}$$

6. (a)	km m	(b)	cm
	63 380		18
	+ 14 175		+ 34
	<u>77 555</u>		<u>52</u>

7. (a)	m cm	(b)	m cm
	54 75		87 89
	- 28 34		- 63 60
	<u>26 41</u>		<u>24 29</u>

8. (a)		m	cm
		60	45
	+	24	75
		85	20

(b)		m	cm
		53	45
	+	34	68
		88	13

(c)		m	cm
		41	29
	-	26	75
		14	54

(d)		m	cm
		70	23
	-	31	45
		38	78

Exercise-7.2

1. (a) $15\text{ kg} = 15 \times 1000 = 15000\text{ g}$
 (b) $10\text{ kg } 76\text{ g} = 10 \times 1000 + 76$
 $= 10000 + 76$
 $= 10076\text{ g}$
 (c) $5\text{ kg} + 543\text{ g} = 5 \times 1000 + 543$
 $= 5000 + 543$
 $= 5543\text{ g}$

2. (a) $6901\text{ g} = \frac{6901}{1000} = 6.901\text{ kg}$
 (b) $7923\text{ g} = \frac{7923}{1000} = 7.923\text{ kg}$
 (c) $4512\text{ g} = \frac{4512}{1000} = 4.512\text{ kg}$

3. (a) $13650\text{ g} = 13\text{ kg } 650\text{ g}$
 (b) $5468\text{ g} = 5\text{ kg } 468\text{ g}$
 (c) $74685\text{ g} = 74\text{ kg } 685\text{ g}$

4. (a)	kg g	(b)	kg g
	6 380		1 000
	+ 4 175		0 345
	<u>10 555</u>		<u>1 345</u>

5. (a)	kg g	(b)	kg g
	8 750		8 289
	- 5 450		- 3 560
	<u>3 300</u>		<u>4 729</u>

6. (a)		kg	g
		22	236
	+	16	123
		38	359

(b)		kg	g
		16	564
	+	11	270
		27	834

(c)		kg	g
		87	900
	-	21	950
		65	950

(d)		kg	g
		96	147
	-	42	140
		54	007

Exercise-7.3

1. (a) $71800\text{ ml} = 7 \times 1000 + 800$
 $= 7000 + 800$
 $= 7800\text{ ml}$
 (b) $91765\text{ ml} = 9 \times 1000 + 765$
 $= 9000 + 765$
 $= 9765\text{ ml}$
 (c) $516\text{ ml} = 5 \times 1000 + 6 = 5000 + 6$
 $= 5006\text{ ml}$

2. (a) 6594 ml
 $= \frac{6594}{1000} = \frac{6000 + 594}{1000} = \frac{6000}{1000} + \frac{594}{1000}$
 $= 61594\text{ ml}$
 (b) 4378 ml
 $= \frac{4378}{1000} = \frac{4000 + 378}{1000} = \frac{4000}{1000} + \frac{378}{1000}$
 $= 41378\text{ ml}$

16

(c) 9876 ml

$$= \frac{9876}{1000} = \frac{9000 + 876}{1000} = \frac{9000}{1000} + 876$$
$$= 9 \text{ l.} 876 \text{ ml}$$

3. (a) $\because 250 \text{ ml} + 250 \text{ ml} = 500 \text{ ml}$

and $1\text{ l} = 1000\text{ ml}$

$$\therefore 1000 \text{ ml} > 500 \text{ ml}$$
$$\therefore 1l \text{ } \boxed{>} \text{ } 250 \text{ ml} + 250 \text{ ml}$$

(b) 75 ml 500 ml

(c) $1/\boxed{<} 9999 \text{ ml}$

$$[\because 1\text{ l} = 1000\text{ ml}]$$

(d) $\therefore 3\text{ l } 220 \text{ ml} = 3 \times 1000 + 220$

$$= 3000 + 220$$

$$= 3220 \text{ ml}$$

$$\therefore 3220 \text{ ml} = 3220 \text{ ml}$$
$$\therefore 3\cancel{2}20 \text{ ml} \boxed{=} 3220 \text{ ml}$$

4. (a) 1 ml (b) 1 ml

$$\begin{array}{r} 1\ 000 \\ + 0\ 345 \\ \hline 1\ 345 \end{array}$$

$$\begin{array}{r} 63\ 380 \\ + 14\ 175 \\ \hline 77\ 555 \end{array}$$

5. (a) 1 ml (b) 1 ml

$$\begin{array}{r} 28\ 750 \\ - 8\ 450 \\ \hline 20\ 300 \end{array}$$

$$\begin{array}{r} 87\ 289 \\ - 63\ 560 \\ \hline 23\ 729 \end{array}$$

6. (a)

+	l	ml
	25	830
	42	126
	67	956

(b)	+	l	ml
		13	645
		54	143
		67	788

(c)		l	ml
	—	29	910
		21	500
		8	410

(d)

—	l	ml
	63	560
	34	230
	29	330

BRUSH UP YOUR CONCEPTS

1. cm

2. m

3. km

4. cm

5. m

6. m

Long than |Shorter than| Same as

1. 6 km is longer than 600m.

[6 km = 6000 m]

2. 1 m is longer than 10cm. [1m = 100 cm]

3. 1000 m is same as 1 km.

$$[\because 1 \text{ km} = 1000 \text{ m}]$$

4. 4 m is shorter than 500 cm.

$$[\because 4\text{m} = 400\text{ cm}]$$

Units is Order

1. Ascending order : mm, cm, metre, km.

2. Descending order : km, metre, cm, mm.

Decide : L or ml.

Liquid to be measured	Millilitres	Litres
1. Cough syrup	✓	
2. Vinegar	✓	
3. Water in tank		✓
4. Water you bring to school.	✓	✓
5. Oil in kitchen		✓
6. Petrol		✓

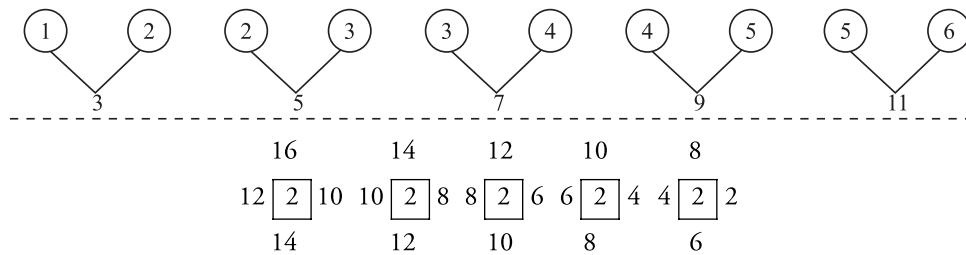
8. Patterns

Exercise-8

[illegible]

- (b)
- (c)
- (d)
2. (a)
- (b)
- (c)
- (d)
3. (a) 11, 17, 23, 29, 35 (b) 25, 30, 35, 40, 45
4. (a) a, c, e, g, i (b) AaB BbC CcD DdE
5. (a)
- (b)
- (c)

BRUSH UP YOUR CONCEPTS



Discover the pattern

ABC	DEF	GHI	JKL	MNO	PQR	STU	VWX
18	20	22	24	26	28	30	32
46	44	42	40	38	36	34	32
9	15	21	27	33	39	45	51
30	27	24	21	18	15	12	9
15	25	35	45	55	65	75	85
11A	13B	15C	17D	19E	21F	23G	25H
7	14	21	28	35	42	49	56

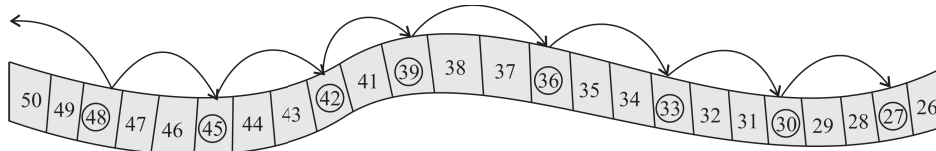
18 Answer Key 3 to 5

Grids Challenge

16	20	24	28	32
14	18	22	26	30
12	16	20	24	28
10	14	18	22	26
8	12	16	20	24

23	26	29	32	35
33	36	39	42	45
43	46	49	52	55
53	56	59	62	65
63	66	69	72	75

Kitty's movement

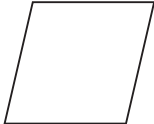


9. Geometry

Exercise-9.1

- (a) A line segment has finite length whereas a line has infinite length.
(b) A point shows an exact location.
(c) A ray has no fixed length.
- (a) A = 6 cm (b) B = 3 cm
(c) C = 2 cm

Exercise-9.2

- (a) 4 line segments (b) 4 line segments
(c) 4 line segments (d) 4 line segments
- (a) Rectangle (b) Pentagon
(c) Square
- (a)  (b) 
- (a) JK → diameter (b) L → centre
(c) ST → Radius

Exercise-9.3

- (a) A solid figure whose all the faces are of same size is cube.
(b) The corner where 2 or more edges meet is called a vertex.
(c) A sphere has a curved surface only.
(d) Cone has only one vertex.
(e) A solid figure that has two flat surfaces and a curved surface and roll is a cylinder.

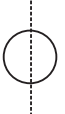
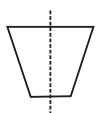
- Do, your self.

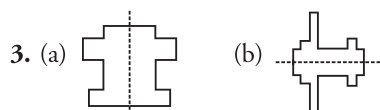
3. Statement True/False

- All the edges of a cuboid are equal **False**
- There are twelve corners in a cuboid **False**
- A cylinder has two straight edges **False**
- There are two plane faces in a cylinder. **True**
- A cone has two corners. **False**

- Name of the shape cube.
Faces : 6 vertices 8 edges 12
(b) Name of the shape cuboid
Faces 6 Vertices 8 edge 12.

Exercise-9.4

- (a)  (b) 
- (a)  (b) 
- (a)  (b) 

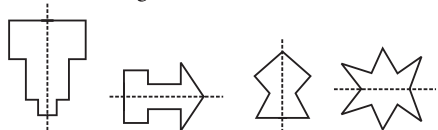


BRUSH UP YOUR CONCEPTS

1. Draw Curved and straight lines!
Do yourself.
2. Draw the Line of Symmetry!



3. Moirror Image!



10. Fractions

Exercise-10.1

1. (a) W (b) W
(c) F (d) W
(e) F (f) F

2. (a) $\frac{6}{11}$, Numerator = 6

Denominator = 11

- (b) $\frac{3}{5}$, Numerator = 3

Denominator = 5

- (c) $\frac{4}{7}$, Numerator = 4

Denominator = 7

- (d) $\frac{0}{8}$, Numerator = 0

Denominator = 8

3. (a) $\frac{3}{6}$ ie $\frac{1}{2}$ (b) $\frac{1}{2}$
(c) $\frac{2}{3}$ (d) $\frac{4}{6}$ ie $\frac{2}{3}$

4. Do, your self

5. (a) $\frac{7}{10}$; Seven tenths

- (b) $\frac{8}{9}$; Eight ninths

- (c) $\frac{2}{5}$; Two fifths

- (d) $\frac{1}{6}$; One sixths

6. (a) One third; $\frac{1}{3}$

- (b) Seven elevenths; $\frac{7}{11}$

- (c) Three eights $\frac{3}{8}$

7. (a) $\frac{1}{4}$ (b) $\frac{3}{4}$

- (c) $\frac{2}{4}$

Exercise-10.2

1. Do, yourself.

2. Do, yourself.

3. (a) yes (b) no
(c) no

4. Do, yourself.

BRUSH UP YOUR CONCEPTS

Counting by Half

1. 42, $41\frac{1}{2}$, 41, $40\frac{1}{2}$, 40, $39\frac{1}{2}$, 39, $38\frac{1}{2}$

2. 17, $17\frac{1}{2}$, 18, $18\frac{1}{2}$, 19, $19\frac{1}{2}$, 20, $20\frac{1}{2}$,
21

3. 28, $27\frac{1}{2}$, 27, $26\frac{1}{2}$, 26, $25\frac{1}{2}$, 25, $24\frac{1}{2}$

Comprehension Math

1. 4 2. $\frac{4}{7}$

3. 2 4. $\frac{2}{7}$

5. 1 6. $\frac{1}{7}$

20 Answer Key 3 to 5**Observe**

1. $\frac{4}{10}$ 2. $\frac{3}{10}$ 3. $\frac{1}{10}$

Choose the correct one

1 and 3 are correct.

11. Time**Exercise-11.1**

1. (a) 6 : 15 o'clock (b) 10 : 15 o'clock
 (c) 10 : 45 o'clock (d) 7 : 30 o'clock
 (e) 8 : 45 o'clock
2. (a) 6 : 35 o'clock (b) 11 : 55 o'clock
 (c) 10 : 50 o'clock

Exercise-11.2

1. Do, yourself.
2. (a) There are 24 hours in each day.
 (b) There are 60 minutes in every hour.
 (c) There are 60 seconds in every minute.
 (d) There are 12 months in a year.
3. Time : 2 : 00 o'clock

→ Time : 2 : 45 o'clockTime Elapsed : 45 minutes**Exercise-11.3**

1. (a) 6 weeks = 6×7 [$\because$ 1 week = 7 days]
 = 42 days
- (b) 9 weeks 3 days = $9 \times 7 + 3$
 = $63 + 3 = 66$ days
- (c) 12 weeks 2 days = $12 \times 7 + 2$
 = $84 + 2 = 86$ days
- (d) 7 months = $7 \times 30 = 210$ days
 [$\because$ 1 months = 30 days]
- (e) 8 months 20 days = $8 \times 30 + 20$
 = $240 + 20$
 = 260 days
- (f) 11 months 15 days = $11 \times 30 + 15$
 = $330 + 15$
 = 345 days
2. $\because$ 1 years = 12 months
- (a) 6 years = $6 \times 12 = 72$ months

(b) 9 years = $9 \times 12 = 108$ months

(c) 7 years 6 months = $7 \times 12 + 6$
 = $84 + 6$
 = 90 months

(d) 10 years 4 months = $10 \times 12 + 4$
 = $120 + 4$
 = 124 months

(e) 12 years 2 months = $12 \times 12 + 2$
 = $144 + 2$
 = 146 months

(f) 10 years 10 months = $10 \times 12 + 10$
 = $120 + 10$
 = 130 months

3. $\because$ 1 year = 365 days

(a) 3 years = $3 \times 365 = 1095$ days

(b) 5 years = $5 \times 365 = 1825$ days

(c) 8 years = $8 \times 365 = 2920$ days

(d) 1 years 26 days = $365 + 26 = 391$ days

(e) 4 years 150 days = $4 \times 365 + 150$
 = $1460 + 150$
 = 1610 days

(f) 9 years 200 days = $9 \times 365 + 200$
 = $3285 + 200$
 = 3485 days

4. $\because$ 1 day = 24 hours

(a) 11 days = 11×24 hours = 264 hours

(b) 15 days = 15×24 hours = 360 hours

(c) 30 days = 30×24 hours = 720 hours

(d) 9 days 5 hours = $(9 \times 24 + 5)$ hours
 = $(216 + 5)$ hours
 = 221 hours

(e) 20 days 4 hours = $(20 \times 24 + 4)$ hours
 = $(480 + 4)$ hours
 = 484 hours

(f) 17 days 4 hours = $(17 \times 24 + 4)$ hours
 = $(408 + 4)$ hours
 = 412 hours.

BRUSH UP YOUR CONCEPTS

We have

Sunday = 1 Monday = 2, Tuesday = 3
 Wednesday = 4, Thursday = 5, Friday = 6
 and Saturday = 7.

1. If today is 6 means today is Friday
So, yesterday was Thursday.
2. If today is 7, means today is Saturday
So, day before yesterday is Thursday.
3. If today is 1, means today is Sunday the day tomorrow ie next day of Sunday is Monday.
4. If today is 4 means today is Wednesday, the day before yesterday is Monday.
5. If today is 3, means today is Tuesday the day after tomorrow will be Thursday.

Elapsed Time

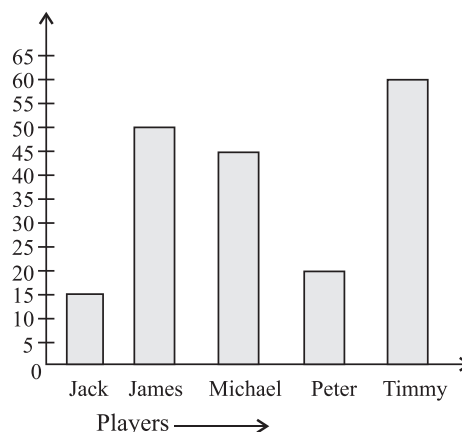
1. Divi started his work = 4 : 00 O' clock
The time taken by Divi = 4 hours
to finish her work
The time she has finished her work
= 4 : 00 O'clock + 4 hours
= 8 : 00 O' clock
2. The time at which train arrived = 6 : 00 O' clock
The train was delayed = 4 hours
The time train arrived
= 6 : 00 O' clock + 4 hours
= 10 : 00 O'clock
3. The time Anjali started her work = 11 : 00 O' clock
She finished her work 5 hours later
The time at which she finished her work
= 11 : 00 O'clock + 5 hours
= 16 : 00 O' clock
= (16 - 12) = 4 : 00 O' clock
4. The time at which Leela reached museum = 11 : 00
She was 3 hours later
So, the time she got home = 11 + 3
= 14 : 00 - 12 : 00
= 2 : 00 O' clock

12. Data Handling

Exercise-12.1

1. (a) Descending order : 9, 7, 5, 4, 2, 1.
(b) 1

- (c) Saturday
(d) 28
- (a) 9 (b) Pasta
(c) 15 (d) Icecream
(e) 9
- (a) Fruits and their quantity.
(b) 5 types of fruits are seen in the data.
(c) No. of strawberries in the data = 16
No. of bananas in the data = 10
No. of strawberries are more than bananas = $16 - 10 = 6$
(d) Apples
(e) Total number of fruits
= $12 + 8 + 10 + 2 + 16$
= 48



BRUSH UP YOUR CONCEPTS

1. Total number of chocolates sold on Thursday = $4 \times 10 = 40$
2. The sale was maximum on Monday
The sale on Monday = $5 \times 10 = 50$
3. Since, sale on Tuesday = $3 \times 10 = 30$
And sale of Friday = $3 \times 10 = 30$
So, sale on Tuesday = Sale on Friday.
4. The total number of chocolates sold in six days
= $5 \times 10 + 3 \times 10 + 2 \times 10 + 4 \times 10$
+ $3 \times 10 + 10$
= $50 + 30 + 20 + 40 + 30 + 10$
= 180

22 Answer Key 3 to 5

5. The sale on Saturday was minimum.

It is 10.

Pictograph

Do, yourself.

Test Yourself-1

Section A

- (a) Place value of 2 = 200
And place value of 2 = 20
Sum of two place value of 2 = $200 + 20 = 220$
- (a) 589 is more than $256 = 589 - 256 = 333$
- (c) 8 S are 15 times in 120.
- $\frac{1}{7}$ has 7 as denominator.
- (b) The place value of 9 and 7 should be compared to determine the greater of the given numbers.
- (d) Successor of $765 = 765 + 1 = 766$
And the predecessor of $142 - 1 = 141$
The sum of the required numbers
 $= 766 + 141 = 907$
- (a) Let the x gram grains should be added to make it 2 kg grains.
 $\therefore 575 + x = 2 \text{ kg}$
 $\Rightarrow x = 2 \text{ kg} - 575\text{g}$
 $= 2000\text{g} - 575\text{g}$
 $[\because 1 \text{ kg} = 1000\text{g}]$
 $= 1425\text{g} = 1000\text{g} + 425\text{g}$
 $= 1 \text{ kg } 425\text{g}$
So, 1425g grains should be added to make it 2kg grains.
- (c) Circle is not a tangram piece
- (b) $\star = 7$ should be suitable key scale to represent the data given below in a pictograph.
- (b) To pay a bill of ₹ 80, which three notes ₹ 50, ₹ 20, ₹ 10 can be given.

11. (d)  represents 4 fruits in a pictograph,

 represent $5 \times 4 = 20$ fruits.

12. (c) We can write quarter past 9 as 9 : 15.

Section B

1. Number of glasses of 180 ml can be filled from a water dispenser whose total capacity is 9l

$$= 9000 \div 18$$

$$= 500 \text{ glasses}$$

$$[\because 1 \text{ L} = 1000 \text{ ml}]$$

$$[\therefore 9\text{L} = 9000 \text{ ml}]$$

2. $\therefore$  = 750 people

$$\therefore \text{  = 750 \times 5 = 3750 \text{ people.}$$

So, 3750 people visited Nainital.

- Cuboid solid shape will obtained by joining 3 cubes.
- The minute hand moves 5 times round the clock in 5 hours.
- We get 600 on rounding off number 567 to nearest 100.

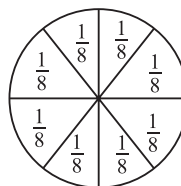
$$\begin{array}{r} 745 \\ - 468 \\ \hline 277 \end{array}$$

So, the difference between 745 and 468 is 277.

$$\begin{array}{r} 5 \\ 11 \overline{) 56} \\ - 55 \\ \hline 01 \end{array}$$

The remainder will be left 1 on dividing 56 by 11.

8. If a whole divided in 8 equal parts, then each part is called $\frac{1}{8}$ of the whole.



9. If last digit of the given number is 0, 2, 4, 6, 8, the number is called even number.
e.g. 12, 36, 104, 3468, 50000.
And if last digit of the given number is 1, 3, 5, 7, 9 is called odd number.
e.g. 23, 55, 121, 46391, 55067, 4149.
10. $\frac{6}{18}$ can be written as six eighteenth.

Section C

- 834 = Eight hundred thirty four
 $834 = 800 + 30 + 4$
- Using the digits 2, 7, 4 and 9.
Smallest number = 247
Largest number = 974
Sum of the numbers obtained = $974 + 247 = 1221$
- Round of the numbers 765 and 743 to nearest 10 are:
 $765 = 770$ and $743 = 740$
Estimated their difference = $770 - 740 = 30$.
- Number of Candies in a each jar = 45
Number of candies in 22 jars = $45 \times 22 = 990$.
- Number of vowels in Mathematis = 4
Number of total letters in Mathematis = 11
Fraction of number of vowels to the total number of letters = $\frac{4}{11}$
- Total number of book in a library = 245
Number of English book in library = 139
Required fraction = $\frac{139}{245}$
- Saving of Shobhit in every day = 45.50
Saving of shobhit in 30 days = $45.50 \times 30 = ₹ 1365$.
- Ascending order of icecream = 100, 200, 300, 350.
- Vertices in cube = 8
Vertices in cone = 1
Vertice in sphere = 0

Answer Key 3 to 5 23

∴ Sum of vertices in cube, cone and sphere
 $= 8 + 1 + 0 = 9$.

Now,

$$\begin{array}{r} 1 \\ 5 \overline{) 9} \\ \underline{5} \\ 4 \end{array}$$

Quotient = 1, remainder = 4.

10. (a) PFTR (b) 1 6 7 8 4 5

11. The amount has Neha = ₹ 245

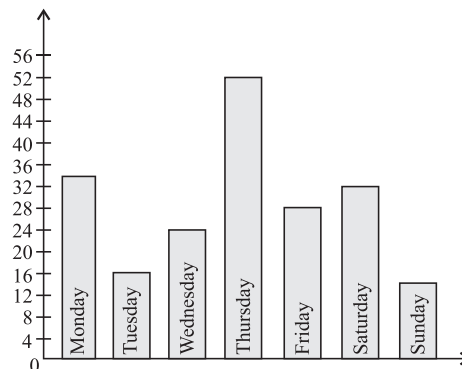
The amount has Ashish = ₹ 315

Sum of these amount = $245 + 315 = ₹ 560$

Since, cost of aboard ₹ 599 is greater than ₹ 560.

So, they will be not buy it

The amount more they need = $599 - 560 = ₹ 39$.



Test Yourself-2

- (a) The smallest three digit number using the digits 2, 0, 4 and 6 is 204.
- (a) Standard form of $500 + 70 + 8 = 578$.
- (d) Since, any number when divided by 0(zero), we get infinite (∞) e.g. $\frac{5}{0} = \infty$
So, 0(zero) cannot be denominator of a fraction.
- (b) Dice is the best example of a cube.
- (a) Since, 2022 cannot be divided by 4.
So, number of days in February 2022 are 28.

24 Answer Key 3 to 5

6. (c) L ml

$$\begin{array}{r} 45 \ 200 \\ - 37 \ 150 \\ \hline 8 \ 050 \end{array}$$
7. (c) Four thousand five hundred ten rupees
 = ₹4510.
8. (b) $\therefore$  represents 5 students.
 $\therefore$ To represent 30 students number of  will be drawn = $30 \div 5 = 6$.
9. (b) Since, cone cube and cuboid are 3D solids but circle is a plane figure (i.e., 2D shape).

Section B

- Since, 1 km = 1000 m.
 So, We should 3 zero (0) to the right of a number while converting it from km to m.
- In ones place, the face value and place value of any digit will be the same.
 e.g In the number 367,
 The face value of 7 = 7
 and place value of 7 = 7.
- The greatest 3 digit number = 999
 The smallest 2 digit number 10 the difference = $999 - 10 = 989$.
- Number of months having 31 days = 7
 Total number of months = 12
 Required fraction = $\frac{7}{12}$
- Largest number formed using the digits 3, 2 and 7 = 732
 $\therefore$ 732 = Seven hundred thirty two.
- Kilometre is used to measure the length of rivers.
- The point where edges of a solid meet is known is vertex.
- The data represented in the form of pictures is called pictograph.
- There are 6 face in a cube.

Section C

- Cost of 1 kg oranges = ₹ 80
 Cost of 1 kg apples = ₹ 100
 Rahana bought 2 kg oranges and 3 kg apples
 So, amount paid by Rahana to the fruit seller

$$\begin{aligned} &= 2 \times 80 + 3 \times 100 \\ &= 160 + 300 \\ &= ₹ 460. \end{aligned}$$
- The time at which went to school = 7 : 40
 The time at which he reached to school = 8 : 10
 The time taken by him to reach the school

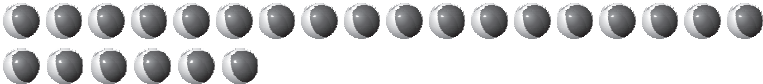
hour	minutes
7	70
8	10
7	40
0	30

 Hence, the time taken by him to reach the school = 30 minutes.
- Since,  = 25 orders.
 So, number of orders placed for cold coffee

$$\begin{aligned} &= 4 \times 25 \\ &= 100 \end{aligned}$$
 Number of orders placed for Tea = $3 \times 25 = 75$
 Number of orders placed for Sandwich

$$\begin{aligned} &= 3 \times 25 = 75 \end{aligned}$$
 Number of orders placed for spring roll

$$\begin{aligned} &= 2 \times 25 = 50 \end{aligned}$$
-  
- 12, 36, 108, 324 972
 Pattern, New number = $3 \times$ previous number.

Toy	Number of Toys in a Shop	 = 1 ball
Doll		
Teddy		
Toy trains		
Ball		

7. The length of yarn used for 1 sweater
= 900 m

The length of yarn required for 25 sweater
= 900×25
= 22500 m

8. The product of two numbers = 492

One of the number = 12

Other number = $\frac{492}{12}$
= 41

9. The amount paid by Amit at the counter
= ₹ 500

The amount used to purchase groceries
= ₹ 267

The amount will be get back = ₹ 233

10. Even numbers : 568, 570, 572, 574, 576,
578, 580, 584, 586, 588, 590, 592, 594,
596, 598, 600, 602, 604.

Odd numbers : 569, 571, 573, 575, 577,
579, 581, 583, 585, 587, 589, 591, 593,

595, 597, 599, 601, 603.

11. The total number of pieces of a cube = 36

Number of pieces eaten by the students of
class I

= One third of 36

= $\frac{1}{3} \times 36$

= 12

Number of pieces eaten by the students of
Class II

= One fourth of 36

= $\frac{1}{4} \times 36$

= 9

Number of pieces are still left for the
students of class III

= $36 - (12 + 9)$

= $36 - 21$

= 15.

Mathematics - 4

1. Number Sense

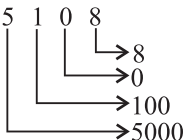
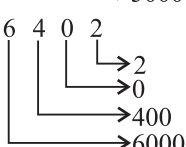
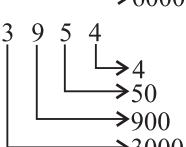
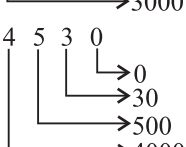
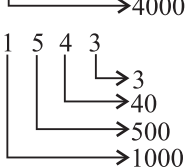
Exercise-1.1

1. (a) 1446 (b) 2235 (c) 2313 (d) 1080
 2. (a) 3564 = Three thousand five hundred sixty four.
 (b) 2006 = Two thousand six
 (c) 7682 = Seven thousand six hundred eighty two
 (d) 8413 = Eight thousand four hundred thirteen

4.

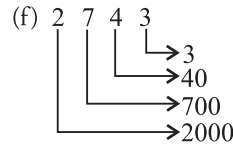
1068	1069	1070	1071	1072	1073	1074	1075	1076	1077
4685	4686	4687	4688	4689	4690	4691	4692	4693	4694
8991	8992	8993	8994	8995	8996	8997	8998	8999	9000

5. (a) 7000, 400, 60, 4
 (b) 5, 5000, 1, 0
 (c) 600, 4000, 30, 4
 (d) 9, 700, 400, 6000
 (e) 7000, 400, 50, 7

6. (a) 
 (b) 
 (c) 
 (d) 
 (e) 

(e) 1238 = One thousand two hundred thirty eight

3. (a) Six thousand four hundred fifty two = 6452
 (b) Eight thousand seven hundred nine = 8709
 (c) Nine thousand eight = 9008
 (d) Five thousand seventy seven = 5077
 (e) Three thousand thirty one = 3031

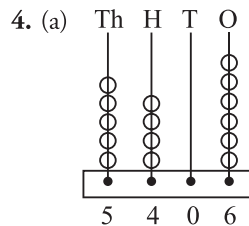


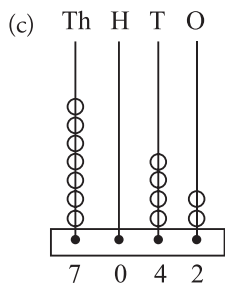
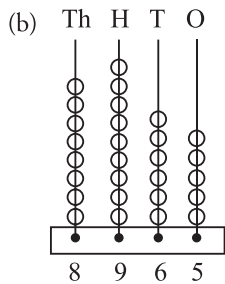
7.

Digits	Place Value	Face Value
(a) <u>6</u> 502	6000	6
(b) 1 <u>2</u> 34	200	2
(c) 40 <u>2</u> 8	90	9
(d) <u>2</u> 430	2000	2
(e) 380 <u>7</u>	7	7

Exercise-1.2

1. (a) 2738 (b) 3325
 (c) 5844 (d) 7014
 2. (a) 8485 = Eight thousand four hundred eighty five
 (b) 7918 = Seven thousand nine hundred eighteen
 3. (a) 5951 = 5000 + 900 + 50 + 1
 (b) 7255 = 7000 + 200 + 50 + 5
 (c) 5285 = 5000 + 200 + 80 + 5





5. (a) $3029 = 3000 + 0 + 20 + 9$
 (b) $7305 = 7000 + 300 + 0 + 5$
 (c) $5757 = 5000 + 700 + 50 + 7$
 (d) $3029 = 3000 + 0 + 20 + 9$
6. (a) $4000 + 500 + 20 + 6 = 4526$
 (b) $6000 + 800 + 60 + 4 = 6864$
 (c) $5000 + 600 + 30 + 5 = 5635$
 (d) $3000 + 700 + 50 + 3 = 3753$
7. (a) 8 Thousands + 3 hundreds + 4 tens + 1 one = 8341
 (b) 6 Thousands + 2 hundreds + 7 tens + 4 ones = 6274
 (c) 5 Thousands + 6 hundreds + 8 tens + 7 ones = 5687
 (d) 9 Thousands + 5 hundreds + 3 tens + 8 ones = 9538

Exercise-1.3

1. (a) $8773 \geq 8737$ (b) $5094 < 5904$
 (c) $7163 < 7613$ (d) $5942 = 5942$
2. (a) 8310, 8031, 8013, 3018 **D**
 (b) 1500, 1520, 1600, 1820 **A**
 (c) 4790, 4700, 4699, 4599 **D**
 (d) 917, 1536, 2568, 3584 **A**

Answer Key 3 to 5

27

3. (a) 2986, 3285, 3469, 4061
 (b) 1125, 1289, 1892, 1928
 (c) 9009, 9099, 9909, 9990
 (d) 6143, 6314, 6341, 6431
4. (a) 5230, 4986, 4352, 2250
 (b) 6776, 6767, 6741, 6414
 (c) 7700, 7070, 7007, 7000
 (d) 9652, 8945, 8756, 7485
5. (a) 5246, 5346, 5446, 5568
 (b) 8354, 8365, 8345, 8356
 (c) 4897, 4879, 4786, 4768
 (d) 1126, 1162, 1062, 1026
6. (a) $5648 \rightarrow \boxed{5649}$ (b) $4569 \rightarrow \boxed{4570}$
 (c) $3264 \rightarrow \boxed{3265}$ (d) $1236 \rightarrow \boxed{1237}$
 (e) $5010 \rightarrow \boxed{5011}$
7. (a) $\boxed{1024} \leftarrow 1025$ (b) $\boxed{9000} \leftarrow 9001$
 (c) $\boxed{5009} \leftarrow 5010$ (d) $\boxed{8998} \leftarrow 8999$
 (e) $\boxed{7489} \leftarrow 7490$

8.

Predecessor	Number	Successor
(a) 2829	2830	2831
(b) 5496	5497	5498
(c) 6985	6986	6987
(d) 7611	7612	7613
(e) 3720	3721	3722
(f) 1044	1045	1046

Exercise-1.4

- | Digits | Greatest number | Smallest number |
|--------|-----------------|-----------------|
|--------|-----------------|-----------------|
1. (a) 8, 3, 2, 9 9832 2389
 (b) 4, 0, 9, 7 9740 4079
 (c) 6, 7, 0, 8 8760 6078
 (d) 3, 4, 8, 6 8643 3468
2. (a) 5684; since, last digit (ones) is less than the number 5, so, round off to nearest 10 of the number 5684 is 5680
 (b) 7942; since, last digit (ones) is less than 5, so, round off to nearest 10 of the number 7942 is 7940

28 Answer Key 3 to 5

- (c) 6456; since, last digit (ones) is greater than 5, so, round off to nearest 10 of the number 6456 is 6460.
- (d) 4278; since, last digit (ones) is greater than 5, so, round off to nearest 10 of number 4278 is 4280.
3. (a) 6895; since, last two digits are greater than 50 so, the round of nearest to 100 of the number 6895 is 6900.
- (b) 4869; since, last two digits are greater than 50, so, the round off nearest to 100 of the number 4869 is 4900.
- (c) 5717; since, last two digits are less than 50, so, the round off nearest to 100 of the number 5717 is 5700.
- (d) 3612; Since, last two digits are less than 50, so, round off the nearest 100 of the number 3612 is 3600.
4. We know that if the last digit is 0, 2, 4, 6, 8 then the number is even and if the last digit is 1, 3, 5, 7, 9 then the number is odd.
- (a) 4895 odd (b) 8614 even
- (c) 5987 odd (d) 6012 even
- (e) 7256 even
5. (a) 43 → Forty three (b) 36 → Thirty six
- (c) 54 → Fifty four (d) 12 → Twelve
- (e) 30 → Thirty
- (f) 22 → Twenty two
6. (a) 50th → Fiftieth
- (b) 98th → Ninety eighth
- (c) 82nd → Eighty second
- (d) 53rd → Fifty third
2. The largest 3 digit number is 953.
3. The smallest 4 digit number if 3 is in the thousands place = 3259.
4. The smallest 4 digit even number = 3592.
5. Largest two digit number if 5 is in the tens place = 59.

2. An Introduction to Roman Numerals

Exercise-2

1. (a) Seven = VII
- (b) Twenty two = XXII
- (c) The letters V, L, D are never repeated.
- (d) The three basic symbols of roman numeral are I, V and X.
2. (a) The numbers nine is written as IX
- (b) The value of D is 500
- (c) We can repeat X more than 3 times

3.

I	V	X	L	C	D	M
1	5	10	50	100	500	1000
4. (a) 39 = XXXIX (b) 24 = XXIV
- (c) 19 = XIX (d) 5 = V
- (e) 29 = XXIX (f) 37 = XXXVII
- (g) 26 = XXVI (h) 10 = X
- (i) 6 = VI (j) 32 = XXXII
5. (a) XIX = 19 (b) XXIV = 24
- (c) XVII = 17 (d) XXVI = 26
6. (a) XXXX → ☒ (b) VXV → ☒
- (c) XIX → ☒ (d) XV → ☒
7. (a) II, V, XVI, XVIII, XXI
- (b) IV, VII, XII, XXVII, XXXI
- (c) III, VIII, XIX, XXVI, XXXIII
- (d) XIX, XXII, XXVIII, XXXII, XXXIX
8. (a) XXIX, XXIII, XXI, XX, X
- (b) XXXV, XXVI, XIV, XI, III
- (c) XXXV, XXXI, XXVIII, XXI, V
- (d) XXX, XXIX, XIV, VI

BRUSH UP YOUR CONCEPTS

Competency Based Questions

1. Greatest number 8421
2. 8241 [If 4 is in tens place]
3. Smallest number 1248
4. Greatest number is Red basket = 9652
- Greatest number is blue basket = 8421
- Difference = 1231

Achiever's Section

Required number = 9998

Challenge

1. The smallest 4 digit number using the digits 3, 5, 9, 2 is 2359.

9. (a)	Hindu Arabic	1	2	3	4	5	6	7	8	9	10
	Roman	I	II	III	IV	V	VI	VII	VIII	IX	X

(b)	Hindu Arabic	11	12	13	14	15	16	17	18	19	20
	Roman	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX

(c)	Hindu Arabic	21	22	23	24	25	26	27	28	29	30
	Roman	XXI	XXII	XXIII	XXIV	XXV	XXVI	XXVII	XXVIII	XXIX	XXX

(d)	Hindu Arabic	31	32	33	34	35	36	37	38	39	40
	Roman	XXXI	XXXII	XXX III	XXXIV	XXXV	XXXVI	XXXVII	XXX VIII	XXXIX	XL

BRUSH UP YOUR CONCEPTS

Competency Based Questions

- Number of non flowering plants = 11
Number of flowering plants = 13
Total number of plants = 24 = XXIV.

- XXIV
- IV

Achiever's Questions

- 4 : 45
- 10 : 30
- 7 : 15

Challenge Questions

- 15 = VVV (XV)
- 24 = XXVI (XXIV)
- 8 = IIX (VIII)
- 19 = XVIII (XIX)
- 25 = XXVX (XXV)
- 17 = IIIXX (XVII)

3. Addition

Exercise-3.1

1. (a)	Th	H	T	0
	1	1		
		8	8	4
+		3	9	3
	1	2	7	7

(b)	Th	H	T	0
	1	1		
		9	7	1
+		8	5	5
	1	8	2	6

(c)	Th	H	T	0
	1	1		
		9	3	7
+		6	7	2
	1	6	0	9

2. (a)	Th	H	T	0
			1	
		4	1	6
+		3	5	6
		7	7	2

(b)	Th	H	T	0
		1	1	
		3	5	9
+		4	6	8
		8	2	7

(c)	Th	H	T	0
	1		1	
		7	0	8
+		9	8	7
	1	6	9	5

(d)	Th	H	T	0
	1			
		8	3	3
+		7	5	5
	1	5	8	8

30 Answer Key 3 to 5

(e)

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

(f)

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

Exercise-3.2

1. (a)

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

(b)

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

(c)

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

2. (a) $636 + 763 + 214$

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

(b)

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

(c)

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

(d)

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

Exercise-3.3

1. (a)

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

(b)

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

(c)

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

(d)

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

(e)

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

(f)

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

2. (a)

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

(b)

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

(c)

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

(d)

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

(e)

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

(f)

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

Exercise-3.4

1.

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

2.

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

3.

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

4.

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

32 Answer Key 3 to 5

5.

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

6.

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

Exercise-3.5

1.

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

2.

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

3.

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

4.

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

5.

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

6.

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

7.

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

8.

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

9.

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

10.

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

11.

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

12.

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

Exercise-3.6

1. Add down

	2	8	9
+	1	3	5
	4	2	4

Check Subtract from Sum

	4	2	4
-	1	3	5
	2	8	9

2. Add down

	3	9	6
+	4	3	7
	8	3	3

Check Subtract from Sum

	8	3	3
-	3	9	6
	4	3	7

3. Add down

	9	8	5
+	6	6	6
	16	5	1

Check Subtract from Sum

	16	5	1
-	6	6	6
	9	8	5

4. Add down

	6	0	5
+	8	9	3
	14	9	8

Check Subtract from Sum

	14	9	8
-	8	9	3
	6	0	5

Exercise-3.7

- Number of Apple trees = 1265
Number of mango trees = 1125
Number of orange trees = + 2475
Total number of trees = 4865

Answer Key 3 to 5 33

- In 1 day Neelam baked chocolate pastries
= 1275
In 1 day she baked pineapple pastries
= 1035
In 1 day she baked strawberry pastries
= + 2750
In 1 day she baked total pastries = 5060
- Distance travelled in June = 6544 km
More distance travelled in = + 542 km
July than in June = 7086 km
The distance travelled in July
- Number of boys = 3657
Number of girls = 5678
Number of staff = + 657
Number of people in the school = 9992
- Numbers of people were trekking
in the mountains = 2458
Numbers of more people joined later
+ 4269
Numbers of people were trekking in all
= 6727
- Numbers of soft drink can collected by
Riya = 5486
Numbers of news paper can collected by
Sophia = 2309
Numbers of empty milk bottles can
collected by Yuva = + 1487
Numbers of items were collected
by them = 9282

BRUSH UP YOUR CONCEPTS

Match the column

- (III), 2. (I), 3. (IV), 4. (II)

Competency Based Questions

- The required 4 digit number = 7627.
- The required 4 digits number = 2333
- The required 4 digits number = 3123
- The required 4 digit number = 1942
After finding the 4 digit number.
- The sum of (1) and (2) = 7627 + 2333
= 9960
- The sum of (3) and (4) = 5065

34 Answer Key 3 to 5

3. The sum of (1) and (4) = $7627 + 1942$
 $= 9569$

4. The sum of (3) and (2) = $3123 + 2333$
 $= 5456$

5. The sum of (1), (2), (3) and (4)
 $= 7627 + 2333 + 3123$
 $= 1942$
 $= 15025$

Challenge

Do your self

4. Subtraction

Exercise-4.1

1. (a) $\boxed{3088} - 936 = 2152$

(b) $2774 - \boxed{209} = 2565$

(c) $1926 - \boxed{917} = 1009$

(d) $6941 - \boxed{40} = 6901$

(e) $\boxed{8634} - 621 = 8013$

(f) $6927 - \boxed{146} = 6781$

2. (a)

	H	T	0
		4	16
	9	5	6
-	1	0	8
	8	4	8

(b)

	H	T	0
	5	10	
	6	0	3
-	5	8	2
	0	2	1

(c)

	H	T	0
	5	15	12
	6	6	2
-	2	9	5
	3	6	7

(d)

	Th	H	T	0
	8	14	6	11
	9	4	7	1
-		8	6	6
	8	6	0	5

(e)

	Th	H	T	0
		3	10	
	8	4	0	9
-		1	9	8
	8	2	1	1

(f)

	Th	H	T	0
		1	9	12
	7	2	0	2
-		1	0	7
	7	0	9	5

(g)

	Th	H	T	0
	6	6	2	8
-		2	0	7
	6	4	2	1

(h)

	Th	H	T	0
	3	9	5	9
-		7	3	2
	3	2	2	7

(i)

	Th	H	T	0
	5	2	8	9
-		2	2	2
	5	0	6	7

3. (a) $5275 - 687 = \boxed{4588}$

(b) $7445 - 529 = \boxed{6916}$

(c) $3260 - 538 = \boxed{2722}$

(d) $9005 - 295 = \boxed{8710}$

(e) $2744 - 396 = \boxed{2348}$

(f) $4276 - 884 = \boxed{3392}$

(g) $9500 - 362 = \boxed{9138}$

(h) $5324 - 473 = \boxed{4851}$

Exercise-4.2

1. (a) $2691 - \boxed{291} = 2400$

(b) $\boxed{8798} - 786 = 8012$

(c) $6898 - \boxed{896} = 6002$

(d) $9479 - \boxed{424} = 9055$

(e) $2539 - 109 = \boxed{2430}$

(f) $3389 - 349 = \boxed{3040}$

2. (a)

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

(b)

	Th	H	T	0
	8	9	3	1
-	3	7	3	0
	5	2	0	1

(c)

	Th	H	T	0
	8	9	9	18
	9	0	0	8
-	1	9	9	9
	7	0	0	9

(d)

	Th	H	T	0
	4	9	12	
	5	0	2	8
-	4	3	9	0
	0	6	3	8

Answer Key 3 to 5

35

(e)

	Th	H	T	0
	4	17	16	
	5	8	6	4
-	1	9	8	4
	3	8	8	0

(f)

	Th	H	T	0
	8	11	13	
	9	2	3	9
-	2	3	8	4
	6	8	5	5

(g)

	Th	H	T	0
	8	17		
	9	7	6	6
-	3	8	1	2
	5	9	5	4

(h)

	Th	H	T	0
	8	10	11	12
	9	1	2	2
-	8	8	7	5
	0	2	4	7

(i)

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

3. (a) $5500 - 1267 = \boxed{4233}$

(b) $4916 - 2334 = \boxed{2582}$

(b) $6568 - 1734 = \boxed{4834}$

(d) $5147 - 1065 = \boxed{4082}$

(e) $4856 - 1038 = \boxed{3818}$

(f) $7194 - 4905 = \boxed{2289}$

(g) $3629 - 1756 = \boxed{1873}$

(h) $4285 - 1302 = \boxed{2983}$

36 Answer Key 3 to 5

Exercise-4.3

- The amount was sanctioned to purchase sports items = ₹ 9750
The amount was used to purchase outdoor sports items = ₹ 5918
Cost of indoor sport items = ₹ 3832
- Weight of jowar grows by a farmer = 3290 kg
Weight of jowar use for his house hold use = - 1376 kg
Weight of jowar sold = 1914 kg
- Number of men in a village = 4526
Number of women in a village = - 3214
Number of men more than = 1312
Women in a village
- Number of seeds collected by Ajay = 1207
Number of seeds collected by Vijay = - 897
Number of seeds Ajay more than Vijay = 310
- The amount decided by an organization for a certain project = ₹ 2500
The amount collected through donations and other kinds of aid = - ₹ 1340
The amount more they need to reach their target = 1160

BRUSH UP YOUR CONCEPTS

Chess Board

Do, your self

- (a)-(iv), (b)-(iii), (c)-(ii), (d)-(i)
- (a)---(iii) (b)---(iv)
(c)---(i) (d)---(v)
(e)---(vi) (f)---(ii)

Consecutive Substraction

Do yourself.

5. Multiplication

Exercise-5.1

- (a) Since, $6 \times 4 = 24$, $3 \times 8 = 24$,
 $5 \times 9 = 45$, $12 \times 2 = 24$, $4 \times 6 = 24$
So, odd one out is 5×9

(b) Since, $4 \times 10 = 40$, $5 \times 8 = 40$,
 $6 \times 7 = 42$, $20 \times 2 = 40$, $10 \times 4 = 40$
So, odd one out is 6×7 .

(c) Since $9 \times 10 = 90$, $6 \times 15 = 90$,
 $18 \times 5 = 90$, $10 \times 3 = 30$, $30 \times 3 = 90$
So, odd one out is 30×3 .

2. Do, yourself

- (a) $3 \times \boxed{9} = 27$ (b) $\boxed{4} \times 5 = 20$
(c) $5 \times 7 = \boxed{35}$ (d) $4 \times \boxed{4} = 16$
(e) $9 \times \boxed{4} = 36$ (f) $\boxed{8} \times 2 = 16$
(g) $4 \times 6 = \boxed{24}$ (h) $9 \times \boxed{8} = 72$
(i) $\boxed{2} \times 6 = 12$
- (a) $12 \times 0 = \boxed{0}$ (b) $12 \times 4 = \boxed{48}$
(c) $12 \times 7 = \boxed{84}$ (d) $12 \times 10 = \boxed{120}$
(e) $12 \times 1 = \boxed{12}$ (f) $12 \times 5 = \boxed{60}$
(g) $12 \times 8 = \boxed{96}$ (h) $12 \times 3 = \boxed{36}$
(i) $12 \times 2 = \boxed{24}$ (j) $12 \times 6 = \boxed{72}$
(k) $12 \times 9 = \boxed{108}$
- (a) $11 \times 2 < 15 \times 6$ (b) $15 \times 9 > 14 \times 8$
(c) $13 \times 8 < 14 \times 8$ (d) $13 \times 7 > 12 \times 5$
(e) $4 \times 11 = 11 \times 4$ (f) $11 \times 8 > 13 \times 6$

Exercise-5.2

- (a)

H	T	0
	3	
	1	5
	$\times$	7
1	0	5

 (b)

H	T	0
	2	
	3	3
	$\times$	9
2	9	7
- (c)

H	T	0
	1	
	3	4
	$\times$	4
1	3	6

 (d)

H	T	0
	8	2
	$\times$	2
1	6	4

Answer Key 3 to 5

37

(e)

H	T	0
	7	
	4	9
	×	8
3	9	2

(f)

H	T	0
	2	
	8	5
	×	5
4	2	5

(g)

H	T	0
	5	
	1	9
	×	6
1	1	4

(h)

H	T	0
	2	
	2	9
	×	3
	8	7

(c)

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

(d)

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

2. (a) $312 \times 100 = \boxed{31200}$

(b) $64 \times \boxed{100} = 6400$

(c) $\boxed{89} \times 10 = 890$

(d) $187 \times \boxed{10} = 1870$

(e) $\boxed{45} \times 10 = 450$

(f) $892 \times 1000 = \boxed{892000}$

3. (a) $7 \times 20 = \boxed{140}$

(b) $82 \times 10 = \boxed{820}$

(c) $29 \times 300 = \boxed{8700}$

(d) $6 \times 300 = \boxed{1800}$

(e) $14 \times 100 = \boxed{1400}$

(f) $76 \times 40 = \boxed{3040}$

4. (a)

Th	H	T	O
		5	6
	×	4	1
		5	6
2	2	4	×
2	2	9	6

(b)

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

Exercise-5.3

1. Number of pencils in a box = 58

Number of pencils in 8 boxes = 58

$$\begin{array}{r} \times 8 \\ = 464 \end{array}$$

2. Number of guavas in a box = 76

Number of guavas in 45 boxes = 76

$$\begin{array}{r} \times 45 \\ 380 \\ + 304 \times \\ \hline 3420 \end{array}$$

3. 1 box contains sachets = 89

47 boxes contain sachets = 89

$$\begin{array}{r} \times 47 \\ 623 \\ + 356 \times \\ \hline 4183 \end{array}$$

4. In 1 day chocolates makes = 65

In 48 days will it make chocolates = 65

$$\begin{array}{r} \times 48 \\ 520 \\ + 260 \times \\ \hline 3120 \end{array}$$

5. Each tank has tadpoles = 46

15 tanks has tadpoles = 46

$$\begin{array}{r} \times 15 \\ 230 \\ + 46 \times \\ \hline 690 \end{array}$$

6. Each packet has stickers = 548

38 Answer Key 3 to 5

$$\begin{array}{r} 7 \text{ packets has stickers} = 548 \\ \times 7 \\ \hline 3836 \end{array}$$

BRUSH UP YOUR CONCEPTS

Solve Tables : Do, yourself

Multiplication Crossword

Do, yourself.

6. Division

Exercise-6.1

1. (a) $40 \div \boxed{1} = 40$ (b) $9 \div \boxed{9} = 1$
 (c) $28 \div \boxed{1} = 28$ (d) $15 \div \boxed{15} = 1$
 (e) $492 \div \boxed{1} = 492$ (f) $134 \div 134 = \boxed{1}$
2. **Multiplication Facts Division :**
 (a) $8 \times 3 = 24$ (b) $6 \times 8 = 48$
 (c) $5 \times 9 = 45$ (d) $4 \times 8 = 32$
 (e) $10 \times 6 = 60$

3. (a) $8 \times 7 = \boxed{56}$ $\begin{cases} \rightarrow \boxed{56} \div \boxed{7} = \boxed{8} \\ \rightarrow \boxed{56} \div \boxed{8} = \boxed{7} \end{cases}$
 (b) $6 \times 9 = \boxed{54}$ $\begin{cases} \rightarrow \boxed{54} \div \boxed{6} = \boxed{9} \\ \rightarrow \boxed{54} \div \boxed{9} = \boxed{6} \end{cases}$
 (c) $4 \times 5 = \boxed{20}$ $\begin{cases} \rightarrow \boxed{20} \div \boxed{4} = \boxed{5} \\ \rightarrow \boxed{20} \div \boxed{5} = \boxed{4} \end{cases}$
 (d) $\boxed{9} \times \boxed{8} = \boxed{72}$ $\begin{cases} \rightarrow \boxed{72} \div \boxed{8} = \boxed{9} \\ \rightarrow \boxed{72} \div \boxed{9} = \boxed{8} \end{cases}$
4. (a) $9 \div 9 = \boxed{1}$ (b) $462 \div 1 = \boxed{462}$
 (c) $364 \div 364 = \boxed{1}$ (d) $0 \div 6773 = \boxed{0}$
 (e) $718 \div 1 = 718$ (f) $25 \div 25 = \boxed{1}$

Exercise-6.2

1. (a) $24 \div 4 = 6$ (b) $60 \div 6 = 10$
 (c) $36 \div 6 = 6$ (d) $64 \div 8 = 8$
 (e) $48 \div 6 = 8$ (f) $18 \div 2 = 9$

(g) $35 \div 7 = 5$ (h) $40 \div 5 = 8$

2. (a) $92 \div 4 = 23$
 (b) $66 \div 2 = 33$
 (c) $38 \div 3$; Q = 12, R = 2
 (d) $46 \div 2 = 23$
 (e) $96 \div 8 = 12$
 (f) $84 \div 6 = 14$
 (g) $87 \div 5$, Q = 17, R = 2
 (h) $75 \div 2$; Q = 37, R = 1

$$\begin{array}{r} 263 \\ 2 \overline{) 526} \\ \underline{-4} \\ 12 \\ \underline{-12} \\ 06 \\ \underline{-06} \\ 0 \end{array}$$

So, Q = 263, R = 0

$$\begin{array}{r} 64 \\ 4 \overline{) 256} \\ \underline{-24} \\ 16 \\ \underline{-16} \\ 0 \end{array}$$

So, Q = 64, R = 0

$$\begin{array}{r} 101 \\ 8 \overline{) 809} \\ \underline{-8} \\ 09 \\ \underline{-8} \\ 1 \end{array}$$

So, Q = 101, R = 1

$$\begin{array}{r} 61 \\ 3 \overline{) 184} \\ \underline{-18} \\ 4 \\ \underline{-3} \\ 1 \end{array}$$

So, Q = 61, R = 1

$$\begin{array}{r} 139 \\ (e) \ 7 \overline{) 976} \\ \underline{-7} \\ 27 \\ \underline{-21} \\ 66 \\ \underline{-63} \\ 3 \end{array}$$

So, $Q = 139$, $R = 3$

$$\begin{array}{r} 121 \\ 4. (a) \ 6 \overline{) 728} \\ \underline{-6} \\ 12 \\ \underline{-12} \\ 8 \\ \underline{-6} \\ 2 \end{array}$$

$Q = 121$, $R = 2$, divisor = 6, dividend = 728

We know that

$$\begin{aligned} \text{Dividend} &= \text{divisor} \times \text{quotient} \\ &\quad + \text{remainder} \end{aligned}$$

$$\Rightarrow 728 = 6 \times 121 + 2$$

$$\Rightarrow 728 = 728$$

□ LHS = RHS **Verified**

$$\begin{array}{r} 14 \\ (b) \ 4 \overline{) 57} \\ \underline{-4} \\ 17 \\ \underline{-16} \\ 1 \end{array}$$

So, dividend = 57, divisor = 4, quotient = 14 and remainder = 1

We know that

$$\begin{aligned} \text{Dividend} &= \text{Divisor} \times \text{quotient} \\ &\quad + \text{remainder} \end{aligned}$$

$$\Rightarrow 57 = 4 \times 14 + 1$$

$$\Rightarrow 57 = 57$$

□ LHS = RHS **Verified.**

$$\begin{array}{r} 115 \\ (c) \ 8 \overline{) 920} \\ \underline{-8} \\ 12 \\ \underline{-8} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

So, dividend = 920, divisor = 8, quotient = 115 and remainder = 0

We know that

$$\begin{aligned} \text{Dividend} &= \text{divisor} \times \text{quotient} \\ &\quad + \text{remainder} \end{aligned}$$

$$\Rightarrow 920 = 8 \times 115 + 0$$

$$\Rightarrow 920 = 920$$

□ LHS = RHS **Verified**

$$\begin{array}{r} 52 \\ (d) \ 6 \overline{) 315} \\ \underline{-30} \\ 15 \\ \underline{-12} \\ 3 \end{array}$$

So, dividend = 315, divisor = 6, quotient = 52 and remainder = 3

We know that

$$\begin{aligned} \text{Dividend} &= \text{divisor} \times \text{quotient} \\ &\quad + \text{remainder} \end{aligned}$$

$$\Rightarrow 315 = 6 \times 52 + 3$$

$$\Rightarrow 315 = 312 + 3$$

$$\Rightarrow 315 = 315$$

□ LHS = RHS **Verified**

$$\begin{array}{r} 107 \\ (e) \ 4 \overline{) 429} \\ \underline{-4} \\ 29 \\ \underline{-28} \\ 1 \end{array}$$

So, dividend = 429, divisor = 4, quotient = 107, and remainder = 1

We know that

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$$\begin{array}{l} \text{Dividend} = \text{divisor} + \text{quotient} \\ \quad \quad \quad + \text{remainder} \end{array}$$

$$\Rightarrow 429 = 4 \times 107 + 1$$

$$\Rightarrow 429 = 428 + 1$$

$$\Rightarrow 429 = 429$$

$$\square \quad \text{LHS} = \text{RHS} \quad \text{Verified}$$

$$\begin{array}{r} 41 \\ (f) \ 5 \overline{) 208} \\ \underline{-20} \\ 8 \\ \underline{-5} \\ 3 \end{array}$$

$$\text{So, dividend} = 208, \text{ divisor} = 5, \\ \text{quotient} = 41, \text{ and remainder} = 3$$

We know that

$$\begin{array}{l} \text{Dividend} = \text{divisor} + \text{quotient} \\ \quad \quad \quad + \text{remainder} \end{array}$$

$$\Rightarrow 208 = 6 \times 52 + 3$$

$$\Rightarrow 208 = 205 + 3$$

$$\Rightarrow 208 = 208$$

$$\square \quad \text{LHS} = \text{RHS} \quad \text{Verified}$$

$$\begin{array}{r} 173 \\ (g) \ 3 \overline{) 521} \\ \underline{-3} \\ 22 \\ \underline{-21} \\ 11 \\ \underline{-9} \\ 2 \end{array}$$

$$\text{So, dividend} = 521, \text{ divisor} = 3, \\ \text{quotient} = 173, \text{ and remainder} = 2$$

We know that

$$\begin{array}{l} \text{Dividend} = \text{divisor} + \text{quotient} \\ \quad \quad \quad + \text{remainder} \end{array}$$

$$\Rightarrow 521 = 3 \times 173 + 2$$

$$\Rightarrow 521 = 519 + 2$$

$$\Rightarrow 521 = 521$$

$$\square \quad \text{LHS} = \text{RHS} \quad \text{Verified}$$

$$\begin{array}{r} 139 \\ (h) \ 7 \overline{) 973} \\ \underline{-7} \\ 27 \\ \underline{-21} \\ 63 \\ \underline{-63} \\ 0 \end{array}$$

$$\text{So, dividend} = 973, \text{ divisor} = 7, \\ \text{quotient} = 139, \text{ and remainder} = 0$$

We know that

$$\begin{array}{l} \text{Dividend} = \text{divisor} + \text{quotient} \\ \quad \quad \quad + \text{remainder} \end{array}$$

$$\Rightarrow 973 = 7 \times 139 + 0$$

$$\Rightarrow 973 = 973$$

$$\square \quad \text{LHS} = \text{RHS} \quad \text{Verified}$$

Exercise-6.3

1. Total number of books = 84

$$\text{Number of books read in 1 day} = 6$$

$$\begin{array}{l} \text{Number of days will read completely} \\ = 84 \div 6 = 14 \text{ days} \end{array}$$

2. Number of persons carried by 8 auto

$$\text{rick haws} = 56$$

$$\begin{array}{l} \text{Number of persons carried by each} \\ \text{auto rick haws} = 56 \div 8 = 7 \end{array}$$

3. Number of people accommodate by a cab = 4

$$\begin{array}{l} \text{Number of cabs needed to accommodate} \\ 32 \text{ people} = 32 \div 4 = 8 \text{ cabs} \end{array}$$

4. Number of apples = 248

$$\text{Number of children} = 8$$

$$\because 248 \text{ apples were distributed among 8 children so, each get}$$

$$\therefore 248 \div 8 = 31 \text{ apples.}$$

5. Number of story books shared equally = 749

$$\text{Number of friends} = 7$$

$$\begin{array}{l} \text{Number of story books get by each friend} \\ = 749 \div 7 = 107 \text{ story books} \end{array}$$

BRUSH UP YOUR CONCEPTS

Missing Dividend

1. $160 \div 4 = 40$
2. $90 \div 3 = 30$
3. $300 \div 3 = 100$
4. $420 \div 7 = 60$
5. $300 \div 5 = 60$
6. $80 \div 2 = 40$

Achiever's Section

$\times$	A	B	C
3	21	D	18
5	E	15	30
10	70	F	G

$A = 7$ $B = 3$ $C = 6$
 $D = 9$ $E = 35$ $F = 30$
 $G = 60$

Decode The math tool !

1. $8 \div 2 = 4$
2. $10 \div 5 = 2$
3. $24 \div 4 = 6$
4. $50 \div 10 = 5$
5. $72 \div 9 = 8$
6. $32 \div 10 = 3$ remainder 2
7. $48 \div 7 = 6$, remainder 6
8. $29 \div 3 = 9$, remainder 2
9. $65 \div 8 = 8$, remainder 1
10. $92 \div 6 = 15$ remainder 2

I 8	E 1
L 3 remainder 2	N 7 remainder 6
W 7	I 6 remainder 6
S 8 remainder 1	E 2
U 6	O 11
A 9	P 15 remainder 2
B 15 remainder 3	X 2 remainder 5
L 4	C 10
D 2 remainder 3	R 5
T 9 remainder 2	

M U L T I P L I E R S
 3 1 8 5 10 6 7 2 4 9

Competency Based Questions

Do, yourself

Challenge!

Sport the given table and answer the following questions

Sport/Activity	Number of children taking part
Gymnastics	3 per group
Relay race	4 per group
Football	5 per group
Ice hockey	6 per team
Base ball	9 per team

1. Number of teams can be formed for football = $20 \div 5 = 4$
2. Number of teams can be formed for base ball = $36 \div 9 = 4$
3. Number of teams can be formed for ice hockey = $42 \div 6 = 7$
4. Number of teams can be formed for relay race = $16 \div 4 = 4$
5. Number of teams can be formed for gymnastics = $27 \div 3 = 9$

7. Money

Exercise-7.1

1. ₹ 1 = 100 paise

(a) 182 rupees 76 paise
 $= (182 \times 100 + 76)$ paise
 $= (18200 + 76)$ paise
 $= 18276$ paise

(b) 911 rupees 50 paise
 $= (911 \times 100 + 50)$ paise
 $= (91100 + 50)$ paise
 $= 91150$ paise

(c) 624 rupees 65 paise
 $= (624 \times 100 + 65)$ paise
 $= (62400 + 65)$ paise
 $= 62465$ paise

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- (d) 543 rupees 35 paise
 $= (543 \times 100 + 35) \text{ paise}$
 $= (54300 + 35) \text{ paise}$
 $= 54335 \text{ paise}$
- (e) 743 rupees 44 paise
 $= (743 \times 100 + 44) \text{ paise}$
 $= (74300 + 44) \text{ paise}$
 $= 74344 \text{ paise}$
- (f) 875 rupees 28 paise
 $= (875 \times 100 + 28) \text{ paise}$
 $= (87500 + 28) \text{ paise}$
 $= 87528 \text{ paise}$
2. (a) $9648 \text{ paise} = \frac{9648}{100}$
 $= \frac{9600}{100} \text{ rupees} + 48 \text{ paise}$
 $= 96 \text{ rupees } 48 \text{ paise}$
- (b) $876 \text{ paise} = \frac{876}{100} = \frac{800}{100} \text{ rupees}$
 $+ 76 \text{ paise}$
 $= 8 \text{ rupees } 76 \text{ paise}$
 $\therefore 100 \text{ paise} = ₹ 1$
- (c) $543 \text{ paise} = ₹ \frac{543}{100} = \frac{500}{100} \text{ rupees}$
 $+ 43 \text{ paise}$
 $= 5 \text{ rupees } 43 \text{ paise}$
- (d) $6120 \text{ paise} = \frac{6120}{100} = \frac{6100}{100} \text{ rupees}$
 $+ 20 \text{ paise}$
 $= 61 \text{ rupees } 20 \text{ paise}$
- (e) $287 \text{ paise} = \frac{287}{100} = \frac{200}{100} \text{ rupees}$
 $+ 87 \text{ paise}$
 $= 2 \text{ rupees } 87 \text{ paise}$
- (f) $1240 \text{ paise} = \frac{1240}{100} = \frac{1200}{100} \text{ rupees}$
 $+ 40 \text{ paise}$
 $= 12 \text{ rupees } 40 \text{ paise}$
- (g) $428 \text{ paise} = \frac{428}{100} = \frac{400}{100} \text{ rupees}$
 $+ 28 \text{ paise}$
 $= 4 \text{ rupees } 28 \text{ paise}$
- (h) $7896 \text{ paise} = \frac{7896}{100} = \frac{7800}{100} \text{ rupees}$
 $+ 96 \text{ paise}$
 $= 78 \text{ rupees } 96 \text{ paise.}$
3. $\therefore ₹ 1 = 100 \text{ paise}$
- (a) ₹ 789.09 = Seven hundred eighty nine rupees and nine paise
- (b) ₹ 486.42 = Four hundred eighty six rupees and forty two paise.
- (c) ₹ 89.12 = Eighty nine rupees and twelve paise
- (d) ₹ 607.37 = Six hundred seven rupees and thirty seven paise.
4. (a) One hundred twelve rupees and ninety four paise = ₹ 112.94
- (b) Three hundred forty rupees and thirty eight paise = ₹ 340.38
- (c) Seven hundred rupees and twenty six paise = ₹ 700.26
- (d) Four hundred sixty rupees and twelve paise = ₹ 460.12
5. (a) ₹ 120 . 56
 $₹ 458 . 24$
 $+ ₹ 78 . 38$
 $₹ 657 . 18$
- (c) ₹ 569 . 00
 $₹ 79 . 00$
 $+ ₹ 769 . 06$
 $₹ 1417 . 06$
- (d) ₹ 7 . 05
 $₹ 46 . 78$
 $₹ 897 . 42$
 $₹ 951 . 25$
- (d) ₹ 45
 $₹ 79$
 $+ ₹ 68$
 $₹ 192$
6. (a) ₹ 985.30
 $- ₹ 456.25$
 $₹ 529.05$
- (c) ₹ 100.78
 $- ₹ 56.65$
 $₹ 44.13$
- (b) ₹ 519.68
 $- ₹ 102.35$
 $₹ 417.33$
- (d) ₹ 200
 $- ₹ 168$
 $₹ 32$

Answer Key 3 to 5 43

7. (a) 8) 612.80 (76.60

$$\begin{array}{r} - 56 \\ 52 \\ - 48 \\ 48 \\ 48 \\ 0 \end{array}$$

$$\therefore ₹ 612.80 \div 8 = ₹ 76.60.$$

(b) 7) 144.16 (20.594

$$\begin{array}{r} - 14 \\ 41 \\ - 35 \\ 66 \\ - 63 \\ 30 \\ - 28 \\ 2 \end{array}$$

$$\therefore ₹ 144.16 \div 7 = ₹ 20.594 = ₹ 20.59.$$

(c) 10) 1056.60 (105.66

$$\begin{array}{r} - 10 \\ 56 \\ - 50 \\ 66 \\ - 60 \\ 60 \\ - 60 \\ 0 \end{array}$$

$$\therefore ₹ 1056.60 \div 10 = ₹ 105.66.$$

(d) 5) 175.05 (35.01

$$\begin{array}{r} 15 \\ 25 \\ - 25 \\ 05 \end{array}$$

$$\therefore ₹ 175.05 \div 5 = ₹ 35.01.$$

8. $\therefore 1 ₹ = 100.$

(a) ₹ P

$$\begin{array}{r} 31 \quad 10 \\ \times \quad 8 \\ \hline ₹ 248 \quad 80 \text{ paise} \end{array}$$

$$\therefore ₹ 248 + 80 \text{ paise} = ₹ 248 + ₹ \frac{80}{100}$$

$$= ₹ 248 + ₹ .8$$

$$= ₹ 248.8$$

(b) ₹ P

$$\begin{array}{r} 26 \quad 15 \\ \times \quad 6 \\ \hline ₹ 156 \quad 90 \text{ paise} \end{array}$$

$$\therefore ₹ 1569 \text{ paise} = ₹ 156 + ₹ \frac{90}{100}$$

$$= ₹ 156 + ₹ 0.90$$

$$= ₹ 156.9$$

(c) ₹ 2P

$$\begin{array}{r} 9 \quad 24 \\ \times \quad 7 \\ \hline 63 \quad 168 \end{array}$$

$$\therefore ₹ 63168 \text{ paise} = ₹ 63 + ₹ \frac{168}{100}$$

$$= ₹ 63 + ₹ 1.68$$

$$= ₹ 64.68$$

(d) ₹ P

$$\begin{array}{r} 12 \quad 30 \\ \times \quad 9 \\ \hline 108 \quad 270 \end{array}$$

$$\therefore ₹ 108270 \text{ paise} = ₹ 108 + ₹ \frac{270}{100}$$

$$= ₹ 108 + ₹ 2.70$$

$$= ₹ 110.70 \text{ paise.}$$

9. $\therefore 100 \text{ paise} = ₹ 1$

(a) ₹ P

$$\begin{array}{r} 438 \quad 20 \\ - 215 \quad 45 \\ \hline 222 \quad 75 \\ = ₹ 222.75 \end{array}$$

(b) ₹ P

$$\begin{array}{r} 535 \quad 60 \\ 29 \quad 42 \\ + 8 \quad 27 \\ \hline 572 \quad 129 \\ = ₹ 573.29 \end{array}$$

(c) ₹ P

$$\begin{array}{r} 256 \quad 27 \\ - 123 \quad 84 \\ \hline 132 \quad 43 \end{array}$$

(d) ₹ P

$$\begin{array}{r} 712 \quad 50 \\ 429 \quad 75 \\ + 245 \quad 38 \\ \hline 1387 \quad 63 \end{array}$$

10. $\therefore$ The salary of 12 workers is ₹ 3732

$$\therefore \text{The salary of 1 worker is } ₹ \frac{3732}{12}$$

$$= ₹ 311$$

$$\therefore \text{The salary of 5 workers is } 311 \times 5$$

$$= ₹ 1555.$$

Exercise-7.2

1. The price of 5 balls = ₹ 50

$$\begin{aligned}\text{The price of 1 ball} &= \frac{\text{₹ } 50}{5} \\ &= \text{₹ } 10\end{aligned}$$

2. The price of 8 notebooks = ₹ 72

$$\begin{aligned}\text{The price of 1 notebook} &= \frac{\text{₹ } 72}{8} \\ &= \text{₹ } 9\end{aligned}$$

3. The cost of 9 litres petrol = ₹ 378

$$\begin{aligned}\text{The cost of 1 litre petrol} &= \frac{\text{₹ } 378}{9} \\ &= \text{₹ } 42\end{aligned}$$

$$\begin{aligned}\text{The cost of 15 litres petrol} &= \text{₹ } 42 \times 15 \\ &= \text{₹ } 630\end{aligned}$$

4. Mika in 16 hours can walk = 128 km

$$\begin{aligned}\text{Mika in 1 hour can walk} &= \frac{128}{16} \\ &= 8 \text{ km}\end{aligned}$$

$$\begin{aligned}\text{Mika in 3 hours can walk} &= 8 \times 3 \\ &= 24 \text{ km.}\end{aligned}$$

BRUSH UP YOUR CONCEPTS

Comprehension math

Chaat stall

Prices

Per Plate

Pani Puri ₹ 15

PAPRI-CHAAT ₹ 25

ALOOTIKKA ₹ 25

PAOBHAJI ₹ 30

CHANA BHATURA ₹ 35

VEGP

Shahi Dhaba

Prices Per Plate

DAL MAKHANI ₹ 35

SHAHIPANNER ₹ 60

DUMALLO ₹ 27

VEGPULAO ₹ 25

TANDOORI ROTI ₹ 5

1. We need amount to pay for 2 plates of Paobhaj = ₹ 30 × 2 = ₹ 60.

2. We need amount to pay for 2 Tandoori Roti and 1 plate of Dum aloo in all = ₹ 5 × 2 + ₹ 27 = ₹ 37.

3. 1 plate of chana Bhatura more than 1 plate of Veg pulao = ₹ 35 – ₹ 25 = ₹ 10.

4. Price of chaat stall Price of shahi Dhaba

$$\text{₹ } 15 + \text{₹ } 25 + \text{₹ } 25 \quad \text{₹ } 35 + \text{₹ } 60 + \text{₹ } 27$$

$$+ \text{₹ } 30 + \text{₹ } 35 \quad + \text{₹ } 25 + \text{₹ } 5$$

$$= \text{₹ } 130 \quad \text{₹ } 152$$

Difference between price of shate Dhaba and Price of chaat stall.

$$= 152 - 130$$

$$= \text{₹ } 22$$

Cash Bill

Shahi Dhaba, New Delhi

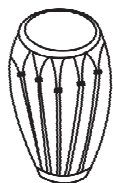
Bill no 152

Date 8/2/24

S.No	Items	Quantity	Rate (in ₹)	Amount (in ₹)
1.	Dal makhni	2	35.00	70
2.	Shahi Panner	3	60.00	180
3.	Dum Aloo	1	27.00	27
4.	Tandoori Roti	8	5	40
5.	Veg Pulao	2	25.00	50
	Total			₹367



₹ 132



₹ 205



₹ 4



₹ 245



₹ 63

1. $20 + 245 = 265$
2. Toffee
3. Cost of 2 Vases = $205 \times 2 = 410$.

Challenge

Will for the items purchased using the given rate chart

Rate chart in a stationery shop

Items	Quantity	Rate (in ₹)	Amount (in ₹)
1. Pen	6	₹ 2.00	12
2. Pencil	5	₹ 10.00	50
3. Charts	5	₹ 5.00	25
4. Eraser	1	₹ 10.00	10
5. Sharpener	3	₹ 5.00	15
6. Sketch Pen	2	₹ 50.00	<u>100</u>
			₹ 212

Rabi bought one eraser, 3 sharpeners 2 sketch pens 5 charts 5 pencils and 6 pens
 $= ₹ 10 + 5 \times 3 + 50 \times 2 + 5 \times 5 + 10 \times 5 + 6 \times 2$
 $= ₹ 10 + 15 + 100 + 25 + 50 + 12$
 $= ₹ 212$

So, Ravi paid amount = ₹ 212.

8. Measurement

Exercise-8.1

1. (a) $32 \text{ m } 45 \text{ cm} = (32 \times 100 + 45) \text{ cm}$
 $[\because 1 \text{ m} = 100 \text{ cm}]$
 $= (3200 + 45) \text{ cm}$
 $= 3245 \text{ cm}$

(b) $6 \text{ m} = 6 \times 100 \text{ cm} = 600 \text{ cm}$

(c) $30 \text{ m} = 30 \times 100 \text{ cm} = 3000 \text{ cm}$

(d) $24 \text{ m } 56 \text{ cm} = (2400 + 56) \text{ cm}$
 $= (2400 + 56) \text{ cm}$
 $= 2456 \text{ cm}$
2. (a) $25 \text{ km } 217 \text{ m} = (25 \times 1000 + 217) \text{ m}$
 $[\because 1 \text{ km} = 1000 \text{ m}]$

- $= (25000 + 217) \text{ m}$
 $= 25217 \text{ m}$
- (b) $8 \text{ km } 250 \text{ m} = (8 \times 1000 + 250) \text{ m}$
 $= (8000 + 250) \text{ m}$
 $= 8250 \text{ m}$
- (c) $6 \text{ km} = 6 \times 1000 = 6000 \text{ m}$
- (d) $617 \text{ km} = 617 \times 1000$
 $= 617000 \text{ m}$
3. (a) $920 \text{ cm} = [100 \text{ cm} = 1 \text{ m}]$
 $\frac{920}{100} \text{ m} = 9.2 \text{ m}$
- 100) 920 cm (9.2 m
 $\underline{- 900}$
 200
 $\underline{- 200}$
 0

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$$(b) \quad 480 \text{ cm} = \frac{480}{100} \text{ m}$$

$$= 4.8 \text{ m}$$

$$100 \text{) } 480 \text{ cm (} 4.8 \text{ m}$$

$$\begin{array}{r} - \underline{400} \\ 800 \\ - \underline{800} \\ 0 \end{array}$$

$$(c) \quad 762 \text{ cm} = \frac{762}{100} \text{ m}$$

$$= 7.62 \text{ m}$$

$$100 \text{) } 762 \text{ cm (} 7.62 \text{ m}$$

$$\begin{array}{r} - \underline{700} \\ 620 \\ - \underline{600} \\ 200 \\ - \underline{200} \\ 0 \end{array}$$

$$(d) \quad 379 \text{ cm} = \frac{379}{100} \text{ m} \quad [100 \text{ cm} = 1 \text{ m}]$$

$$= 3.79 \text{ m}$$

$$100 \text{) } 379 \text{ cm (} 3.79 \text{ m}$$

$$\begin{array}{r} - \underline{300} \\ 790 \\ - \underline{700} \\ 900 \\ - \underline{900} \\ 0 \end{array}$$

$$4. (a) \quad 9268 \text{ m} = \frac{9268}{1000} \text{ km} \quad [1000 \text{ m} = 1 \text{ km}]$$

$$= 9.268 \text{ km}$$

$$1000 \text{) } 9268 \text{ m (} 9.268 \text{ km}$$

$$\begin{array}{r} - \underline{9000} \\ 2680 \\ - \underline{2000} \\ 6800 \\ - \underline{6000} \\ 8000 \\ - \underline{8000} \\ 0 \end{array}$$

$$(b) \quad 3408 \text{ m} = \frac{3408}{1000} \text{ km}$$

$$= 3.408 \text{ km}$$

$$1000 \text{) } 3408 \text{ m (} 3.408 \text{ km}$$

$$\begin{array}{r} - \underline{3000} \\ 4080 \\ - \underline{4000} \\ 8000 \\ - \underline{8000} \\ 0 \end{array}$$

$$(c) \quad 4587 \text{ m} = \frac{4587}{1000} \text{ km}$$

$$= 4.587 \text{ km}$$

$$1000 \text{) } 4587 \text{ m (} 4.587 \text{ km}$$

$$\begin{array}{r} - \underline{4000} \\ 5870 \\ - \underline{5000} \\ 8700 \\ - \underline{8000} \\ 7000 \\ - \underline{7000} \\ 0 \end{array}$$

$$(d) \quad 8456 \text{ m} = \frac{8456}{1000} \text{ km}$$

$$= 8.456 \text{ km}$$

$$1000 \text{) } 8456 \text{ m (} 8.456 \text{ km}$$

$$\begin{array}{r} - \underline{1000} \\ 4560 \\ - \underline{4000} \\ 5600 \\ - \underline{5000} \\ 6000 \\ - \underline{6000} \\ 0 \end{array}$$

$$5. (a) \quad 45289 \text{ g} = \frac{45289}{1000} \text{ kg} \quad [1000 \text{ g} = 1 \text{ kg}]$$

$$= 45.289 \text{ kg}$$

Answer Key 3 to 5**47**

$$1000 \text{) } 45289 \text{ g (} 45.289 \text{ kg}$$

$$\begin{array}{r} - \underline{4000} \\ 5289 \\ - \underline{5000} \\ 2890 \\ - \underline{2000} \\ 8900 \\ - \underline{8000} \\ 9000 \\ - \underline{9000} \\ \underline{0} \end{array}$$

$$(b) \ 68971 \text{ g} = \frac{68971}{1000} \text{ kg}$$

$$= 68.971 \text{ kg}$$

$$1000 \text{) } 68971 \text{ g (} 68.971 \text{ kg}$$

$$\begin{array}{r} - \underline{6000} \\ 8971 \\ - \underline{8000} \\ 9710 \\ - \underline{9000} \\ 7100 \\ - \underline{7000} \\ 1000 \\ - \underline{1000} \\ \underline{0} \end{array}$$

$$(c) \ 5674 \text{ g} = \frac{5674}{1000} \text{ kg}$$

$$= 5.674 \text{ kg}$$

$$1000 \text{) } 5674 \text{ g (} 5.674 \text{ kg}$$

$$\begin{array}{r} - \underline{5000} \\ 6740 \\ - \underline{6000} \\ 7400 \\ - \underline{7000} \\ 4000 \\ - \underline{4000} \\ \underline{0} \end{array}$$

$$(d) \ 3768 \text{ g} = \frac{3768}{1000} \text{ kg}$$

$$= 3.768 \text{ kg}$$

$$1000 \text{) } 3768 \text{ g (} 3.768 \text{ kg}$$

$$\begin{array}{r} - \underline{3000} \\ 7680 \\ - \underline{7000} \\ 6000 \\ - \underline{6000} \\ 8000 \\ - \underline{8000} \\ \underline{0} \end{array}$$

$$6. (a) \ 6 \text{ kg } 820 \text{ g} = (6 \times 1000 + 820) \text{ g}$$

$$= (6000 + 820) \text{ g}$$

$$= 6820 \text{ g}$$

$$(b) \ 65 \text{ kg } 546 \text{ g} = (65 \times 1000 + 546) \text{ g}$$

$$= (65000 + 546) \text{ g}$$

$$= 65546 \text{ g}$$

$$(c) \ 7 \text{ kg } 456 \text{ g} = (7 \times 1000 + 456) \text{ g}$$

$$= (7000 + 456) \text{ g}$$

$$= 7456 \text{ g}$$

$$(d) \ 55 \text{ kg } 986 \text{ g} = (55 \times 1000 + 986) \text{ g}$$

$$= (55000 + 986) \text{ g}$$

$$= 55986 \text{ g}$$

$$7. (a) \ 45\text{L}25 \text{ ml} = (45 \times 1000 + 25) \text{ ml}$$

$$= (45000 + 25) \text{ ml}$$

$$= 45025 \text{ ml}$$

$$(b) \ 8\text{L}76 \text{ ml} = (8 \times 1000 + 76) \text{ ml}$$

$$= (8000 + 76) \text{ ml}$$

$$= 8076 \text{ ml}$$

$$(c) \ 79\text{L}33 \text{ ml} = (79 \times 1000 + 33) \text{ ml}$$

$$= (79000 + 33) \text{ ml}$$

$$= 79033 \text{ ml}$$

$$(d) \ 4\text{L}500 \text{ ml} = (4 \times 1000 + 500) \text{ ml}$$

$$= (4000 + 500) \text{ ml}$$

$$= 4500 \text{ ml}$$

$$8. (a) \ 6409 \text{ ml} = \frac{6409}{1000} \text{ L}$$

$$= 6.409 \text{ L}$$

$$1000 \text{) } 6409 \text{ m (} 6.409 \text{ L}$$

$$\begin{array}{r} - \underline{1000} \\ 4090 \\ - \underline{4000} \\ 9000 \\ - \underline{9000} \\ \underline{0} \end{array}$$

48 Answer Key 3 to 5

(b) $2697 \text{ ml} = \frac{2697}{1000} \text{ L}$

$= 2.697 \text{ L}$

$1000 \text{) } 2697 \text{ ml (} 2.697 \text{ L}$

$$\begin{array}{r} \underline{- 2000} \\ 6970 \\ \underline{- 6000} \\ 9700 \\ \underline{- 9000} \\ 7000 \\ \underline{- 7000} \\ 0 \end{array}$$

(c) $3000 \text{ ml} = \frac{3000}{1000} \text{ L}$

$= 3 \text{ L}$

$1000 \text{) } 3000 \text{ m (} 3 \text{ L}$

$$\begin{array}{r} \underline{- 3000} \\ 0 \end{array}$$

(d) $7568 \text{ ml} = \frac{7568}{1000} \text{ L}$

$= 7.568 \text{ L}$

$1000 \text{) } 7568 \text{ ml (} 7.568 \text{ L}$

$$\begin{array}{r} \underline{- 7000} \\ 5680 \\ \underline{- 5000} \\ 6800 \\ \underline{- 6000} \\ 8000 \\ \underline{- 8000} \\ 0 \end{array}$$

Exercise-8.2

1.

	m
	295
+	896
	1191

2.

	m
	8117
+	972
	9089

3.

	m	cm
	61	71
	20	08
+	41	89
	123	68

	m	cm
	48	29
	72	85
+	18	95
	140	09

5.

	m	cm
	72	80
-	25	15
	47	65

6.

	m	cm
	15	86
-	10	72
	5	14

7.

	km	m
	175	216
-	86	563
	88	653

8.

	km	m
	201	063
-	172	128
	28	935

9.

	g
	421
+	218
	639

10.

	g
	378
+	225
	603

11.

	g
	975
	216
+	720
	1911

12.

	g
	675
	726
+	89
	1490

13.

	g
	829
-	425
	404

14.

	kg	g
	800	800
-	125	125
	675	675

15.

	L	ml
	34	105
+	4	864
	38	969

16.

	L	ml
	45	185
	5	764
	50	949

Exercise-8.3

m cm

1. Length of red rebbnon bought by kala

$= 18 \text{ } 73$

Length of blue rebbon bought by kala

$= + 27 \text{ } 65$

Total length of ribbon bought by kala

$= 46 \text{ } 38$

2. Weight of kerosene bought Ria = 8 L 452 ml
 Weight of kerosene consumed Ria = 5 387
 Weight of kerosene left with her = 3. 065
3. Weight of cherries bought by Raju = 4 kg 765 g
 Weight of apples bought by Raju = 3 134
 Weight of banana bought by Raju = + 1 000
 The total weight of all three fruits = 8. 899 m l
4. Weight of coconut oil bought shreya = 246
 Weight of olive oil bought shreya = 21
 Weight of mustard bought shreya = + 450
 Weight of total quantity of 3 oil together = 717 m cm
5. Length of rope purchased by Vivek = 42 52
 Length of rope used by vivek to tie horse = - 17 15
 Remaining length of rope he had = 25 37
6. Weight of mike = kg g
 Weight of Anil = 30 800
 Weight of mike more than Anil = - 27 659
 = 03 141

BRUSH UP YOUR CONCEPTS

Plant	Height (cm)	Height	
		(m)	(cm)
1.	115 cm	1	15
2.	234 cm	2	34
3.	175 cm	1	75
4.	116 cm	1	16
5.	208 cm	2	08
6.	104 cm	1	04
7.	264 cm	2	64
8.	203 cm	2	03

50 Answer Key 3 to 5

Weight : Do, yourself.

Competency Base

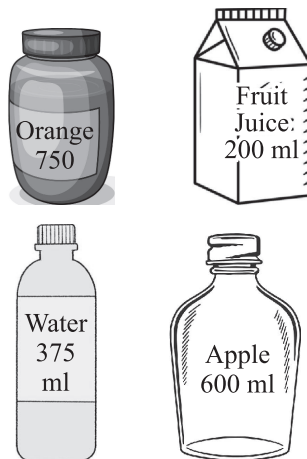
Questions

Fruits/Vegetables	Weight
Apple	1.846 kg
Cabbage	5.761 kg
Lemon	5.265 kg
Peach	0.725 kg
Pumpkin	7.245 kg
Strawberry	2.310 g
Pear	2.1 kg
Blueberry	11.28 kg

- Blueberry → 11.28 kg, pumpkin → 7.245 kg, cabbage → 5.761 kg, Lemon → 5.265 kg, strawberry 2.310 g, Pear → 2.1 kg, Apple → 1.846 kg, Peach → 0.725 g.

- Lemon is heavier than pear by
 $= 5.265 \text{ kg} - 2.1 \text{ kg}$
 $= 3.165 \text{ kg}$

Challenge

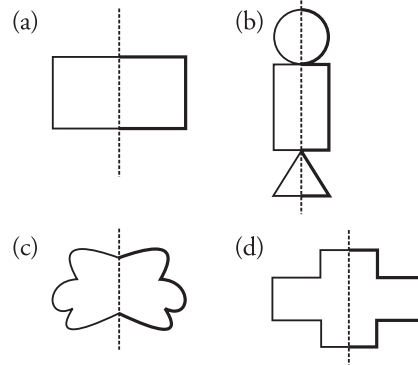


- A fruit juice and apple drink = 200 ml + 600 ml = 800 ml
- 2 Oranges drinks = $2 \times 750 \text{ ml} = 1500 \text{ ml} = 1.5 \text{ L}$
- 1 water and 1 apple drink = $375 \text{ ml} + 600 \text{ ml} = 975 \text{ ml}$

9. Patterns

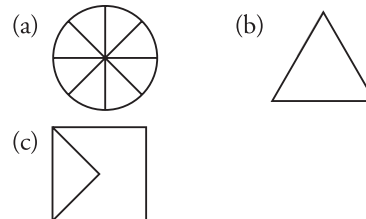
Exercise-9

1. Complete the figures.



2. Do yourself.

3. Complete the pattern.



4. Observe and complete the number pattern without calculation.

- $4 + 4, 5 + 5, 6 + 6$
- $4 + 5 + 6, 5 + 6 + 7, 6 + 7 + 8$
- $9 \times 6 \times 6 \times 6 \times 6, 9 \times 6 \times 6 \times 6 \times 6 \times 6, 9 \times 6 \times 6 \times 6 \times 6 \times 6 \times 6$
- $5 \times 3 + 4, 5 \times 4 + 5, 5 \times 5 + 6$

5. Observe and complete the number pattern with calculation.

- $4 + 5 = 9$ (b) $4 + 5 + 6 = 15$
 $5 + 6 = 11$ $5 + 6 + 7 = 18$
 $6 + 7 = 13$ $6 + 7 + 8 = 21$
- $2 + 4 = 6$
 $2 + 5 = 7$
 $2 + 6 = 8$

BRUSH UP YOUR CONCEPTS

Decode!

- GOD IS EVERY WHERE
- PLANT TREES

Logic!

Do, yourself.

Challenge!

Which numbers are :

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

Growing Pattern!

Do, yourself.

10. Geometry

Exercise-10

1. Do, yourself.

2.

Sr. No.	Shapes	Number of edges	Number of faces	Number of corners
(a)	cuboid	12	6	8
(b)	sphere	0 (zero)	1	0
(c)	cube	12	6	8
(d)	cylinder	2	3	0

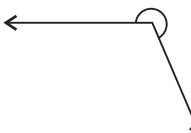
3. Do, yourself.

4. Do, yourself.

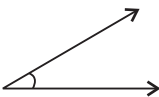
5. (a) line (b) Ray (c) line segment

6. Do, yourself.

7. (a) $\angle 1 = 120^\circ$ (b) $\angle 2 = 67^\circ$

8. (a) 

(b) 
Straight angle

(c) 
Acute angle

BRUSH UP YOUR CONCEPTS

Identify the Circle Terms!

1. Centre = O
2. Radius = AO, OB
3. Diameter = AB
4. Chord = PQ

Side and Vertex!

1. 8 Vertices
8 Sides
2. 6 Vertices
6 Sides

Answer Key 3 to 5

51

3. 12 Vertices

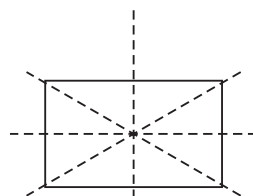
12 Sides

4. 5 Vertices

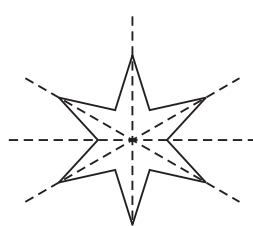
5 Sides

Lines of Symmetry in Geometrical Shapes!

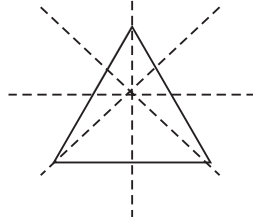
1.



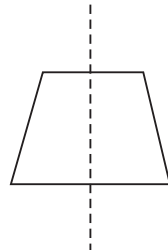
2.



3.

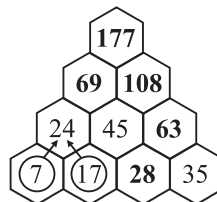


4.

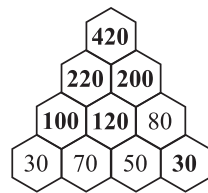


Challenge!

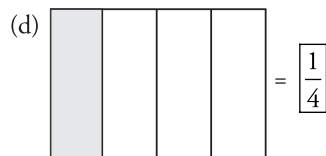
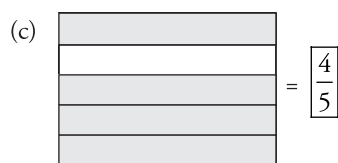
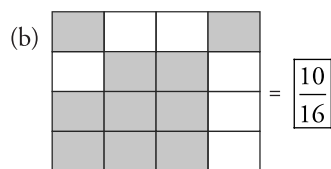
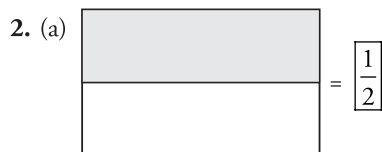
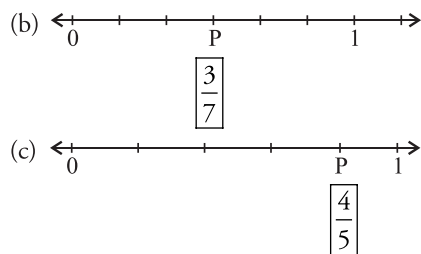
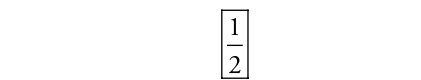
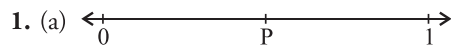
Each hexagon is made by adding up the numbers in the two hexagons alongside it. Fill the missing numbers in these puzzles.



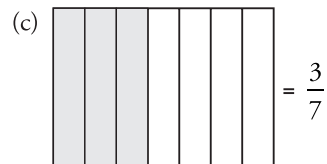
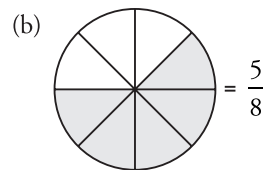
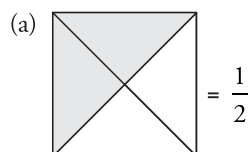
52 Answer Key 3 to 5



11. Fractions
Exercise-11



3. Shade the part that will tell the given fractions.



4. Write the fraction for the following fractional numbers.

(a) six-sevenths = $\frac{6}{7}$

(b) two-fifths = $\frac{2}{5}$

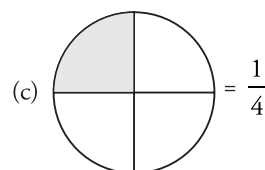
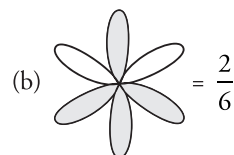
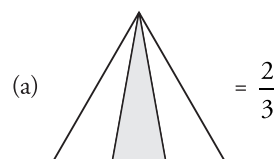
(c) seven-twelfths = $\frac{7}{12}$

(d) three-fourths = $\frac{3}{4}$

(e) four-thirteenths = $\frac{4}{13}$

(f) five-fifteenths = $\frac{5}{15}$

5. Observe the figures and write the fractions for unshaded portions.



6. Classify for the following fractions.

(a) $\frac{9}{11}$ = Proper (b) $\frac{19}{9}$ = Improper

(c) $\frac{17}{10}$ = Improper (d) $3\frac{8}{14}$ = Mixed

(e) $\frac{1}{16}$ = Proper (f) $2\frac{5}{15}$ = Mixed

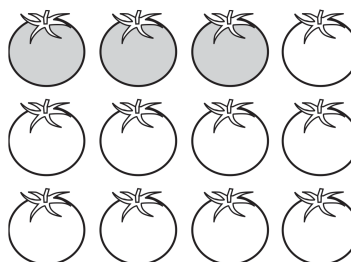
7. Write the fraction for the following numerators and denominators.

	Numerators	Denominators	Fraction
(a)	5	18	$\frac{5}{18}$
(b)	8	13	$\frac{8}{13}$
(c)	11	17	$\frac{11}{17}$
(d)	3	10	$\frac{3}{10}$

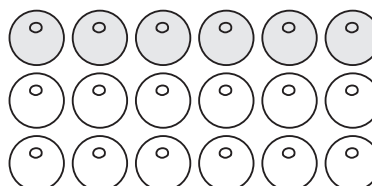
(e) 12 14 $\frac{12}{14}$

8. Colour the fraction of the following collections.

(a) $\frac{1}{4}$ of 12 = 3 tomatoes



(b) $\frac{1}{3} \times 18 = 6$ beads



BRUSH UP YOUR CONCEPTS

Missed Out!

	Shaded parts	Fractions	Fractional Numbers	Figures
1.	3 parts out of 5 equal parts	$\frac{3}{5}$	Three-fifths	
2.	5 parts out of 6 equal parts	$\frac{5}{6}$	Five-six	
3.	4 parts out of 7 equal parts	$\frac{4}{7}$	Four-sevenths	
4.	3 parts out of 8 equal parts	$\frac{3}{8}$	Three-eighths	
5.	7 parts out of 12 equal parts	$\frac{7}{12}$	Seven-twelfths	

54 Answer Key 3 to 5**6. Guess!**

Student drew a rectangle and divided it into 10 equal parts. If he/she shaded 3 parts, has fraction will he/she have?

$$\text{Shaded fraction} = \frac{3}{10}$$

Comprehension Math!

1. 7 2. 3

3. 4 4. $\frac{4}{7}$

5. $\frac{3}{7}$

12. Time

Exercise-12

1. Look at the pictures and write AM/PM.

- (a) 7:25 AM (b) 10:20 PM
 (c) 4:15 PM (d) 6 : 00 AM

2. (a) 7 hours 3 minutes

$$\begin{aligned} &= (7 \times 60 + 3) \text{ minutes} \\ &[\because 1 \text{ hour} = 60 \text{ minutes}] \\ &= (420 + 3) \text{ minutes} \\ &= 423 \text{ minutes} \end{aligned}$$

(b) 10 hours 15 minutes

$$\begin{aligned} &= (10 \times 60 + 15) \text{ minutes} \\ &= (600 + 15) \text{ minutes} \\ &= 615 \text{ minutes} \end{aligned}$$

(c) 5 hours and 27 minutes

$$\begin{aligned} &= (5 \times 60 + 27) \text{ minutes} \\ &= (300 + 27) \text{ minutes} \\ &= 327 \text{ minutes} \end{aligned}$$

(d) 11 hours = 11×60 minutes
 = 660 minutes

3. (a) 10 : 55 AM = 10 : 55 hours

(b) 3 : 40 PM = $(3 : 40 + 12)$ hours
 = 15 : 40 hours

(c) 2 : 20 PM = $(2 : 20 + 12)$ hours
 = 14 : 20 hours

(d) 07 : 05 AM = 07 : 05 hours

(e) 5 : 48 PM = $(5 : 48 + 12)$ hours
 = 17 : 48 hours

(f) 1 : 35 PM = $(1 : 35 + 12)$ hours
 = 13 : 35 hours

4. (a) 12 minutes 35 seconds

$$\begin{aligned} &= (12 \times 60 + 35) \text{ seconds} \\ &[\because 1 \text{ minutes} = 60 \text{ seconds}] \\ &= (720 + 35) \text{ seconds} \\ &= 755 \text{ seconds} \end{aligned}$$

(b) 35 minutes 48 seconds

$$\begin{aligned} &= (35 \times 60 + 48) \text{ seconds} \\ &= (2100 + 48) \text{ seconds} \\ &= 2148 \text{ seconds} \end{aligned}$$

(c) 45 minutes 54 seconds

$$\begin{aligned} &= (45 \times 60 + 54) \text{ seconds} \\ &= (2700 + 54) \text{ seconds} \\ &= 2754 \text{ seconds} \end{aligned}$$

(d) 27 minutes = 27×60 seconds
 = 1620 seconds

5. (a) 3 hours after 6 : 03 AM

$$\begin{aligned} &= 6 : 05 \text{ AM} + 3 : 00 \text{ AM} \\ &= 9 : 05 \text{ AM} \end{aligned}$$

(b) 2 hours before 12 noon

$$\begin{aligned} &= 12 : 00 \text{ AM} - 2 : 00 \text{ AM} \\ &= 10 : 00 \text{ AM} \end{aligned}$$

(c) 1 hour after mid night = 1 : 00 AM

(d) 3 hours before 8 : 10 PM = $8 : 10 - 3 : 00$
 = 5 : 10 PM

6. (a) 1229 [$\because 1 \text{ minutes} = 60 \text{ seconds}$]
 $\therefore 60 \mid 1229 \text{ sec (20 min$

$$\begin{array}{r} \underline{- 120} \\ 29 \text{ sec} \end{array}$$

Hence, 1229 seconds = 20 minutes and 29 seconds.

(b) 366 seconds

60) 366 sec (6 minutes

$$\begin{array}{r} \underline{- 360} \\ 6 \text{ sec} \end{array}$$

Hence, 366 seconds = 6 minutes 6 seconds.

(c) 547 minutes

60) 547 sec (9 minutes

$$\begin{array}{r} \underline{- 540} \\ 7 \text{ sec} \end{array}$$

Hence, 547 seconds = 9 minutes 7 seconds.

Answer Key 3 to 5 55

7. (a) $23 : 40 \text{ hours} = 23 : 4 - 12$
 $= 11 : 40 \text{ PM}$

(b) $14 : 18 \text{ hours} = 14 : 18 - 12$
 $= 2 : 18 \text{ PM}$

(c) $17 : 25 \text{ hours} = 17 : 25 - 12$
 $= 5 : 25 \text{ PM}$

8. $\therefore 1 \text{ minutes} = 60 \text{ seconds}$

(a) $\therefore 160 \text{ minutes} = 160 \times 60$
 $= 9600 \text{ seconds}$

(b) $45 \text{ minutes} = 45 \times 60 = 2700 \text{ seconds}$

(c) $22 \text{ minutes} = 22 \times 60 = 1320 \text{ seconds}$

9. $\therefore 1 \text{ days} = 24 \text{ hours}$

(a) $\therefore 15 \text{ days } 3 \text{ hours}$
 $= (15 \times 24 + 3) \text{ hours}$
 $= (360 + 3) \text{ hours}$
 $= 363 \text{ hours}$

(b) $12 \text{ days } 5 \text{ hours} = (12 \times 24 + 5) \text{ hours}$
 $= (288 + 5) \text{ hours}$
 $= 293 \text{ hours}$

(c) $5 \text{ days } 7 \text{ hours} = (5 \times 24 + 7) \text{ hours}$
 $= (120 + 7) \text{ hours}$
 $= 127 \text{ hours}$

10. (a) $11 : 10 \text{ AM to } 2 : 30 \text{ PM}$
 $= 14 : 30 - 11 : 10$
 $= 3 : 20 \text{ hours}$
 $= 3 \text{ hours } 20 \text{ minutes}$

(b) $6 : 00 \text{ AM to } 9 : 30 \text{ AM}$
 $= 9 : 30 - 6 : 00$
 $= 3 : 30 \text{ hours}$
 $= 3 \text{ hours } 30 \text{ minutes}$

(c) $06 : 20 \text{ hours to } 8 : 50 \text{ hours}$
 $= 8 : 50 - 6 : 20$
 $= 2 : 30 \text{ hours}$
 $= 2 \text{ hours } 30 \text{ minutes}$

(d) $8 : 15 \text{ PM to } 9 : 30 \text{ PM}$
 $= 9 : 30 - 8 : 15$
 $= 1 : 15 \text{ hours}$
 $= 1 \text{ hours } 15 \text{ minutes}$

11. A class test starts = $9 : 00 \text{ AM}$

A class test completed = $10 : 30 \text{ AM}$

Duration of the test = $10 : 30 - 9 : 00$

$$= 1 : 30 \text{ hours}$$
$$= 1 \text{ hours } 30 \text{ minutes}$$

12. A foot ball match started = $4 : 00 \text{ PM}$

$$= 12 : 00 + 4 : 00$$

$$= 16 : 00 \text{ hours}$$

A foot ball finished at

$$= 12 : 00 + 7 : 30$$

$$= 19 : 30 \text{ hours}$$

Duration of time = $19 : 30 - 16 : 00$

$$= 3 : 30 \text{ hours}$$

$$= 3 \text{ hours } 30 \text{ minutes}$$

BRUSH UP YOUR CONCEPTS

Blanks : Do, yourself.

How many

1. Days in 1 year 365

2. Hours in 1 day 24

3. Weeks in 1 year 52

4. Seconds in 1 minutes 60

5. Days in 1 week 7

6. Minutes in 1 hour 60

Time in different ways : Do, yourself.

Challenge

1. Duration of time for cleaning the hours
 $= 1 \text{ hour } 30 \text{ minutes}$
 $= 1 : 30 \text{ hours}$

The time in which she finished her work

$$= 12 : 45 \text{ PM}$$

The time in which she start her work

$$= 12 : 45 - 1 : 30$$

$$= 11 : 15 \text{ AM}$$

2. Mukesh left his house for jogging = $14 : 20$
hours

The time he ran = $2 \text{ hours } 15 \text{ minutes}$

$$= 2 : 15 \text{ hours}$$

He reached his home = $14 : 20 + 2 : 15$

$$= 16 : 30 \text{ hours}$$

OR

$$16 : 35 - 12 : 00 = 4 : 35 \text{ PM}$$

13. Data Handling

Exercise-13

1.

	Numbers	Tally marks
(a)	37	
(b)	25	
(c)	20	
(d)	23	
(e)	27	
(f)	16	
(g)	17	
(h)	12	
(i)	26	
(j)	18	

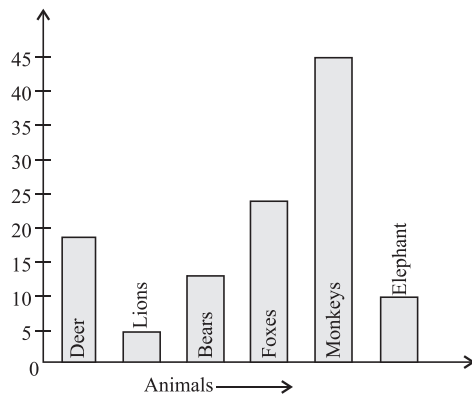
2. (a) The maximum students were absent on Monday.
 (b) 10 students were absent on Monday.
 (c) 7 students were absent on Saturday.
 (d) 37 students were absent in a week.
3. (a) Marks obtained by a student in relative subjects.
 (b) 60 marks scored in science.
 (c) Maximum marks were scored in maths.
 (d) 5 subjects are referred in the graph
 (e) Maximum marks = 70
 Minimum marks = 40
 Difference = $70 - 40 = 30$.

4.

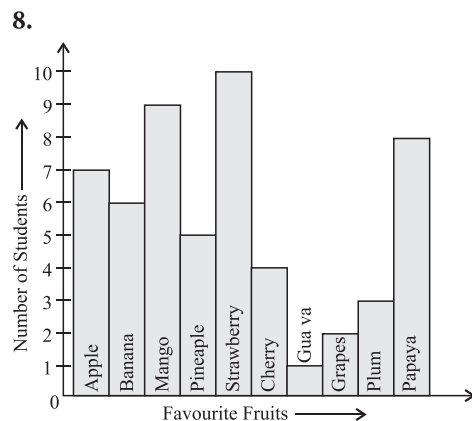
Icecream flavour	Numbers of students	Tally marks
Strawberry	7	
Vanilla	5	
Chocolate	16	
Butterscotch	14	
Kesar pista	4	
Mango	9	

5. (a) 15 children like orange juice.
 (b) Mango juice is the most favourite juice among the children.
 (c) Grapes juice is the least juice among the children.
 (d) Pineapple juice is liked by 9 children.
- 6.

Animals	No. of animals	Tally marks
Deer	18	
Lions	5	
Bears	13	
Foxes	25	
Monkeys	45	
Elephants	11	



7. (a) There are $5 \times 5 = 25$ white flowers in the garden.
 (b) No. of pink flowers = $5 \times 4 = 20$
 No. of yellow flowers = $2 \times 5 = 10$
 Difference = $20 - 10 = 10$
 Hence, 10 pink flowers are more than yellow flowers in the garden.
 (c) Red flowers was least.
 (d) Maximum flowers = 25
 Maximum flowers = 5
 Difference = $25 - 5 = 20$



9. (a) Rainfall in city A = $15 \times 8 = 120$ cm.
 Rainfall in city B = $15 \times 3 = 45$ cm
 Difference = $120 - 45 = 75$ cm
 Hence, 75 cm rainfall is less in city B than city A.
 (b) Rainfall in city C = $15 \times 10 = 150$ cm
 Rainfall in city D = $15 \times 11 = 165$ cm
 Difference = $165 - 150 = 15$ cm
 Hence, 15 cm more rainfall in city D than city C

Answer Key 3 to 5 57

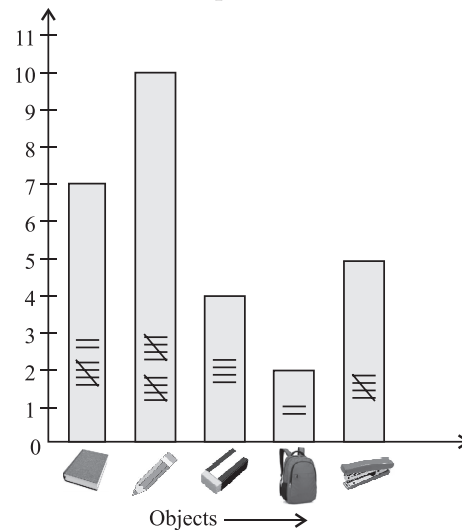
- (c) Total rainfall in cities in A, B, C, D
 $= 120 + 45 + 150 + 165$
 $= 480$ cm.

10.

Categories of Stations	tally marks	numbers
Station 1		34
Sectoin 2		22
Station 3		24
Station 4		20

BRUSH UP YOUR CONCEPTS

Vertical Bar Graph



Pictograph

1. (a) A lot more polular is Barbecue.
 (b) A bit more popular is salt and venegar.
 (c) Not popular is chicken.
 2. (a) A lot more popular is Barbecue.
 (b) A bit more popular is salt and vinegar.
 (c) Not popular is chicken.
 3. Graph-2.

58 Answer Key 3 to 5

4. 48 people were surveyed in graph 1 and 192 people were surveyed in graph 2.

Hence, $48 + 192$ ie 240 people were surveyed in graph 1 and graph 2.

Challenge

Number of Students	9	9	8	4
Marks scored	60-70	70-80	80-90	90-100
Tally marks				

Test Yourself-1

Section-A

- (b) Sum of place values of two 3's
 $= 3000 + 3$
 $= 3003$
- (a) 6695 nearest to 1000 = 7000
2296 nearest to 1000 = + 2000
= 9000
- (c) Smallest 4 digit number = 1000
largest 2 digit number = - 99
Difference = 901
- (d) Multiply by 1000.
- (d) 54
- (c) $\frac{25}{35}$

Section-B

- (a) Four thousand five hundred six = 4506
(b) Nine thousand eight hundred twenty two = 9822.
- (a) 2653 = Two thousand six hundred fifty three.
(b) 8679 = Eight thousand six hundred seventy nine.
(c) 7890 = Seven thousand eight hundred ninety.

- (d) 3251 = Three thousand two hundred fifty one.

- (a) XXV = 25
(b) XXXVII = 37
(c) XIX = 19
(d) XLVII = 47

10. Required number = 6640.

11. Required number = 3078.

12. (a) $2000 + 500 + 60 + 7 = 2567$

(b) $9000 + 600 + 30 + 1 = 9631$

13. (a) 3862, 4502, 4509, 4529, 5029

(b) 9863, 8932, 6680, 5402, 2540.

14. (a) The distance ran by Surbhi = 3450 m

The distance ran by Pihu = - 3054 m

396m

Since, $3450 > 3054$, So, Surbhi ran 396m more than Pihu.

15. (a) Place value of 8 in 2380 = 80

(b) Place value of 0 in 3405 = 0.

Section-C

16. (a) 3, 6, 12, 24, 48, 96, 192

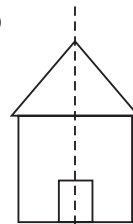
(b) 4, 7, 10, 13, 16, 19, 22

17. The cost of 5 pencils = ₹ 125

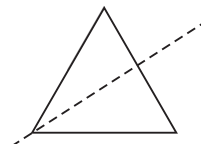
The cost of 1 pencil = $\frac{125}{5} = ₹ 25$

The cost of 15 pencils = $25 \times 15 = ₹ 375$.

18. (a)



(b)



So, symmetric lines of are drawn in only (a) and (b)

19.

Vegetable	Price 1 kg	Quantity	Price
Potato	₹ 30	3 kg	$30 \times 3 = ₹ 90$
Onion	₹ 45	2 kg	$45 \times 2 = ₹ 90$
Peas	₹ 80	1 kg	$80 \times 1 = ₹ 80$
Carrot	₹ 40	5 kg	$40 \times 5 = ₹ 200$
Cauliflower	₹ 35	2 kg	$35 \times 2 = ₹ 70$
Total			₹ 530

The amount given by Mrs Pundir

$$= 500 + 200$$

$$= ₹ 700$$

The amount expense for purchase vegetables

$$= -₹ 530$$

The amount get by mrs Pundir = ₹ 170

20. (a) Required time = 2 : 15 PM

+ 2 hours 30 minutes

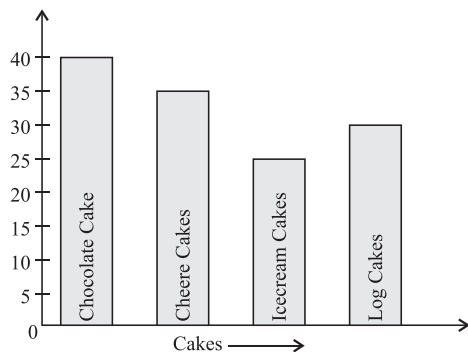
= 4 : 45 PM

(b) Required time = 2 : 15 PM

+ 9 hours 45 minutes

= 12 : 00 midnight

21.



(a) He made 10 chocolate cakes more than log cakes

(b) Cost of an icecream = ₹ 12

$$\text{Cost of 25 icecreams} = ₹ 12 \times 25$$

$$= ₹ 300$$

(c) 35 cheese cakes cost = 35×8

$$= 280$$

$$\text{Cost of 30 log cake} = 30 \times 3$$

$$= 90$$

Answer Key 3 to 5

59

Difference = $280 - 90$

$$= ₹ 90$$

(d) Total number of cakes

$$= 40 + 35 + 25 + 30$$

$$= 130.$$

22. (a) Sports preferred by students.

(b) 7 students play badminton.

(c) Cricket is the most popular game.

(d) 38 students were surveyed.

Test Yourself-2

Section-A

1. (a) The number of zeroes in smallest 4 digit number are 3.

$$\begin{array}{r} 26.95 \\ + 32.96 \\ \hline 59.91 \end{array}$$

3. (d) To convert the length given L into ml, we multiply by 1000.

4. (d) 12, 24, 36, 48, 60, 72

5. (b) XL = 40

6. (d) Days in January = 31

Days in March = 31

Sum 62

7. No. of men = 4269

No. of women = 2758

No. of children = + 2160

Total population = 9187

8. The amount has Amar = ₹ 9004

The amount expense to

purchase bicycle = - ₹ 3856

The balance amount does

he has = ₹ 5148

9. Total students in a school = 265

Amount contributes by a student = ₹ 15

Total amount collected = 265×15

$$= ₹ 3975$$

10. Number of trucks = 16

Number of bags were loaded = 2416

Number of bags were loaded in each

$$\text{truck} = \frac{2416}{16}$$

60 Answer Key 3 to 5

By long division method, we have

$$16 \overline{) 2416} \quad (151$$

$$\begin{array}{r} \underline{-16} \\ 81 \\ \underline{-80} \\ 16 \\ \underline{-16} \\ 0 \end{array}$$

Hence, 151 bags were loaded in each truck.

11. Three line segments can be drawn among three non collinear points.

12. (a) AB is a diameter of the circle.

(b) OC is a radius of the circle.

(c) PQ is a chord of the circle.

13. (a) XII + VIII = XX

(b) XL - X = XXX

(c) L - XX = XXX

(d) $5 \times 32 \times 2 = 320$

(e) $(20 \times 143) \div 5 = \frac{2860}{5} = 572$

(f) $2750 \div (6 + 4) = 2750 \div 10 = \frac{2750}{10}$
= 275

14. (a)
$$\begin{array}{r} 4 \ 3 \ 8 \ 8 \\ + 3 \ \boxed{2} \ 9 \ \boxed{5} \\ \hline \boxed{7} \ 6 \ \boxed{8} \ 3 \end{array}$$

(b)
$$\begin{array}{r} 7 \ 6 \ 9 \ 4 \\ - 5 \ \boxed{8} \ 3 \ \boxed{9} \\ \hline \boxed{1} \ 8 \ \boxed{5} \ 5 \end{array}$$

15. Round off the given numbers nearest to 100 are

(a) 9287 = 9300

(b) 2043 = 2000

(c) 1702 = 1700

(d) 4227 = 4200

Section-C

16. The Pihu's school has been closed on = 29 december

Number of days the school has been closed = 15

The pihus school will repon = 29 dec., 30 dee, 31 dec; 1 Jan. 2 Jan,, 13 Jan.

So, Pihu's school will be reopean on 13 Jannuary.

17. minutes seconds

$$\begin{array}{r} 37 \quad 45 \\ + 15 \quad 38 \\ \hline 52 \quad 83 \\ \text{ie } 53 \quad 23 \end{array}$$

[$\because$ 60 sec = 1 min]

18. hours minutes

$$\begin{array}{r} 5 \quad 81 \\ 6 \quad 21 \\ - 4 \quad 39 \\ \hline 1 \quad 42 \end{array}$$

[$\because$ 1 hr = 60 min]

19. Quantity of milk contained = L ml

in a bucket = 16 825

Quantity of milk contained = 5 785

in another bucket

Quantity of milk contained = 22 610

in both bucket

20. 2nd July 2020 was Thursday

(a) So,
$$\begin{array}{r} 7 \ 22 \ (3) \\ \underline{21} \\ 1 \end{array}$$

On 2nd July was Thursday So, 22 July was Friday.

- (b) Days from 2 July 2020 to 31 July 2020

$$= 31 - 1 = 29$$

Days from 1 August 2020 to 9 August 2020 = 9

Total days = 29 + 9 = 38 days

Now,
$$\begin{array}{r} 7 \ 38 \ (5) \\ \underline{35} \\ 3 \end{array}$$

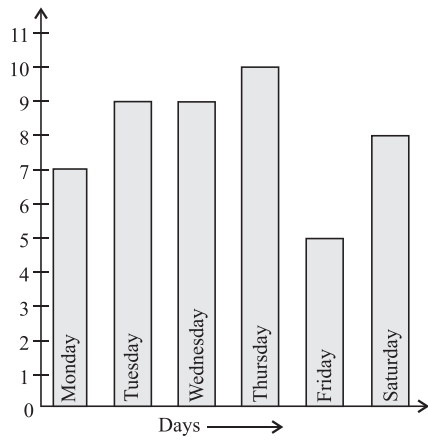
The day on 9 August = 3 days after Thursday i.e., Sunday.

21. Number of days in June = 12

Number of days in July = + 7

Total number of days = 19

22.



Answer Key 3 to 5 61

- (a) On Thursday the temperature was maximum.
- (b) On Friday the temperature was minimum.
- (c) On Tuesday and Wednesday the temperature was same.
- (d) Average temperature of all six days

$$= \frac{7^{\circ}\text{C} + 9^{\circ}\text{C} + 9^{\circ}\text{C} + 10^{\circ}\text{C} + 5^{\circ}\text{C} + 8^{\circ}\text{C}}{6}$$

$$= \frac{48^{\circ}\text{C}}{6} = 8^{\circ}\text{C}.$$

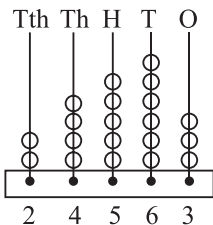
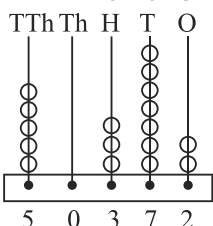
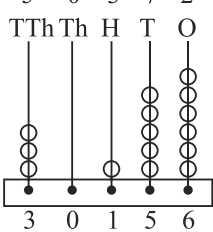


Mathematics - 5

1. Number Sense

Exercise-1.1

1. (a) 36745 = Thirty six thousand seven hundred forty five.
(b) 10764 = Ten thousand seven hundred sixty four.
(c) 3021 = Three thousand twenty one.
2. (a) 50000 = 50,000 (b) 80808 = 80,808
(c) 94123 = 94,123 (d) 36104 = 36,104
(e) 15048 = 15,048

3. (a) 
2 4 5 6 3
- (b) 
5 0 3 7 2
- (c) 
3 0 1 5 6

4.	Number	T.Th	Th	H	T	O
a	95250	9	5	2	5	0
b	75949	7	5	9	4	9
c	18724	1	8	7	2	4
d	35414	3	5	4	1	4
e	64980	6	4	9	8	0

5. (a) 84569 = Eighty four thousand five hundred sixty nine.

- (b) 78654 = Seventy eight thousand six hundred fifty four.
 - (c) 32460 = Thirty two thousand four hundred sixty.
 - (d) 40987 = Forty thousand nine hundred eighty seven.
 - (e) 52731 = Fifty two thousand seven hundred thirty one
6. (a) seventy four thousand two hundred thirty = 74,230.
(b) Forty six thousand nine = 46,009
(c) Ninety Thousand eight hundred sixteen = 90,816
(d) Sixty one thousand eighteen = 61,018
(e) Eleven thousand = 11,000
 7. (a) 5 more than 99857 = $99857 + 5 = 99862$
(b) 6 less than 45689 = $45689 - 6 = 45683$
(c) 1 more than 99998 = $99998 + 1 = 99999$.
 8. (a) 76235, 77235, 78235, 79235, 80235
(b) 23657, 24657, 25657, 26657, 27657

Exercise-1.2

1. (a) 16087 (b) 44433
8 = 80 3 = 3
(c) 98642 (d) 78965
8 = 8000 7 = 70000
2. (a) 45120 = 4 ten thousand + 5 thousands + 1 hundreds + 2 tens + 0 ones
(b) 67072 = 6 ten thousand + 7 thousands + 0 hundreds + 7 tens + 2 ones
(c) 36521 = 3 ten thousand + 6 thousands + 5 hundreds + 2 tens + 1 ones
(d) 73695 = 7 ten thousand + 3 thousands + 6 hundreds + 9 tens + 5 ones
3. (a) $98952 = \boxed{9} \times 10000 + \boxed{8} \times 1000 + \boxed{9} \times 100 + \boxed{5} \times 10 + \boxed{2}$
(b) $51246 = \boxed{5} \times 10000 + \boxed{1} \times 1000 + \boxed{2} \times 100 + \boxed{4} \times 10 + \boxed{6}$
(c) $27890 = \boxed{2} \times 10000 + \boxed{7} \times 1000 + \boxed{8} \times 100 + \boxed{9} \times 10 + \boxed{0}$

Answer Key 3 to 5**63**

- (d) $19864 = \boxed{1} \times 10000 + \boxed{9} \times 1000 + \boxed{8} \times 100 + \boxed{6} \times 10 + \boxed{4}$
4. (a) $40000 + 3000 + 600 + 50 + 8 = 43658$
 (b) $80000 + 7000 + 70 + 1 = 87071$
 (c) $60000 + 2000 + 100 + 9 = 62109$
 (d) $10000 + 6000 + 4 = 16004$
5. (a) $82463 = 80000 + 2000 + 400 + 60 + 3$
 (b) $92409 = 90000 + 2000 + 400 + 0 + 9$
 (c) $54321 = 50000 + 4000 + 300 + 20 + 1$
 (d) $36428 = 30000 + 6000 + 400 + 20 + 8$
6. (a) Given number is $1 \underline{1} 8 0 4$
 Place value of 1 = 1000
 Face Value of 1 = 1
 (b) $2 \underline{2} 9 6 2$
 Place value of 9 = 900
 Face Value of 9 = 9
 (c) $7 \underline{8} 0 4 3$
 Place value of 7 = 70000
 Face Value of 7 = 7
 (d) $9 \underline{6} \underline{1} 2 4$
 Place value of 1 = 100
 Face Value of 1 = 1
- Exercise-1.3**
1. (a) $61016 \geq 60106$
 (b) $69701 \geq 68701$
 (c) $18427 < 18521$
 (d) $81111 \geq 81101$
 (e) $12608 \geq 11608$
 (f) $16815 < 18915$
2. (a) $24000 > 24043$ **False**
 (b) $91180 > 79200$ **True**
 (c) $75819 < 87510$ **True**
 (d) $56160 > 56166$ **False**
 (e) $60700 > 60699$ **True**
 (f) $89111 < 81119$ **False**
3. (a) 65473, 65743, 65437, **65798**
 (b) 45674, **45762**, 45679, 45688
 (c) 81650, **81657**, 81653, 81356
 (d) 59876, 59867, 59873, **59879**
4. (a) 45687, 45698, **45268**, 45789
 (b) 36897, 36987, 36989, **36457**
 (c) 59478, **59469**, 59499, 59488
 (d) 59874, 59876, 59873, **69871**
5. (a) Required number using the digits 2, 4, 7, 8, 9 is 24789
 (b) Required number using the digits 5, 0, 9, 1, 3 is 10359
 (c) Required number using the digits 5, 7, 8, 6, 4 is 45678
6. (a) successor of $99,786 + 1 = 99,787$
 (b) successor of $67549 + 1 = 67550$
 (c) successor of $34,526 = 34,526 + 1 = 34,527$
 (d) successor of $21,345 = 21,345 + 1 = 21,346$
 (e) successor of $84,635 = 84,635 + 1 = 84,636$
7. (a) The numbers comes just before 54768
 $- 1 = 54767$
 (b) The numbers comes just before =
 $76490 - 1 = 76489$
 (c) The numbers comes just after $36569 = 36569 + 1 = 36570$
 (d) The numbers comes in between 26547 and 26549 = 26548
 (e) What number comes just after 68975 is $68975 + 1 = 68976$
8. (a) Predecessor of $52,008 = 52,008 - 1 = 52,007$
 (b) Predecessor of $67,980 = 67,980 - 1 = 67,979$
 (c) Predecessor of $82,543 = 82,543 - 1 = 82,542$
 (d) Predecessor of $73,546 = 73,546 - 1 = 73,545$
 (e) Predecessor of $91,432 = 91,432 - 1 = 91,431$
 (f) Predecessor of $63,806 = 63,806 - 1 = 63805$
9. (a) The given digits are: 2, 1, 3, 4, 6
 The greatest number = 64,321
 The smallest number = 12,346
 (b) The given digits are: 9, 2, 6, 3, 5
 The greatest number = 96,532
 The smallest number = 23,569

64 Answer Key 3 to 5

- (c) The given digits are: 2, 0, 4, 2, 8
The greatest number = 84,220
The smallest number = 20,248
- (d) The given digits are: 5, 9, 7, 8, 7
The greatest number = 98,775
The smallest number = 57,789
- (e) The given digits are: 6, 3, 8, 0, 5
The greatest number = 86,530
The smallest number = 30,568
- (f) The given digits are: 9, 1, 2, 4, 3
The greatest number = 94,321
The smallest number = 12,349
10. The given ascending order is ; in a sending order.
Sunday 10,025 < Saturday 10, 105 < Thursday 68,905 < Monday 75,242 < Tuesday 75,835 < Friday 79,155 < Wednesday 80,000.
i.e., 10,025 < 10,105 < 68,905 < 75,242 < 75,835 < 79,153 < 80,000
- (a) 6215 = 6200
(b) 576 = 600
(c) 9910 = 9900
(d) 5883 = 5900
(e) 54213 = 54200
3. Round off the given numbers to nearest 1000 are:
(a) 5225 = 5000
(b) 4569 = 5000
(c) 75463 = 75000
(d) 26897 = 27000
(e) 37691 = 38000
4. (a) 75000 = even
(b) 914 = even
(c) 1011 = odd
(d) 23564 = even
(e) 5899 = odd

BRUSH UP YOUR CONCEPTS

Ascending or Descending order :

1. Round off the given numbers to nearest 10 are:
(a) 2539 = 2540 (b) 35 = 40
(c) 2412 = 2410 (d) 176 = 180
(e) 277 = 280
2. Round off the given numbers to nearest 100 are:
(a) 2539 = 2540 (b) 35 = 40
(c) 2412 = 2410 (d) 176 = 180
(e) 277 = 280
3. Ascending order of the given numbers is:
29,531, 38502, 43,953, 44,664, 53,294, 64,417, 96225.
4. City. 4
5. Descending order.
96,225, 64,417, 53,294, 44,664, 43,953, 38,502, 29,531
6. City 2

Number Names

	T.Th	Th	H	T	O	
1		5	4	3	1	Five thousand four hundred thirty one
2	3	5	2	6	4	Thirty five thousand two hundred sixty four
3	1	9	5	0	0	Nineteen thousand five hundred
4	6	9	0	0	7	Sixty nine thousand seven
5	9	9	9	9	9	Ninety nine thousand nine hundred ninety nine.

Numerals :

1. Ten thousand four hundred seventy five.
= 10475
2. Twenty nine thousand eight hundred seventeen.
= 29817
3. Fifty three thousand seven hundred sixty eight.
= 53768
4. Seventeen thousand seventeen.
= 17017
5. Eighty thousand
= 80000
- Abacus**— Do, yourself

Greatest and smallest Numbers

1, 9, 8, 2, 3 2, 4, 0, 1, 5 6, 0, 0, 2, 3

1. Greatest Number

98321 **54210** **63200**

2. Smallest Number

12389 **10245** **20036**

Complete the bores

1. 47, 276, 47, 286, **47296** **47306** **47316**
47326 **47336**

2. 21, 148, 21, 248 **21,348** **21,448**
21,548 **21,648** **21,748**

3. 47, 106, 48106 **49,106** **50,106**
51,106 **52,106** **53,106**

4. 52, 215, 62, 215 **72,215** **82,215**
92,215 **102,215** **112, 215**

Nearest Thousand

The given amount in months of the year in nearest thousands are:

1. January – ₹ 39,778 is ₹ 40,000
2. February – ₹ 62,132 is ₹ 62,000
3. March – ₹ 1164 ₹ 1000
4. July – ₹ 24,581 is ₹ 25,000
5. September – ₹ 94,567 is ₹ 95,000
6. December – ₹ 5565 is ₹ 6,000

2. Roman Numerals

Exercise-2

1. (a) A day has **XXIV** hours.
(b) January has **XXXI** days.
(c) There are **XII** months in one year.
(d) April has **XXX** days.
2. (a) The number ninety nine is written as XC **False**
The numbers ninety nine is written as XCIX
(b) The value of L is 50 **True**
(c) We can repeat X more than 3 times **False** (I, X and C can be repeated only up to three times)
(d) The number for CC is 190 **False**
(The numbers for CC is 200)

3. (a) (i) L X I = 61

(ii) X C V II = 97

(iii) X L VII = 47

(iv) L X X X = 80

(v) X L V I I I = 48

(vi) C X C = 190

(b) (i) 162 = C L X I I

(ii) 140 = C X L

(iii) 155 = C L V

(iv) 174 = C L X X I V

(v) 198 = C X C V I I I

(vi) 48 = X L V I I I

4. (a) (iii) (b) (iv) (c) (i) (d) (v) (e) (ii)

5. (a) 55 – 18 = 37

∴ 37 = XXXVII

(b) 100 – 70 = 30

∴ 30 = XXX

(c) 170 – 67 = 103

∴ 103 = CIII

(d) 120 – 50 = 70

∴ 70 = LXX

6. (a) 100 + 64 = 164

∴ 164 = CLXIV

(b) 176 + 24 = 200

∴ 200 = CC

(c) 115 + 29 = 144

∴ 144 = CXLIV

(d) 139 + 51 = 190

∴ 190 = CXC

7. The required ascending order of Roman numerals are :

(a) XCIX, CIX, CXIX, CXXI

(b) CLIX, CXC, CXCII, CXCVII

8. The required descending order of Roman numerals are :

(a) LXXXII, LXXV, LXIX, LIV, XL

(b) LXXXIV, LXXV, LIX, XLIX, XLIV

66 Answer Key 3 to 5

BRUSH UP YOUR CONCEPTS

Greater or lesser.

1. 19 $\square$ XIX
2. XV $\square$ 14
2. V $\square$ 12
4. 29 $\square$ XXX

Circle the wrong ones

1. LXIX
2. ~~XXC~~
3. ~~CIIX~~
4. CLXX
5. ~~CLIIIX~~

Achiever's Section

No. of non flowering plants = 81
 No. of flowering plants = 93
 Total no. of number of plants in the garden = 174.
 So, 174 in Roman numeral = CLXXIV

Decode

"Please do not eat us"

Crossword Challenge

Do, yourself

3. Addition and Subtraction

Exercise-3.1

1. (a)
$$\begin{array}{r} 43428 \\ + 46325 \\ \hline 89753 \end{array}$$
 (b)
$$\begin{array}{r} 58209 \\ + 23490 \\ \hline 81699 \end{array}$$
- (c)
$$\begin{array}{r} 56938 \\ + 23452 \\ \hline 80390 \end{array}$$
 (d)
$$\begin{array}{r} 66902 \\ 15789 \\ + 11465 \\ \hline 94156 \end{array}$$
- (e)
$$\begin{array}{r} 21461 \\ 14231 \\ + 23250 \\ \hline 58942 \end{array}$$

2. (a)
$$\begin{array}{r} 98035 \\ - 45876 \\ \hline 52159 \end{array}$$
 (b)
$$\begin{array}{r} 99320 \\ - 60235 \\ \hline 39085 \end{array}$$
- (c)
$$\begin{array}{r} 87002 \\ - 48256 \\ \hline 38746 \end{array}$$
 (b)
$$\begin{array}{r} 50702 \\ - 13854 \\ \hline 36848 \end{array}$$
3. (a)
$$\begin{array}{r} 65772 \\ + 47994 \\ \hline 113766 \end{array}$$
 (b)
$$\begin{array}{r} 90307 \\ + 6507 \\ \hline 96814 \end{array}$$
- (c)
$$\begin{array}{r} 2338 \\ + 65419 \\ \hline 67757 \end{array}$$
 (d)
$$\begin{array}{r} 77083 \\ 92456 \\ + 5008 \\ \hline 174547 \end{array}$$
- (e)
$$\begin{array}{r} 45206 \\ + 62318 \\ \hline 107524 \end{array}$$
 (f)
$$\begin{array}{r} 34673 \\ + 65708 \\ \hline 100381 \end{array}$$
4. (a)
$$\begin{array}{r} 50871 \\ - 23692 \\ \hline 27179 \end{array}$$
 (b)
$$\begin{array}{r} 64015 \\ - 35794 \\ \hline 28221 \end{array}$$
- (c)
$$\begin{array}{r} 85106 \\ - 37895 \\ \hline 47211 \end{array}$$
 (d)
$$\begin{array}{r} 47852 \\ - 30547 \\ \hline 17305 \end{array}$$
- (e)
$$\begin{array}{r} 63005 \\ - 56413 \\ \hline 6592 \end{array}$$
 (f)
$$\begin{array}{r} 57682 \\ - 25341 \\ \hline 32341 \end{array}$$

5. (a)

	T ^h	Th	H	T	O
	①	①	1		
	7	6	3	8	1
+	1	0	6	5	1
	8	7	0	3	2
- (b)

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

(c)

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

(d)

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

(e)

	T [*] Th	Th	H	T	O
	①	①			
	6	6	7	9	1
+		5	7	0	0
	7	2	4	9	1

(f)

	T [*] Th	Th	H	T	O
		①			
	5	5	9	3	0
+		1	2	3	0
	5	7	1	6	0

6. (a)

	T [*] Th	Th	H	T	O
	5	9	0	5	0
−	4	8	3	1	5
	1	0	7	3	5

(b)

	T [*] Th	Th	H	T	O
	9	0	2	0	7
−	4	9	8	2	1
	4	0	3	8	6

(c)

	T [*] Th	Th	H	T	O
	5	9	6	9	7
−	2	7	6	0	6
	3	2	0	9	1

(d)

	T [*] Th	Th	H	T	O
	8	4	9	1	8
−			2	6	0
	8	4	6	5	8

(e)

	T [*] Th	Th	H	T	O
	1	5	2	3	2
−		8	0	4	2
		7	1	9	0

(f)

	T [*] Th	Th	H	T	O
	3	1	6	7	2
−			7	3	2
	3	0	9	4	0

7. (a)

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

(b)

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

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(c)

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

(d)

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

(e)

	T Th	Th	H	T	O
	②	①	②	②	
	4	9	8	1	6
	2	7	0	9	8
	2	0	7	7	1
+		6	1	2	8
	1.0	3	8	1	3

(f)

	T Th	Th	H	T	O
	①	②	②	①	
	4	3	5	6	1
	3	6	9	3	2
	2	0	1	4	6
+			9	7	2
	10	1	6	1	1

Exercise-3.2

1. (a)

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

Rounding off to nearest 100 →

	H	T	O
	4	0	0
+	4	0	0
	8	0	0

Rounding off to nearest 100 →

(b)

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

Rounding off to nearest 100 →

	H	T	O
	5	0	0
+	7	0	0
	12	0	0

Rounding off to nearest 100 →

(c)

	H	T	O
	9	1	0
+	3	8	2
	12	9	2

Rounding off to nearest 100 →

	H	T	O
	9	0	0
+	4	0	0
	13	0	0

Rounding off to nearest 100 →

(d)

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

Rounding off to nearest 100 →

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

2. (a)

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

Rounding off to nearest

1000

T	Th	H	T	O
4	4	0	0	0
2	6	0	0	0
3	5	0	0	0
10	5	0	0	0

(b)

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

Rounding off to nearest

1000

T	Th	H	T	O
2	0	0	0	0
3	2	0	0	0
4	8	0	0	0
10	0	0	0	0

Rounding off to nearest

1000

(c)

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

Rounding off to nearest

1000

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

Rounding off

to nearest 1000

3. (a)	<table> <tr><td>9 1</td><td>Rounding off to nearest</td><td>9 0</td></tr> <tr><td>- 8 2</td><td>10</td><td>- 8 0</td></tr> <tr><td><u>9</u></td><td>Rounding off to nearest</td><td><u>10</u></td></tr> <tr><td></td><td>10</td><td></td></tr> </table>	9 1	Rounding off to nearest	9 0	- 8 2	10	- 8 0	<u>9</u>	Rounding off to nearest	<u>10</u>		10		
9 1	Rounding off to nearest	9 0												
- 8 2	10	- 8 0												
<u>9</u>	Rounding off to nearest	<u>10</u>												
	10													
(b)	<table> <tr><td>1 0 0</td><td>Rounding off to nearest</td><td>1 0 0</td></tr> <tr><td>- 8 2</td><td>10</td><td>- 8 0</td></tr> <tr><td><u>18</u></td><td>Rounding off to nearest</td><td><u>20</u></td></tr> <tr><td></td><td>10</td><td></td></tr> </table>	1 0 0	Rounding off to nearest	1 0 0	- 8 2	10	- 8 0	<u>18</u>	Rounding off to nearest	<u>20</u>		10		
1 0 0	Rounding off to nearest	1 0 0												
- 8 2	10	- 8 0												
<u>18</u>	Rounding off to nearest	<u>20</u>												
	10													
(c)	<table> <tr><td>5 6</td><td>Rounding off to nearest</td><td>6 0</td></tr> <tr><td>- 2 9</td><td>10</td><td>- 3 0</td></tr> <tr><td><u>27</u></td><td>Rounding off to nearest</td><td><u>30</u></td></tr> <tr><td></td><td>10</td><td></td></tr> </table>	5 6	Rounding off to nearest	6 0	- 2 9	10	- 3 0	<u>27</u>	Rounding off to nearest	<u>30</u>		10		
5 6	Rounding off to nearest	6 0												
- 2 9	10	- 3 0												
<u>27</u>	Rounding off to nearest	<u>30</u>												
	10													
(d)	<table> <tr><td>4 2</td><td>Rounding off to nearest</td><td>4 0</td></tr> <tr><td>- 3 7</td><td>10</td><td>- 4 0</td></tr> <tr><td><u>05</u></td><td>Rounding off to nearest</td><td><u>00</u></td></tr> <tr><td></td><td>10</td><td></td></tr> </table>	4 2	Rounding off to nearest	4 0	- 3 7	10	- 4 0	<u>05</u>	Rounding off to nearest	<u>00</u>		10		
4 2	Rounding off to nearest	4 0												
- 3 7	10	- 4 0												
<u>05</u>	Rounding off to nearest	<u>00</u>												
	10													
(e)	<table> <tr><td>1 0 0</td><td>Rounding off to nearest</td><td>1 0 0</td></tr> <tr><td>- 5 6</td><td>10</td><td>- 6 0</td></tr> <tr><td><u>44</u></td><td>Rounding off to nearest</td><td><u>40</u></td></tr> <tr><td></td><td>10</td><td></td></tr> </table>	1 0 0	Rounding off to nearest	1 0 0	- 5 6	10	- 6 0	<u>44</u>	Rounding off to nearest	<u>40</u>		10		
1 0 0	Rounding off to nearest	1 0 0												
- 5 6	10	- 6 0												
<u>44</u>	Rounding off to nearest	<u>40</u>												
	10													
(f)	<table> <tr><td>1 6 1</td><td>Rounding off to nearest</td><td>1 6 0</td></tr> <tr><td>- 3 9</td><td>10</td><td>- 4 0</td></tr> <tr><td><u>122</u></td><td>Rounding off to nearest</td><td><u>120</u></td></tr> <tr><td></td><td>10</td><td></td></tr> </table>	1 6 1	Rounding off to nearest	1 6 0	- 3 9	10	- 4 0	<u>122</u>	Rounding off to nearest	<u>120</u>		10		
1 6 1	Rounding off to nearest	1 6 0												
- 3 9	10	- 4 0												
<u>122</u>	Rounding off to nearest	<u>120</u>												
	10													

70 Answer Key 3 to 5

4. (a)

	H	T	O
	3	5	9
–	1	5	3
	2	0	6

 $\xrightarrow[100]{\text{Rounding off to nearest}}$

	H	T	O
	4	0	0
–	2	0	0
	2	0	0
- (b)

	H	T	O
	6	2	9
–	1	9	2
	4	3	7

 $\xrightarrow[100]{\text{Rounding off to nearest}}$

	H	T	O
	6	0	0
–	2	0	0
	4	0	0
- (c)

	H	T	O
	8	2	8
–	4	1	2
	4	1	6

 $\xrightarrow[100]{\text{Rounding off to nearest}}$

	H	T	O
	8	0	0
–	4	0	0
	4	0	0
- (d)

	H	T	O
	5	6	6
–	4	1	5
	1	5	1

 $\xrightarrow[100]{\text{Rounding off to nearest}}$

	H	T	O
	6	0	0
–	4	0	0
	2	0	0
5. (a)

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

 $\xrightarrow[100]{\text{Rounding off to nearest}}$

	TTh	Th	H	T	O
	6	5	0	0	0
–	3	6	0	0	0
	2	9	0	0	0
- (b)

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

 $\xrightarrow[100]{\text{Rounding off to nearest}}$

	TTh	Th	H	T	O
	5	4	0	0	0
–	2	7	0	0	0
	2	7	0	0	0
- (c)

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

 $\xrightarrow[100]{\text{Rounding off to nearest}}$

	TTh	Th	H	T	O
	8	5	0	0	0
–	6	5	0	0	0
	2	0	0	0	0

Exercise-3.3

1. (a) $12568 + 4568 + 8976 = (12568 + 4568) + 8976 = 17136 + 8976 = 26112$

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

(b) $23569 + 45698 + 78961 = (23569 + 45698) + 78961 = 69267 + 78961 = 148228$

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

→

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

(c) $25698 + 75896 + 7968 = (25698 + 75896) + 7968 = 101594 + 7968 = 109562$

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

→

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

(d) $32698 + 78961 + 47689 = (32698 + 78961) + 47689 = 111659 + 47689 = 159348$

	TTh	Th	H	T	O
	3	2	6	9	8
+	7	8	9	6	1
	11	1	6	5	9

→

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

2. (a) $(346 + 6784) + 7895 = 7130 + 7895 = 15025$

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

→

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

(b) $56742 + (5467 + 6786) = 56742 + 12253 = 68995$

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

→

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

(c) $(25691 + 45698) + 25788 = 71389 + 25788 = 97177$

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

→

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

3. (a) $(1077 + 1770) + 797$
 $= 797 + (1077 + 1770)$

$\Rightarrow 2847 + 797 = 797 + 2847$

$\Rightarrow 3644 = 3644$

Associative property of addition.

(b) $8765 + (5411 + 203)$
 $= (8765 + 5411) + 203$

$\Rightarrow 8765 + 5614 = 14176 + 203$

$\Rightarrow 14379 = 14379$

Associative property of addition.

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4. Do yourself
5. No, it is valid for only addition and multiplication.

Exercise-3.4

1. Number of people invited = 45450
Number of men and woman = - 41056
Number of children participated = 4394
2. Number of eggs are collected in the form in the morning = 53683
Number of eggs are sent to the market in the evening. = -45890
Number of eggs are left in the form = 7793
3. Number of rubber plant trees = 60000
Number of rubber plant trees Fill down in a storm = -23564
Number of rubber plant trees were remaining in form = 36436
4. Number of books in store 1 = 27584
Number of books in store 2 = +59760
Number of total books in both store = 87344
5. Number of persons are recorded in zoo on Saturday = 53788
Number of persons are recorded in zoo on Sunday +23567
Number of persons are visited the zoo in these two days = 77355
6. The difference between two numbers is = 48290
If the smaller number is = +12563
The larger number is = 60853
7. Number of mangoes in first farm = 12658
Number of mangoes in second farm = 42369
Number of mangoes in third farm = +6754
Number of mangoes in three all farms 61781
8. A rengoli was made with flowers = 30000
Number of yellow flowers = -12356
Number of red flowers = 17644

BRUSH UP YOUR CONCEPTS

Missing digits

1.

	T ^h Th	Th	H	T	O
	7	5	0	<u>0</u>	1
-	3	<u>6</u>	2	7	4
	<u>3</u>	8	<u>7</u>	2	<u>7</u>

2.

	T ^h Th	Th	H	T	O
	5	2	5	<u>3</u>	<u>6</u>
-	<u>1</u>	<u>9</u>	<u>5</u>	5	7
	3	2	9	7	9

3.

	T ^h Th	Th	H	T	O
	8	7	0	5	0
-	4	3	<u>2</u>	<u>2</u>	<u>5</u>
	4	3	8	2	5

4.

	T ^h Th	Th	H	T	O
	3	<u>4</u>	1	<u>0</u>	6
+	<u>1</u>	6	<u>2</u>	8	8
	5	0	3	9	4

5.

	T ^h Th	Th	H	T	O
	5	7	<u>2</u>	5	8
+	1	<u>9</u>	8	<u>9</u>	4
	7	7	1	5	2

6.

	T ^h Th	Th	H	T	O
	4	7	0	5	0
+	4	3	<u>2</u>	<u>2</u>	<u>5</u>
	9	0	2	7	5

7.

	T ^h Th	Th	H	T	O
	7	6	2	2	<u>0</u>
-	<u>3</u>	<u>6</u>	3	4	4
	3	9	8	7	6

Answer Key 3 to 5 73

8.

	T ^h Th	Th	H	T	O
	3	4	1	0	6
-	1	6	2	8	8
	1	7	8	1	8

9.

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

Smallest and Greatest Numbers.

Sets	Smallest Number	Greatest Number	Difference	Sum
1.	2675	3872	$\begin{array}{r} 3872 \\ - 2675 \\ \hline 1197 \end{array}$	$\begin{array}{r} 2675 \\ + 3872 \\ \hline 6547 \end{array}$
2.	2640	4740	$\begin{array}{r} 4740 \\ - 2640 \\ \hline 2100 \end{array}$	$\begin{array}{r} 2640 \\ + 4740 \\ \hline 7380 \end{array}$

Decode

(1) $\begin{array}{r} 12354 \\ + 23423 \\ \hline 35777 \end{array}$	(2) $\begin{array}{r} 22839 \\ + 51100 \\ \hline 73939 \end{array}$
(3) $\begin{array}{r} 31412 \\ + 38367 \\ \hline 69779 \end{array}$	(4) $\begin{array}{r} 43389 \\ + 52510 \\ \hline 95899 \end{array}$
(5) $\begin{array}{r} 10354 \\ + 70241 \\ \hline 80595 \end{array}$	(6) $\begin{array}{r} 15338 \\ + 23460 \\ \hline 38798 \end{array}$
(7) $\begin{array}{r} 42336 \\ + 37351 \\ \hline 79687 \end{array}$	(8) $\begin{array}{r} 44513 \\ + 21375 \\ \hline 65888 \end{array}$
(9) $\begin{array}{r} 42827 \\ + 33130 \\ \hline 75957 \end{array}$	(10) $\begin{array}{r} 51242 \\ + 46531 \\ \hline 97773 \end{array}$

P Y T H A G O R A S
1 2 3 4 5 6 7 8 9 10

Complex :

1. The sum of 25345 and 12032 = 37377

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

2. 34567 Plus 12421 = 46988

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

3. 25112 minus 12224 = 12888

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

4. 51443 less than 85331 = 33888

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

Challenge :

1. The difference between the biggest and smallest crowd is 80320

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

2. The football crowd was more than badminton crowd was 80320

3.

	TTh	Th	H	T	O	Rounding off to nearest		TTh	Th	H	T	O
	8	4	8	6	5	100		8	5	0	0	0
−	1	0	9	8	7	Rounding off to nearest	−	1	1	0	0	0
	7	3	8	7	8	100		7	4	0	0	0

4.

Sum

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

Dereferencer

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

4. Multiplication

Exercise-4.1

1. Fill in the blanks using multiplication property.

- (a) $4532 \times 1 = 4532$
 (b) $178 \times 0 = 0$
 (c) $564 \times 0 = 0$
 (b) $436 \times 1 = 436$
 (e) $789 \times 1 = 789$
 (f) $876 \times 0 = 0$

2. Find the product.

- (a)
$$\begin{array}{r} 432 \\ \times 100 \\ \hline 43200 \end{array}$$
 (b)
$$\begin{array}{r} 214 \\ \times 10 \\ \hline 2140 \end{array}$$

 (c)
$$\begin{array}{r} 888 \\ \times 100 \\ \hline 88800 \end{array}$$
 (b)
$$\begin{array}{r} 842 \\ \times 10 \\ \hline 8420 \end{array}$$

 (e)
$$\begin{array}{r} 346 \\ \times 10 \\ \hline 3460 \end{array}$$
 (f)
$$\begin{array}{r} 763 \\ \times 100 \\ \hline 76300 \end{array}$$

 (g)
$$\begin{array}{r} 920 \\ \times 100 \\ \hline 92000 \end{array}$$
 (h)
$$\begin{array}{r} 486 \\ \times 100 \\ \hline 48600 \end{array}$$

- (i)
$$\begin{array}{r} 5237 \\ \times 1000 \\ \hline 5237000 \end{array}$$
 (j)
$$\begin{array}{r} 1000 \\ \times 33 \\ \hline 33000 \end{array}$$

 (k)
$$\begin{array}{r} 1000 \\ \times 223 \\ \hline 223000 \end{array}$$
 (l)
$$\begin{array}{r} 1000 \\ \times 55 \\ \hline 55000 \end{array}$$

Exercise-4.2

1. Find the product of the following.

- (a)
$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ \hline 3 \\ \times 5 6 \\ \hline 1 3 5 \\ 2 8 0 \\ + 1 6 8 0 \\ \hline 1 9 6 0 \end{array}$$
 $\leftarrow 56 \times 5 = 280$
 $\leftarrow 56 \times 30 = 1680$
 $\leftarrow 56 \times 35 = 1960$
- (b)
$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ \hline 2 \\ 6 3 \\ \times 3 8 \\ \hline 5 0 4 \\ + 1 8 9 0 \\ \hline 2 3 9 4 \end{array}$$
 $\leftarrow 63 \times 8 = 504$
 $\leftarrow 63 \times 30 = 1890$
 $\leftarrow 63 \times 38 = 2394$

(c)

Th	H	T	O
	2	1	
		8	8
	×	3	2
	1	7	6
←	88 × 2 = 176		
+	26	4	0
←	88 × 30 = 2640		
	28	1	6
←	88 × 32 = 2816		

(d)

Th	H	T	O
	3		
		5	
		7	9
	×	4	6
	4	7	4
←	79 × 6 = 474		
+ 3	1	6	0
←	79 × 40 = 3160		
3	6	3	4
←	79 × 46 = 3634		

(e)

Th	H	T	O
		1	
1	4	1	.
	1	8	2
	×	2	5
1	4	1	0
←	82 × 5 = 410		
+ 1	6	4	0
←	82 × 20 = 1640		
2	0	5	0
←	82 × 25 = 2050		

(f)

Th	H	T	O
		1	
		4	4
	×	3	0
		0	0
←	44 × 0 = 00		
+ 1	3	2	0
←	44 × 30 = 1320		
1	3	2	0
←	44 × 30 = 1320		

2. Find the product of the following.

(a)

T ^h	Th	H	T	O
		7	2	9
		×	2	9
	6	5	6	1
←	729 × 9 = 6561			
+ 1	4	5	8	0
←	729 × 20 = 14580			
2	1	1	4	1
←	729 × 29 = 21141			

(b)

T ^h	Th	H	T	O
		9	0	4
		×	2	5
1	4	5	2	0
←	904 × 5 = 4520			
+ 1	8	0	8	0
←	904 × 20 = 18080			
2	2	6	0	0
←	904 × 25 = 22600			

(c)

T ^h	Th	H	T	O
		8	0	6
		×	2	9
1	7	2	5	4
←	806 × 9 = 7254			
+ 1	6	1	2	0
←	806 × 20 = 16120			
2	3	3	7	4
←	806 × 29 = 23374			

76 Answer Key 3 to 5

(d)

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

$\leftarrow 925 \times 3 = 2775$
 $\leftarrow 925 \times 70 = 64750$
 $\leftarrow 925 \times 73 = 67525$

(e)

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

$\leftarrow 756 \times 7 = 5292$
 $\leftarrow 756 \times 40 = 30240$
 $\leftarrow 756 \times 47 = 35532$

(f)

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

$\leftarrow 805 \times 5 = 4025$
 $\leftarrow 805 \times 80 = 64400$
 $\leftarrow 805 \times 85 = 68425$

3. Find the product of the following.

(a)

T	Th	H	T
		2	4
	×	9	<u>6</u>
	1	4	4
<u>2</u>	<u>1</u>	<u>6</u>	0
2	3	0	4

$\leftarrow 24 \times \underline{6} = 144$
 $\leftarrow 24 \times 90 = 2160$
 $\leftarrow 24 \times 9\underline{6} = 2304$

(b)

T	Th	H	T
		3	3
	×	<u>4</u>	7
	2	3	1
+ 1	<u>3</u>	<u>2</u>	<u>0</u>
1	5	5	1

$\leftarrow 33 \times 7 = 231$
 $\leftarrow 33 \times \underline{40} = 1320$
 $\leftarrow 33 \times 47 = 1551$

(c)

T	Th	H	T
		<u>6</u>	6
	₁ ×	3	4
1	<u>2</u>	<u>6</u>	<u>4</u>
+ 1	9	8	0
2	2	4	4

$\leftarrow 66 \times 4 = 264$
 $\leftarrow 66 \times 30 = 1980$
 $\leftarrow 66 \times 34 = 2244$

4. (a)

6 2 4	(b)	7 1 5
× 3 9 2		× 2 4 5
1 2 4 8		3 5 7 5
5 6 1 6 0		2 8 6 0 0
+ 1 8 7 2 0 0		+ 1 4 3 0 0 0
<u>2 4 4 6 0 8</u>		<u>1 7 5 1 7 5</u>

(c)

8 7 7	(d)	5 4 2
× 1 2 6		× 4 5 8
5 2 6 2		4 3 3 6
1 7 5 4 0		2 7 1 0 0
+ 8 7 7 0 0		+ 2 1 6 8 0 0
<u>1 1 0 5 0 2</u>		<u>2 4 8 2 3 6</u>

(e)

7 8 4	(f)	9 8 5
× 1 8 5		× 4 6 5
3 9 2 0		4 9 2 5
6 2 7 2 0		5 9 1 0 0
+ 7 8 4 0 0		+ 3 9 4 0 0 0
<u>1 4 5 0 4 0</u>		<u>4 5 8 0 2 5</u>

5. (a)

T	Th	H	T	O
	3	7	7	8
			×	2
	7	5	5	6

Exercise-4.3

(b)

TTh	Th	H	T	O
	4	0	7	7
			×	9
3	6	6	9	3

(c)

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

(d)

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

(e)

TTh	Th	H	T	O
	8	4	7	5
			×	5
4	2	3	7	5

(f)

TTh	Th	H	T	O
	9	1	1	1
			×	6
5	4	6	6	6

(g)

TTh	Th	H	T	O
	9	0	8	0
			×	9
8	1	7	2	0

(h)

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

(i)

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

1. Total no. of students = 123

Each students collected = 15 sea shells

123 students collected = 123×15

= 1845 sea shells

2. Number of sheets of paper bought for school for each box = 59

Number of sheets of paper bought for 831 boxes

= 831×59

7 4 7 9

+ 4 1 5 5 0

4 9 0 2 9

3. For every student,

Cafeteria planned to bake cookies = 3

No. of students in the school = 715

No. of cookies need to bake = 715×3

2 1 4 5

4. Each restaurants will need employees = 27

No. of pizza depot new restaurants = 31

No. of employee pizza depot need

= 27×31

2 7

+ 8 1 0

8 3 7

5. No. of pencils made by a machine in 1 sec. = 761

No. of pencils made by a machine in 23 sec.

= 761×23

2 2 8 3

+ 1 5 2 2 0

1 7 5 0 3

6. No. of rows of glass beads in the bead shop = 25

No. of glass beads in bead shop = 320

in each row

No. of glass beads in the shop = 320×25

1 6 0 0

+ 6 4 0 0

8 0 0 0

BRUSH UP CONCEPTS

$\begin{array}{r} 32 \\ \times 48 \\ \hline 256 \\ + 1280 \\ \hline 1536 \end{array}$	$\begin{array}{r} 67 \\ \times 14 \\ \hline 268 \\ + 670 \\ \hline 938 \end{array}$	$\begin{array}{r} 53 \\ \times 27 \\ \hline 371 \\ + 1060 \\ \hline 1431 \end{array}$	$\begin{array}{r} 96 \\ \times 52 \\ \hline 192 \\ + 4800 \\ \hline 4992 \end{array}$	$\begin{array}{r} 83 \\ \times 33 \\ \hline 249 \\ + 2490 \\ \hline 2739 \end{array}$
$\begin{array}{r} 39 \\ \times 28 \\ \hline 312 \\ + 780 \\ \hline 1092 \end{array}$	$\begin{array}{r} 56 \\ \times 15 \\ \hline 280 \\ + 560 \\ \hline 840 \end{array}$	$\begin{array}{r} 83 \\ \times 24 \\ \hline 332 \\ + 1660 \\ \hline 1992 \end{array}$	$\begin{array}{r} 75 \\ \times 46 \\ \hline 450 \\ + 3000 \\ \hline 3450 \end{array}$	$\begin{array}{r} 84 \\ \times 62 \\ \hline 168 \\ + 5040 \\ \hline 5208 \end{array}$

What horses like to stay up late?

N	I	G	H	T	M
1992	4992	1536	5208	938	1092
A	R	E	S		
2739	3450	840	1431		

Missing bores

Fill in the bones

(1)	$\begin{array}{r} 27 \\ \times 20 \\ \hline 540 \end{array}$	(2)	$\begin{array}{r} 12 \\ \times 80 \\ \hline 960 \end{array}$
(3)	$\begin{array}{r} 56 \\ \times 20 \\ \hline 1120 \end{array}$	(4)	$\begin{array}{r} 93 \\ \times 70 \\ \hline 6510 \end{array}$
(5)	$\begin{array}{r} 43 \\ \times 50 \\ \hline 2150 \end{array}$	(6)	$\begin{array}{r} 54 \\ \times 60 \\ \hline 3240 \end{array}$
(7)	$\begin{array}{r} 24 \\ \times 70 \\ \hline 1680 \end{array}$	(8)	$\begin{array}{r} 30 \\ \times 92 \\ \hline 2760 \end{array}$

Check the calculator

(1)	$\begin{array}{r} 315 \\ \times 9 \\ \hline 2835 \end{array}$	(2)	$\begin{array}{r} 456 \\ \times 4 \\ \hline 1824 \end{array}$
(3)	$\begin{array}{r} 675 \\ \times 5 \\ \hline 3375 \end{array}$	(4)	$\begin{array}{r} 764 \\ \times 7 \\ \hline 5348 \end{array}$

Match

1. (c) 2. (e) 3. (a) 4. (b) 5. (d).

Pattern

- $14 \times 200 = 2800$
 $14 \times 300 = 4200$
 $14 \times 400 = 5600$
- $15 \times 200 = 3000$
 $15 \times 300 = 4500$
 $15 \times 400 = 6000$
- $25 \times 200 = 5000$
 $25 \times 300 = 7500$
 $25 \times 400 = 10000$
- $27 \times 200 = 5400$
 $27 \times 300 = 8100$
 $27 \times 400 = 10800$
- $39 \times 200 = 7800$
 $39 \times 300 = 11700$
 $39 \times 400 = 15600$
- $48 \times 200 = 9600$
 $48 \times 300 = 14400$
 $48 \times 400 = 19200$
- $50 \times 200 = 10000$
 $50 \times 300 = 15000$
 $50 \times 400 = 20000$

Car Race Challenge.

We can put x cross in place of zero (0) in unit digit, ten's digit and so on.

(1)	$\begin{array}{r} 48 \times 95 \\ 240 \\ 432 \times \\ \hline 4560 \end{array}$	(2)	$\begin{array}{r} 322 \times 7 \\ 2254 \end{array}$
-----	---	-----	---

$$\begin{array}{r}
 (3) \quad 122 \times 8 \quad (4) \quad 59 \times 17 \\
 \boxed{976} \qquad \qquad \qquad 413 \\
 \qquad \qquad \qquad 59 \times \\
 \qquad \qquad \qquad \boxed{1003} \\
 (5) \quad 311 \times 6 \quad (6) \quad 89 \times 73 \\
 \boxed{1866} \qquad \qquad \qquad 267 \\
 \qquad \qquad \qquad 623 \times \\
 \qquad \qquad \qquad \boxed{6497} \\
 (7) \quad 221 \times 9 \quad (8) \quad 34 \times 52 \\
 \boxed{1989} \qquad \qquad \qquad 68 \\
 \qquad \qquad \qquad 170 \times \\
 \qquad \qquad \qquad \boxed{1768}
 \end{array}$$

5. Division

Exercise-5.1

- $65,895 \div 1 = 65,895$
 - $56,789 \div 1 = 56,789$
 - $0 \div 82,892 = 0$
 - $34,726 \div 34,726 = 1$
 - $0 \div 23,694 = 0$
 - $19,532 \div 19,532 = 1$
- $85 \div 10, Q = 8, R = 5$
 - $350 \div 10, Q = 35, R = 0$
 - $187 \div 10, Q = 18, R = 7$
 - $4561 \div 10, Q = 456, R = 1$
 - $69874 \div 10, Q = 6987, R = 4$
 - $800 \div 10, Q = 80, R = 0$
 - $5000 \div 10, Q = 500, R = 0$
 - $90 \div 10, Q = 9, R = 0$
- $306 \div 100, Q = 3, R = 6$
 - $600 \div 100, Q = 6, R = 0$
 - $6985 \div 100, Q = 69, R = 85$
 - $35,784 \div 100, Q = 357, R = 84$
 - $8000 \div 100, Q = 80, R = 0$
 - $95000 \div 100, Q = 950, R = 0$
 - $896 \div 100, Q = 8, R = 96$
 - $5698 \div 100, Q = 56, R = 98$
- $8654 \div 1000, Q = 8, R = 654$
 - $9000 \div 1000, Q = 9, R = 0$
 - $63000 \div 1000, Q = 63, R = 0$
 - $78965 \div 1000, Q = 78, R = 965$
 - $98563 \div 1000, Q = 98, R = 563$
 - $78000 \div 1000, Q = 78, R = 0$
 - $52369 \div 1000, Q = 52, R = 369$
 - $10000 \div 1000, Q = 10, R = 0$

Answer Key 3 to 5

79

Exercise-5.2

$$\begin{array}{r}
 1. \quad (a) \quad 15 \overline{) 645} \quad (b) \quad 18 \overline{) 605} \\
 \underline{-60} \qquad \qquad \underline{-54} \\
 45 \qquad \qquad \quad 65 \\
 \underline{-45} \qquad \qquad \underline{-54} \\
 0 \qquad \qquad \quad 11 \\
 \therefore Q = 43, R = 0 \quad \therefore Q = 33, R = 11 \\
 (c) \quad 16 \overline{) 587} \quad (d) \quad 12 \overline{) 322} \\
 \underline{-48} \qquad \qquad \underline{-24} \\
 107 \qquad \qquad \quad 82 \\
 \underline{-96} \qquad \qquad \underline{-72} \\
 11 \qquad \qquad \quad 10
 \end{array}$$

$$Q = 36, R = 11 \quad Q = 26, R = 10$$

$$\begin{array}{r}
 (e) \quad 11 \overline{) 313} \quad (f) \quad 13 \overline{) 855} \\
 \underline{-22} \qquad \qquad \underline{-78} \\
 93 \qquad \qquad \quad 75 \\
 \underline{-88} \qquad \qquad \underline{-65} \\
 5 \qquad \qquad \quad 10
 \end{array}$$

$$Q = 28, R = 5 \quad Q = 65, R = 10$$

$$\begin{array}{r}
 (g) \quad 17 \overline{) 565} \quad (h) \quad 14 \overline{) 706} \\
 \underline{-51} \qquad \qquad \underline{-70} \\
 55 \qquad \qquad \quad 06 \\
 \underline{-51} \\
 4
 \end{array}$$

$$Q = 33, R = 4 \quad Q = 50, R = 6$$

$$\begin{array}{r}
 2. \quad (a) \quad 22 \overline{) 733} \quad (b) \quad 48 \overline{) 627} \\
 \underline{-66} \qquad \qquad \underline{-48} \\
 73 \qquad \qquad \quad 147 \\
 \underline{-66} \qquad \qquad \underline{-144} \\
 7 \qquad \qquad \quad 3
 \end{array}$$

$$Q = 33, R = 7 \quad Q = 13, R = 3$$

$$\begin{array}{r}
 (c) \quad 66 \overline{) 715} \quad (d) \quad 74 \overline{) 158} \\
 \underline{-66} \qquad \qquad \underline{148} \\
 55 \qquad \qquad \quad 10
 \end{array}$$

$$Q = 10, R = 55 \quad Q = 2, R = 10$$

80 Answer Key 3 to 5

$$\begin{array}{r} 8 \\ (e) 83 \overline{) 665} \\ \underline{-664} \\ 1 \end{array} \quad \begin{array}{r} 17 \\ (f) 37 \overline{) 631} \\ \underline{-37} \\ 261 \\ \underline{-259} \\ 2 \end{array}$$

$Q = 8, R = 1$ $Q = 17, R = 2$

$$\begin{array}{r} 6 \\ (g) 56 \overline{) 352} \\ \underline{-336} \\ 16 \end{array} \quad \begin{array}{r} 3 \\ (h) 78 \overline{) 238} \\ \underline{-234} \\ 04 \end{array}$$

$Q = 6, R = 16$ $Q = 3, R = 4$

3.
$$\begin{array}{r} 1221 \\ (a) 7 \overline{) 8553} \\ \underline{7} \\ 15 \\ \underline{-14} \\ 15 \\ \underline{-14} \\ 13 \\ \underline{-7} \\ 6 \end{array} \quad \begin{array}{r} 1818 \\ (b) 3 \overline{) 5454} \\ \underline{-3} \\ 24 \\ \underline{-24} \\ 5 \\ \underline{-3} \\ 24 \\ \underline{-24} \\ 0 \end{array}$$

$Q = 1221, R = 6$ $Q = 1818, R = 0$

$$\begin{array}{r} 912 \\ (c) 9 \overline{) 8213} \\ \underline{-81} \\ 11 \\ \underline{-9} \\ 23 \\ \underline{-18} \\ 5 \end{array} \quad \begin{array}{r} 1385 \\ (d) 6 \overline{) 8313} \\ \underline{-6} \\ 23 \\ \underline{-18} \\ 51 \\ \underline{-48} \\ 33 \\ \underline{-30} \\ 3 \end{array}$$

$Q = 912, R = 5$ $Q = 1385, R = 3$

$$\begin{array}{r} 1112 \\ (e) 2 \overline{) 2224} \\ \underline{-2} \\ 2 \\ \underline{-2} \\ 2 \\ \underline{-2} \\ 4 \\ \underline{-4} \\ 0 \end{array} \quad \begin{array}{r} 1666 \\ (f) 5 \overline{) 8332} \\ \underline{-5} \\ 33 \\ \underline{-30} \\ 33 \\ \underline{-30} \\ 32 \\ \underline{-30} \\ 2 \end{array}$$

$Q = 1112, R = 0$ $Q = 1666, R = 2$

$$\begin{array}{r} 1116 \\ (g) 4 \overline{) 4467} \\ \underline{-4} \\ 4 \\ \underline{-4} \\ 6 \\ \underline{-4} \\ 27 \\ \underline{-24} \\ 3 \end{array} \quad \begin{array}{r} 135 \\ (h) 9 \overline{) 1222} \\ \underline{-9} \\ 32 \\ \underline{-27} \\ 52 \\ \underline{-45} \\ 7 \end{array}$$

$Q = 1116, R = 3$ $Q = 135, R = 7$

Exercise-5.3

1. (a)
$$\begin{array}{r} 1 \\ 595 \overline{) 643} \\ \underline{-595} \\ 48 \end{array}$$

Dividend = Quotient $\times$ Div. + Rem.

$$643 = 1 \times 595 + 48$$

$$= 643 = \text{correct}$$

(b)
$$\begin{array}{r} 135 \\ 5 \overline{) 676} \\ \underline{-5} \\ 17 \\ \underline{-15} \\ 26 \\ \underline{-25} \\ 1 \end{array}$$

Dividend = Quotient $\times$ Div. + Rem.

$$676 = 675 + 1$$

$$= 135 \times 5 + 1$$

$$1818 = 676 = 675 + 1$$

$$= 676 = 676 = \text{Correct}$$

(c)
$$\begin{array}{r} 1385 \\ 6 \overline{) 8313} \\ \underline{-6} \\ 23 \\ \underline{-18} \\ 51 \\ \underline{-48} \\ 33 \\ \underline{-30} \\ 3 \end{array}$$

$$8313 = 1385 \times 6 + 3$$

$$= 8310 + 3$$

$$= 8313$$

$$= \text{Correct}$$

$$\begin{array}{r} 1818 \\ (d) \ 3 \overline{) 5454} \\ \underline{-3} \\ 24 \\ \underline{-24} \\ 05 \\ \underline{-3} \\ 24 \\ \underline{-24} \\ 0 \end{array}$$

$$\text{Dividend} = \text{Qu} \times \text{div.} + \text{Rem}$$

$$\Rightarrow 5454 = 1818 \times 3 + 0$$

$$= 5454 + 0$$

$$= 5454$$

$$= \text{Correct}$$

$$\begin{array}{r} 19 \\ 2. (a) \ 35 \overline{) 678} \\ \underline{-35} \\ 328 \\ \underline{-315} \\ 13 \end{array}$$

$$\text{Qu.} = 19, \text{Rem} = 13$$

$$\text{Dividend} = \text{Qu} \times \text{div.} + \text{Rem}$$

$$\Rightarrow 678 = 19 \times 35 + 13$$

$$= 665 + 13$$

$$= 678 = \text{correct}$$

$$\begin{array}{r} 43 \\ (b) \ 15 \overline{) 645} \\ \underline{-60} \\ 45 \\ \underline{-45} \\ 0 \end{array}$$

$$\text{Qu.} = 43, \text{Rem} = 0$$

$$\text{Dividend} = \text{Qu} \times \text{div.} + \text{Rem}$$

$$\Rightarrow 645 = 43 \times 15 + 0$$

$$\Rightarrow 645 = 645 + 0$$

$$\Rightarrow 645 = 645 = \text{correct}$$

$$\begin{array}{r} 13 \\ (c) \ 58 \overline{) 777} \\ \underline{-58} \\ 197 \\ \underline{-174} \\ 23 \end{array}$$

$$\text{Qu.} = 13, \text{Rem} = 23$$

$$\text{Dividend} = \text{Qu} \times \text{div.} + \text{Rem}$$

$$\Rightarrow 777 = 13 \times 58 + 23$$

$$= 777 = \text{correct}$$

$$\begin{array}{r} 25 \\ (d) \ 32 \overline{) 803} \\ \underline{-64} \\ 163 \\ \underline{-160} \\ 3 \end{array}$$

$$\text{Qu.} = 25, \text{Rem} = 3$$

$$\text{Dividend} = \text{Qu} \times \text{div.} + \text{Rem}$$

$$\Rightarrow 803 = 25 \times 32 + 3$$

$$\Rightarrow 803 = 803$$

$$\begin{array}{r} 12 \\ (e) \ 46 \overline{) 564} \\ \underline{-46} \\ 104 \\ \underline{-92} \\ 12 \end{array}$$

$$\text{Qu.} = 12, \text{Rem} = 12$$

$$\text{Dividend} = \text{Qu} \times \text{div.} + \text{Rem}$$

$$\Rightarrow 564 = 12 \times 46 + 12$$

$$\Rightarrow 564 = 564 = \text{correct}$$

$$\begin{array}{r} 576 \\ (f) \ 1 \overline{) 576} \\ \underline{-5} \\ 07 \\ \underline{-7} \\ 6 \\ \underline{-6} \\ 0 \end{array}$$

$$\text{Qu.} = 576, \text{Rem} = 0$$

$$\text{Dividend} = \text{Qu} \times \text{div.} + \text{Rem}$$

$$\Rightarrow 576 = 576 \times 1 + 0$$

$$= 576 = \text{correct}$$

82 Answer Key 3 to 5

$$\begin{array}{r} 26 \\ (g) \ 12 \overline{) 322} \\ \underline{-24} \\ 82 \\ \underline{-72} \\ 10 \end{array}$$

$$\text{Qu.} = 25, \text{Rem} = 10$$

$$\text{Dividend} = \text{Qu} \times \text{div.} + \text{Rem}$$

$$\begin{aligned} \Rightarrow \quad 322 &= 12 \times 26 + 10 \\ &= 312 + 10 \\ &= 322 \end{aligned}$$

$$\begin{array}{r} 10 \\ (h) \ 28 \overline{) 288} \\ \underline{-28} \\ 08 \end{array}$$

$$\text{Qu.} = 10, \text{Rem} = 8$$

$$\text{Dividend} = \text{Qu} \times \text{div.} + \text{Rem}$$

$$\begin{aligned} \Rightarrow \quad 288 &= 10 \times 28 + 8 \\ &= 288 \end{aligned}$$

Exercise-5.4

1. No. of pieces a bag of candy containing opened by carry = 126
Since, same no. of pieces give to each of his guests = 42
No. of pieces obtained by each persons = $126 \div 42 = 3$

$$\begin{array}{r} 03 \\ 42 \overline{) 126} \\ \underline{-126} \\ 0 \end{array}$$

2. Pancake restaurant served = 348 pancakes
If an equal number of pancakes eat by customers = 87
No. of each person eat pancakes

$$\begin{array}{r} 4 \\ 87 \overline{) 348} \\ \underline{-348} \\ 0 \end{array} \quad = 348 \div 87 = 4$$

3. No. of books a library has = 4590
No. of shelves for these books arranged = 27
No. of total books in each shelf
 $= 4590 \div 27 = 170$

$$\begin{array}{r} 170 \\ 27 \overline{) 4590} \\ \underline{-27} \\ 189 \\ \underline{-189} \\ 0 \\ 0 \\ \underline{0} \end{array}$$

4. No. of guests hosted by a party = 798

$$\text{No. of guests can have by a each table} = 7$$

$$\text{No. of tables are needed to arrange for the gusts} = 798 \div 7 = 114$$

$$\begin{array}{r} 114 \\ 7 \overline{) 798} \\ \underline{-7} \\ 9 \\ \underline{-7} \\ 28 \\ \underline{-28} \\ 0 \end{array}$$

5. No. of jeans stocks by a shop = 528

$$\text{No. of piles are stored by jeans} = 54$$

$$\text{No. of piles should the shop ape} = 528 \div 44 = 12$$

$$\begin{array}{r} 12 \\ 44 \overline{) 528} \\ \underline{-44} \\ 88 \\ \underline{-88} \\ 0 \end{array}$$

6. No. of cookies for a party bought by Raj = 6634

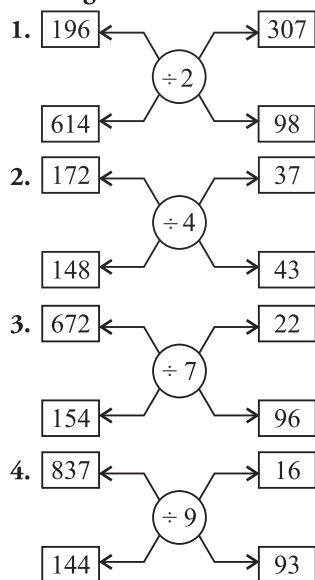
$$\text{No. of boxes come by cookies} = 31$$

$$\text{No. of boxes of cookies bought by him} = 6634 \div 31 = 214$$

$$\begin{array}{r} 214 \\ 31 \overline{) 6634} \\ \underline{-62} \\ 43 \\ \underline{-31} \\ 124 \\ \underline{-124} \\ 0 \end{array}$$

Brush Up Your Concepts

Missing boxes



Multiplication and Devision

- $4 \times 8 = \underline{32}$
 $40 \times 80 = \underline{3200}$
 $3200 \div 40 = \underline{80}$
 $320 \div 8 = \underline{40}$
- $7 \times 6 = \underline{42}$
 $70 \times 60 = \underline{4200}$
 $4200 \div 70 = \underline{60}$
 $420 \div 6 = \underline{70}$
- $8 \times 8 = \underline{64}$
 $80 \times 80 = \underline{6400}$
 $6400 \div 80 = \underline{80}$
 $640 \div 8 = \underline{80}$
- $9 \times 3 = \underline{27}$
 $90 \times 30 = \underline{2700}$
 $2700 \div 90 = \underline{30}$
 $270 \div 3 = \underline{90}$

Mental maths

- No. of biscuits need by you = 80
 In a pack no. of biscuits = 5
 No. of packs need by you = $80 \div 5 = 16$
 I need to bay 16 packs of chocolate biscuits.
- No. of stickers need you = 96
 No. of stickers put on a page = 6

No. of pages can you fill = $96 \div 6 = 16$

I can fill 16 pages

- No. of children can fit in a canoe = 4
 For 60 children no. of canoes you need = 60
 For 60 children I need canoes = $60 \div 4 = 15$
 I need 15 canoes for 60 children.
- No. of chairs in a hall = 95
 No. of chairs in a group = 5
 No. of groups of chairs will be formed
 $= 95 \div 5 = 19$
19 groups of chairs will be formed.

6. Factors and multiples

Exercise-6.1

- Factors of 12 = 1, 2, 3, 4, 6, 12
 Factors of 24 = 1, 2, 3, 4, 6, 8, 12, 24
 Factors of 28 = 1, 2, 4, 7, 14, 28
 Factors of 38 = 1, 2, 19, 38
 Factors of 42 = 1, 2, 3, 6, 7, 14, 21, 42
- Factors of 34 = 1, 2, 17, 34
- Required Factors of 45 = 15 (Which liss between 10 and 30)
- In $8 \times 9 = 72$, the numbers 8 and 9 are the Factors of 72.

Exercise-6.2

- Tow multiples of 6 between 40 and 50 are 42, 48.
- Tow multiples of 8 between 60 and 75 are 64 and 72.
- First seven multiples of 7 are 7, 14, 21, 28, 35
- Multiples of 2 = 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50....
 Multiples of 3 = 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51
 First six common multiples of 2, 3 are multiples 2×3 i.e. 6 = 6, 12, 18, 24, 30, 36
- Six multiples of 10 are 10, 20, 30, 40, 50, 60
- First five multiples of 12 are 12, 24, 36, 48, 60

BRUSH UP YOUR CONCEPTS

Number	Multiple of 30	Multiple of 70
150	Yes	No
140	No	Yes
200	No	No
120	Yes	No
210	Yes	Yes
350	No	Yes
420	Yes	Yes

Factors

- Factors of 100 = 1, 2, 4, 5, 10, 20, 25, 50, 100.
- Multiple of seven between 1 and 100 are 7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84, 91, 98.

Riddle.

- Multiples of 3 between 40, and 50, are: 42, 45, 48
- Multiples of 8 between 50 and 70 are 56, 64
- Common multiples 6 and 4 less than 30 are 12, 24

Multiples of challenge:

20	12	14	25	18	30	21	24	35
Multiple of 3				Multiple of 5				
are : 12, 18, 21, 24, 30				20, 25, 30, 35				
Multiple of 6				Multiple of 7				
12, 18, 30, 24				14, 21, 35				

7. Fractions

Exercise-7.1

- Solve the fractions.

(a) $\frac{2}{3}$ of 15 = $\frac{2}{3} \times 15 = 2 \times 5 = 10$

(b) $\frac{5}{7}$ of 70 = $\frac{5}{7} \times 70 = 5 \times 10 = 50$

(c) $\frac{3}{4}$ of 36 = $\frac{3}{4} \times 36 = 3 \times 9 = 27$

(d) $\frac{2}{7}$ of 56 = $\frac{2}{7} \times 56 = 2 \times 8 = 16$

(e) $\frac{5}{6}$ of 66 = $\frac{5}{6} \times 66 = 5 \times 11 = 55$

(f) $\frac{3}{5}$ of 60 = $\frac{3}{5} \times 60 = 3 \times 12 = 36$

(g) $\frac{9}{11}$ of 99 = $\frac{9}{11} \times 99 = 9 \times 9 = 81$

(h) $\frac{3}{7}$ of 70 = $\frac{3}{7} \times 70 = 3 \times 10 = 30$

(i) $\frac{1}{4}$ of 48 = $\frac{1}{4} \times 48 = 12$

(j) $\frac{7}{12}$ of 96 = $\frac{7}{12} \times 96 = 7 \times 8 = 56$

(k) $\frac{5}{12}$ of 72 = $\frac{5}{12} \times 72 = 5 \times 6 = 30$

(l) $\frac{5}{9}$ of 54 = $\frac{5}{9} \times 54 = 5 \times 6 = 30$

- The distance covered by Gita to reach home = 7 km

The distance covered by Gita by bus = 5 km

The distance covered by walking by her = 2 km

Fraction of kilometres travels by bus = $\frac{5}{7}$

- No. of total roses = 15

No. of roses of yellow colour = 6

No. of roses of red colour = 9

Fraction of red roses = $\frac{9}{15} = \frac{3}{5}$

- No. of strawberry ice creams Nancy has = 6

No. of Chocolate ice creams Nancy has = 4

Fraction of the strawberry icecream = $\frac{6}{10}$

5. Total no stickers collected by Johny = 36
 No. of stickers gave to his sister = 18
 No. of stickers gave to his Friends = 5
 No. of stickers gave to his teacher = $36 - (18+5)$
 $= 36 - 23$
 $= 13$
 No. of stickers gave finally to his teacher
 $= \frac{13}{36}$

6. No. of blue markers has a teacher = 11
 No. of black markers has a teacher = 5
 No. of red markers has a teacher = 7
 Fraction of black markers can be found on teacher desk = $\frac{5}{11+5+7} = \frac{5}{23}$

7. Total no. of building blocks in a bag has Aditi = 52
 No. of building blocks to build a house by Aditi = 38
 Fraction of building blocks remains unused = $\frac{52-38}{52}$
 $= \frac{14}{52}$

8. Total no. of pens has Renu = 15
 No. of blue pens = 7
 No. of red pens = 3
 No. of yellow pens = 5
 Fraction of blue pens = $\frac{7}{15}$

9. Total no. of hours spent by Annie = 6
 The time spent doing activities by Annie = Half of 6 = 3 hours

10. Do, Yourself

Exercise-7.2

1. (a) $\frac{16}{7}$ = improper (b) $3\frac{4}{9}$ = mixed
 (c) $7\frac{8}{11}$ = mixed (d) $\frac{4}{7}$ = Proper

(e) $\frac{7}{4}$ = Improper (f) $13\frac{24}{27}$ = mixed

(g) $\frac{11}{7}$ = Improper (h) $\frac{3}{5}$ = Proper

(i) $\frac{6}{7}$ = Proper (j) $5\frac{10}{14}$ = mixed

2. (a) $3\frac{4}{7}$ (b) $\frac{11}{37}$

3. Proper fractions:

(a) $\frac{3}{7}, \frac{18}{23}, \frac{26}{51}, \frac{11}{16}$ (d) $\frac{34}{45}, \frac{89}{98}, \frac{45}{54}, \frac{67}{87}$

Improper fractions:

(b) $\frac{19}{12}, \frac{12}{5}, \frac{35}{23}, \frac{27}{19}$

(c) $\frac{45}{43}, \frac{56}{45}, \frac{78}{36}, \frac{98}{79}$

Exercise-7.3

1. (a) $\frac{7}{8}$ is an improper fraction = False,
 $\frac{7}{8}$ is a proper fraction.

- (b) $\frac{13}{14}$ is a proper fraction = True

- (c) $\frac{4}{15}, \frac{5}{15}, \frac{6}{15}$ are unlike fractions = False

$\frac{4}{15}, \frac{5}{15}, \frac{6}{15}$ are like fractions

- (d) $\frac{1}{2}, \frac{5}{10}, \frac{11}{22}$ are equivalent fractions

= True $\frac{1}{2}, \frac{5}{10}, \frac{11}{22}$ are proper fractions.

- (e) $\frac{1}{12}, \frac{14}{12}, \frac{11}{22}$ are unit fractions = False

$\frac{1}{12}$ is proper unit fractions but $\frac{14}{12}$,

$\frac{26}{12}$ are improper fractions.

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2. (a) $\frac{9}{10}, \frac{8}{10}$ (ii) Like Fractions. $\therefore \frac{4}{6} \square \frac{8}{10}$
- (b) $2\frac{1}{9}, 1\frac{1}{3}$ (i) Mixed Fractions. (g) $\frac{9}{4} \square \frac{27}{15}$
- (c) $\frac{14}{5}, \frac{12}{11}$ (iv) Unlike Fractions. $\Rightarrow 9 \times 15 = 135$
- (d) $\frac{11}{22}, \frac{1}{2}$ (iii) Equivalent Fractions. and $27 \times 4 = 108$
- $\therefore 135 < 108$
- $\therefore \frac{9}{4} \square \frac{27}{15}$
3. (a) $\frac{33}{22} \square \frac{26}{12}$ (h) $\frac{12}{8} \square \frac{6}{5}$
- $\Rightarrow 33 \times 12 = 396$ $\Rightarrow 12 \times 5 = 60$
- and $22 \times 26 = 572$ and $8 \times 6 = 48$
- But $572 > 396$ $\therefore 60 > 48$
- So, $\frac{26}{12} \square \frac{33}{22}$ $\therefore \frac{12}{8} \square \frac{6}{5}$
- (b) $\frac{2}{9} \square \frac{18}{4}$ (i) $\frac{5}{15} \square \frac{1}{3}$
- $\Rightarrow 2 \times 4 = 8$ $\Rightarrow 5 \times 3 = 15$
- and $18 \times 9 = 162$ and $15 \times 1 = 15$
- $\therefore 162 > 8$ $\therefore 15 = 15$
- $\frac{2}{9} \square \frac{18}{4}$ $\therefore \frac{5}{15} \square \frac{1}{3}$
- (c) $\frac{3}{5} \square \frac{12}{20}$ (j) $\frac{2}{18} \square \frac{1}{9}$
- $\Rightarrow 2 \times 20 = 60$ $\Rightarrow 2 \times 9 = 18$
- and $5 \times 12 = 60$ and $18 \times 1 = 18$
- $\frac{3}{5} \square \frac{12}{20}$ $\therefore 18 = 18$
- So, $\frac{2}{18} \square \frac{1}{9}$
- (d) $\frac{27}{45} \square \frac{9}{15}$ (k) $\frac{7}{2} \square \frac{21}{6}$
- $\Rightarrow 27 \times 15 = 405$ $\Rightarrow 7 \times 6 = 42$
- and $45 \times 9 = 405$ and $2 \times 21 = 42$
- $\therefore 42 = 42$
- So, $\frac{27}{45} \square \frac{9}{15}$ $\therefore \frac{7}{2} \square \frac{21}{6}$
- (e) $\frac{40}{100} \square \frac{4}{10} = \frac{4}{10} \square \frac{4}{10}$ (l) $\frac{7}{3} \square \frac{16}{6}$
- (f) $\frac{4}{6} \square \frac{8}{10}$
- $\Rightarrow 4 \times 10 = 40$
- and $6 \times 8 = 48$
- $\therefore 48 < 40$

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$$\Rightarrow 7 \times 6 = 42$$

$$\text{and } 3 \times 16 = 48$$

$$\therefore 42 < 48$$

$$\therefore \frac{7}{3} < \frac{16}{6}$$

$$4. (a) \frac{11 \times 3}{2 \times 3} = \frac{33}{\boxed{6}} \quad (b) \frac{12 \div 2}{16 \div 2} = \frac{\boxed{6}}{8}$$

$$(c) \frac{39 \div 3}{12 \div 3} = \frac{13}{\boxed{4}}$$

$$(d) \frac{10}{3} = \frac{\boxed{30}}{9}$$

$$\therefore 10 \times 3 = 30$$

$$\text{and } 3 \times 3 = 9$$

$$(e) \frac{6}{\boxed{9}} = \frac{24}{36}$$

$$\therefore 9 \times 4 = 36$$

$$6 \times 4 = 24$$

$$(f) 2 = \frac{20}{10}$$

$$(g) \frac{\boxed{40}}{15} = \frac{8}{3}$$

$$\therefore 15 \div 3 = 5$$

$$\text{So, } 40 \div 5 = 8$$

$$(h) \frac{35}{25} = \frac{\boxed{7}}{5}$$

$$\therefore 25 \div 5 = 5$$

$$\text{So, } 35 \div 5 = 7$$

$$(i) \frac{\boxed{8}}{14} = \frac{16}{28}$$

$$\Rightarrow 16 \times 14 = 28 \times \boxed{}$$

$$\Rightarrow \boxed{} = \frac{16 \times 14}{28}$$

$$\Rightarrow \boxed{} = 8$$

$$5. (a) \frac{4}{7} = \frac{4}{7} \times \frac{2}{2} = \frac{8}{14}$$

$$\frac{4 \times 3}{7 \times 3} = \frac{12}{21}$$

So, $\frac{8}{14}$ and $\frac{12}{21}$ are two equivalent

fractions of $\frac{4}{7}$

$$(b) \frac{2}{5} = \frac{2 \times 2}{5 \times 2} = \frac{4}{10}$$

$$\text{and } \frac{2}{5} \times \frac{3}{3} = \frac{6}{15}$$

So, $\frac{4}{10}$ and $\frac{6}{15}$ are two equivalent

fractions of $\frac{2}{5}$

$$(c) \frac{3}{8} = \frac{3 \times 2}{8 \times 2} = \frac{6}{16}$$

$$\text{and } \frac{3}{8} = \frac{3 \times 3}{8 \times 3} = \frac{9}{24}$$

So, $\frac{6}{16}$ and $\frac{9}{24}$ are two equivalent

fractions of $\frac{3}{8}$

$$(d) \frac{2}{9} = \frac{2 \times 2}{9 \times 2} = \frac{4}{18}$$

$$\text{and } \frac{2 \times 3}{9 \times 3} = \frac{6}{27}$$

So, $\frac{4}{18}$ and $\frac{6}{27}$ are two equivalent

fractions of $\frac{2}{9}$

$$(e) \frac{5}{6} = \frac{5 \times 2}{6 \times 2} = \frac{10}{12}$$

$$\frac{5}{6} = \frac{5 \times 3}{6 \times 3} = \frac{15}{18}$$

So, $\frac{10}{12}$ and $\frac{15}{18}$ are two equivalent

fractions of $\frac{5}{6}$

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6. (a) $\frac{4}{6} = \frac{8}{12}$ (b) $\frac{1}{9} = \frac{2}{18}$
 (c) $\frac{5}{6} = \frac{10}{12}$ (d) $\frac{5}{12} = \frac{25}{60}$
 (e) $\frac{2}{5} = \frac{8}{20}$ (f) $7 = \frac{42}{6}$
 (g) $6 = \frac{66}{11}$ (h) $4 = \frac{28}{7}$

BRUSH UP YOUR CONCEPTS

Comprehension math

1. Vini bought a bag of 10 do-nuts

He ate half the number of do-nuts kept in the bag.

$$\text{Numbers of do-nuts did he eat} = \frac{10}{2} = 5$$

2. No. of cookies bought by Sara = 30

She ate half the number of cookies kept in the bag

$$\begin{aligned} \text{Numbers of cookies did sara eat} &= \frac{30}{2} \\ &= 15 \end{aligned}$$

3. No. of chocolates bought by Anand = 60

He ate $\frac{2}{3}$ of the chocolates

$$\begin{aligned} \text{No. chocolates be eaten} &= 60 \times \frac{2}{3} \\ &= 40 \text{ chocolates} \end{aligned}$$

No. of chocolates are left = $60 - 40 = 20$

4. No. of fruits bought by Sonia = 50

$$\text{No. of fruits eaten by her} = 50 \times \frac{1}{5} = 10$$

No. of fruits are left = $50 - 10 = 40$

Equivalent Fractions

$$\frac{1}{2} = \frac{9}{18} = \frac{9}{9 \times 2}$$

$$\frac{1}{2} \times \frac{9}{9} = \frac{9}{18}$$

$$\frac{3}{5} = \frac{6}{10} = \frac{3 \times 2}{5 \times 2}$$

$$\frac{3 \times 2}{5 \times 2} = \frac{6}{10}$$

$$\frac{9}{4} = \frac{36}{16} = \frac{9 \times 4}{4 \times 4}$$

$$\frac{9 \times 4}{4 \times 4} = \frac{36}{16}$$

$$\frac{5}{7} = \frac{15}{21} = \frac{5 \times 3}{7 \times 3}$$

$$\frac{5 \times 3}{7 \times 3} = \frac{15}{21}$$

Missing Numbers

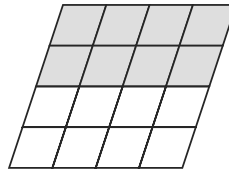
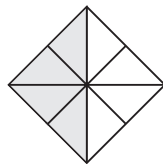
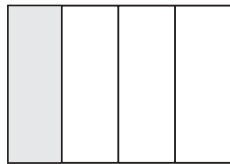
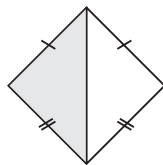
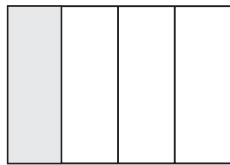
$$1. \frac{1}{4} = \frac{3}{12} = \frac{5}{20} = \frac{7}{28} = \frac{9}{36} = \frac{11}{44} = \frac{13}{52} = \frac{15}{60}$$

$$2. 9 = \frac{18}{2} = \frac{27}{3} = \frac{36}{4} = \frac{45}{5} = \frac{54}{6} = \frac{63}{7} = \frac{72}{8}$$

$$3. \frac{7}{6} = \frac{14}{12} = \frac{21}{18} = \frac{28}{24} = \frac{35}{30} = \frac{42}{36} = \frac{49}{42} = \frac{56}{48}$$

$$4. \frac{3}{8} = \frac{6}{16} = \frac{9}{24} = \frac{12}{32} = \frac{15}{40} = \frac{18}{48} = \frac{21}{56} = \frac{24}{64}$$

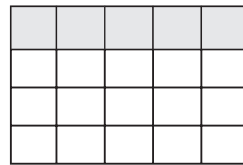
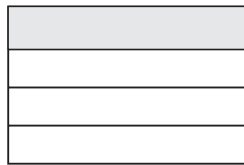
Missing Fractions



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

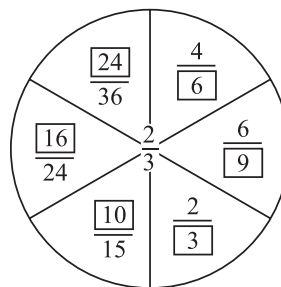
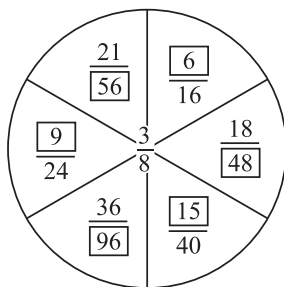
$$\frac{1}{2} = \frac{4}{8}$$

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



$$\frac{1}{4} = \frac{5}{20}$$

Equivalent Fraction Wheel



Decode Fraction Challenge

O $\frac{2}{4} = \frac{1}{\boxed{2}}$	S $\frac{4}{14} = \frac{2}{\boxed{7}}$	T $\frac{22}{24} = \frac{\boxed{11}}{12}$	N $\frac{2}{24} = \frac{1}{\boxed{12}}$
A $\frac{10}{15} = \frac{2}{\boxed{3}}$	B $\frac{2}{32} = \frac{1}{\boxed{16}}$	R $\frac{2}{8} = \frac{1}{\boxed{4}}$	
E $\frac{2}{16} = \frac{1}{\boxed{8}}$	I $\frac{2}{12} = \frac{1}{\boxed{6}}$	M $\frac{2}{26} = \frac{1}{\boxed{13}}$	
H $\frac{4}{10} = \frac{2}{\boxed{5}}$	D $\frac{10}{100} = \frac{1}{\boxed{10}}$	L $\frac{2}{18} = \frac{1}{\boxed{9}}$	
Y $\frac{2}{28} = \frac{1}{\boxed{14}}$	P $\frac{4}{16} = \frac{\boxed{1}}{4}$		

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$$\begin{array}{cccccccccccc} \text{H} & \text{E} & \text{H} & \text{A} & \text{D} & \text{T} & \text{O} & \text{O} & \text{M} & \text{A} & \text{A} \\ \frac{2}{5} & \frac{1}{8} & \frac{2}{5} & \frac{2}{3} & \frac{1}{10} & \frac{11}{12} & \frac{1}{2} & \frac{1}{2} & \frac{1}{13} & \frac{2}{3} & \frac{2}{12} \\ \\ \text{y} & \text{P} & \text{R} & \text{O} & \text{B} & \text{L} & \text{E} & \text{M} & \text{S} \\ \frac{1}{14} & \frac{1}{4} & \frac{1}{4} & \frac{1}{2} & \frac{1}{16} & \frac{1}{9} & \frac{1}{8} & \frac{1}{13} & \frac{2}{7} \end{array}$$

8. Measurement

Exercise-8.1

1. $\therefore$ $1000 \text{ ml} = 1 \text{ L}$
 $1300 \text{ ml} = 1 \text{ L } 300 \text{ ml}$

$$\begin{array}{r} 1\text{L} \\ 1000 \overline{)1300 \text{ ml}} \\ \underline{1000} \\ 300 \text{ ml} \end{array}$$
2. $\therefore$ $100 \text{ cm} = 1 \text{ m}$ or $1 \text{ m} = 100 \text{ cm}$
 $\therefore 7 \text{ m} = 7 \times 100 \text{ cm} = 700 \text{ cm}$
 $\therefore 7 \text{ m } 5 \text{ cm} = (700 + 5) \text{ cm} = 705 \text{ cm}$
3. $1 \text{ g} = 1000 \text{ mg}$
 $5 \text{ g } 50 \text{ mg} = (5 \times 1000 + 50) \text{ mg}$
 $= (5000 + 50) \text{ g}$
 $\Rightarrow 5 \text{ g } 50 \text{ mg} = 5050 \text{ g}$
4. $\therefore 1 \text{ kg} = 1000 \text{ g}$
 $\therefore 15 \text{ kg } 350 \text{ g} = (15 \times 1000 + 350) \text{ g}$
 $= (15000 + 350) \text{ g}$
 $= 15350 \text{ g}$
5. $\therefore 1000 \text{ mg} = 1 \text{ kg}$
 $\therefore 9500 \text{ mg} = 9 \text{ g } 500 \text{ mg}$

$$\begin{array}{r} 9\text{g} \\ 1000 \overline{)9500 \text{ mg}} \\ \underline{1000\text{mg}} \\ 500 \text{ mg} \end{array}$$
6. $6250 \text{ g} = 6 \text{ kg } 250 \text{ g}$

$$\begin{array}{r} 6\text{kg} \\ 1000 \overline{)6250 \text{ mg}} \\ \underline{6000\text{mg}} \\ 250 \text{ g} \end{array}$$
7. $505 \text{ mm} = 5 \text{ cm } 05 \text{ mm}$

$$\begin{array}{r} 50\text{cm} \\ 10 \overline{)505 \text{ mm}} \\ \underline{50} \\ 05 \text{ mm} \end{array}$$

8. $326 \text{ m} = (326 \times 100) \text{ cm}$
 $= 32600 \text{ cm}$
 $\therefore 1 \text{ km} = 1000 \text{ cm}$
9. $5 \text{ km } 30 \text{ m} = (5 \times 1000 + 30) \text{ m}$
 $= (5000 + 30) \text{ m}$
 $= 5030 \text{ m}$
 $\therefore 100 \text{ cm} = 1 \text{ m}$
10. $650 \text{ cm} = 6 \text{ m } 50 \text{ cm}$

$$\begin{array}{r} 6 \text{ m} \\ 100 \overline{)650 \text{ mm}} \\ \underline{600} \\ 50 \text{ cm} \end{array}$$

11. $\therefore 1 \text{ kl} = 1000 \text{ l}$
 $\therefore 7 \text{ kl } 30 \text{ L} = (7 \times 1000 + 30) \text{ L}$
 $= (7000 + 30) \text{ L}$
 $= 7030 \text{ L}$
12. $5 \text{ L } 400 \text{ ml} = (5 \times 1000 + 400) \text{ ml}$
 $= (5000 + 400) \text{ ml}$
 $= 5400 \text{ ml}$

Exercise-8.2

2. (a) $\begin{array}{r} 7 \text{ m } 25 \text{ cm} \\ + 15 \text{ m } 50 \text{ cm} \\ \hline 22 \text{ m } 75 \text{ cm} \end{array}$
- (b) $\begin{array}{r} 4 \text{ kg } 250 \text{ g} \\ + 3 \text{ kg } 450 \text{ g} \\ \hline 7 \text{ kg } 700 \text{ g} \end{array}$
- (c) $\begin{array}{r} 84 \text{ cm } 68 \text{ mm} \\ + 35 \text{ cm } 49 \text{ cm} \\ \hline 120 \text{ cm } 17 \text{ cm} \end{array}$
- (d) $\begin{array}{r} 400 \text{ L } 000 \text{ ml} \\ 50 \text{ L } 000 \text{ ml} \\ + 0 \text{ L } 500 \text{ ml} \\ \hline 450 \text{ L } 500 \text{ ml} \end{array}$
- (e) $\begin{array}{r} 000 \text{ L } 1400 \text{ ml} \\ 000 \text{ L } 5680 \text{ ml} \\ + 280 \text{ L } 000 \text{ ml} \\ \hline 287 \text{ L } 080 \text{ ml} \end{array}$
- (f) $\begin{array}{r} 5 \text{ km } 700 \text{ m} \\ + 12 \text{ km } 450 \text{ m} \\ \hline 18 \text{ km } 150 \text{ m} \end{array}$

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$$\begin{array}{r}
 \text{(g)} \quad 3 \text{ kl } 000 \text{ l } 000 \text{ ml} \\
 + 000 \text{ kl } 400 \text{ l } 000 \text{ ml} \\
 + 000 \text{ kl } 000 \text{ l } 003 \text{ ml} \\
 \hline
 3 \text{ kl } 400 \text{ l } 003 \text{ ml} \\
 = (3 \times 1000 + 400) \text{ l} + 3 \text{ ml} \\
 = (3000 + 400) \text{ l} + 3 \text{ ml} \\
 = 3400 \text{ l } 3 \text{ ml}
 \end{array}$$

$$\begin{array}{r}
 \text{(h)} \quad 75 \text{ g } 430 \text{ mg} \\
 + 750 \text{ g} \\
 \hline
 825 \text{ g } 430 \text{ mg}
 \end{array}$$

$$\begin{array}{r}
 \text{(i)} \quad 97 \text{ kg } 45 \text{ g} \\
 77 \text{ kg } 450 \text{ g} \\
 + 33 \text{ kg } 250 \text{ g} \\
 \hline
 207 \text{ kg } 745 \text{ g}
 \end{array}$$

$$\begin{array}{r}
 \text{(j)} \quad 75 \text{ km } 400 \text{ m} \\
 37 \text{ km } 300 \text{ m} \\
 + 52 \text{ km } 750 \text{ m} \\
 \hline
 165 \text{ km } 450 \text{ m}
 \end{array}$$

$$\begin{array}{r}
 \text{2. (a)} \quad 75 \text{ km } 500 \text{ m} \\
 - 40 \text{ km } 250 \text{ m} \\
 \hline
 35 \text{ km } 250 \text{ m}
 \end{array}$$

$$\begin{array}{r}
 \text{(b)} \quad 985 \text{ kg } 475 \text{ g} \\
 - 275 \text{ kg } 325 \text{ g} \\
 \hline
 710 \text{ kg } 150 \text{ g}
 \end{array}$$

$$\begin{array}{r}
 \text{(c)} \quad 15 \text{ L } 500 \text{ ml} \\
 - 6 \text{ L } 300 \text{ ml} \\
 \hline
 9 \text{ L } 200 \text{ ml}
 \end{array}$$

$$\begin{array}{r}
 \text{(d)} \quad 55 \text{ m } 75 \text{ cm} \\
 - 23 \text{ m } 40 \text{ cm} \\
 \hline
 32 \text{ m } 35 \text{ cm}
 \end{array}$$

$$\begin{array}{r}
 \text{(e)} \quad 15 \text{ km } 450 \text{ m} \\
 - 13 \text{ km } 200 \text{ m} \\
 \hline
 2 \text{ km } 250 \text{ m}
 \end{array}$$

$$\begin{array}{r}
 \text{(f)} \quad 40 \text{ kg } 350 \text{ g} \\
 - 25 \text{ kg } 200 \text{ g} \\
 \hline
 15 \text{ kg } 150 \text{ g}
 \end{array}$$

$$\begin{array}{r}
 \text{(g)} \quad 36 \text{ L } 400 \text{ ml} \\
 - 12 \text{ L } 550 \text{ ml} \\
 \hline
 23 \text{ L } 850 \text{ ml}
 \end{array}$$

$$\begin{array}{r}
 \text{(h)} \quad 750 \text{ m } 840 \text{ mm} \\
 - 370 \text{ m } 480 \text{ mm} \\
 \hline
 380 \text{ m } 360 \text{ mm}
 \end{array}$$

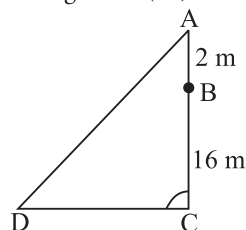
$$\begin{array}{r}
 \text{(i)} \quad 35 \text{ kg } 850 \text{ g} \\
 - 18 \text{ kg } 500 \text{ g} \\
 \hline
 17 \text{ kg } 350 \text{ g}
 \end{array}$$

$$\begin{array}{r}
 \text{(j)} \quad 5 \text{ km } 400 \text{ m} \\
 - 3 \text{ km } 350 \text{ m} \\
 \hline
 2 \text{ km } 050 \text{ m}
 \end{array}$$

3. Length of building of city hall 16 m

Length of flag pole on the top of the building = 2 m

What is distance between the top of the flag pole and ground (Ac) = 18 m



4. Weight of fruits (mangoes and apples) bought by father = 10 kg : 750 g

Weight of mangoes = 6 kg 860 g

Weight of apples = 3 kg 890 g

5. Weight of mustard oil bought by Sara

= 500 ml

Weight of coconut oil bought by Sara

= 250 ml

Weight of refined oil bought by Sara

= 2 l 000 ml

Weight of three oils together = 2 l 750 ml

6. The length of dirt road is = 169 m

The length of dirt road finished by workers

= 105 m

The length of the section of dirt road that is not paved = 64 m

7. Weight of cake bought of Nancy

= 10 kg 875 g

Weight of cake distributed = 7 kg 395 g among the children

Weight of cake is left = 3 kg 480 g

92 Answer Key 3 to 5

8. Length of ribbon has Reena = 63 m 00 cm
Length of ribbon cut by Reena

$$= - 56 \text{ m } 21 \text{ cm}$$

$$\text{Length of ribbon will be left} = \underline{6 \text{ m } 79 \text{ cm}}$$

9. The average height of baby giraffe

$$= 180 \text{ cm}$$

The average height of a grown giraffe can be 3 m taller than baby giraffe

$$= + 3 \text{ m } 000 \text{ cm}$$

Average height (measure in m) of a grown giraffe

$$= 4 \text{ m } 80 \text{ cm}$$

10. Weight of sweets and snacks for the occasion purchased by mother

$$= 19 \text{ kg } 357 \text{ g}$$

Weight of sweets were consumed

$$= - 16 \text{ kg } 458 \text{ g}$$

Weight of sweets and snacks were left

$$= \underline{2 \text{ kg } 899 \text{ g}}$$

Exercise-8.3

1. (a) $12 \text{ km } 225 \text{ m} \times 6$

$$\underline{73 \text{ km } 350 \text{ m}}$$

- (b) $75 \text{ m } 15 \text{ cm} \times 5$

$$\underline{375 \text{ m } 75 \text{ cm}}$$

- (c) $350 \text{ m } 45 \text{ cm} \times 7$

$$\underline{2453 \text{ m } 15 \text{ cm}}$$

- (d) $25 \text{ km } 300 \text{ m} \times 6$

$$\underline{151 \text{ km } 800 \text{ m}}$$

- (e) $37 \text{ m } 350 \text{ mm} \times 8$

$$\underline{298 \text{ m } 800 \text{ mm}}$$

- (f) $31 \text{ km } 210 \text{ m} \times 4$

$$\underline{124 \text{ km } 840 \text{ m}}$$

- (g) $12 \text{ g } 350 \text{ mg} \times 7$

$$\underline{86 \text{ g } 450 \text{ mg}}$$

- (h) $9 \text{ g } 500 \text{ mg} \times 12$

$$\underline{114 \text{ g } 000 \text{ mg}}$$

- (i) $6 \text{ kg } 300 \text{ g} \times 3$

$$\underline{18 \text{ kg } 900 \text{ g}}$$

2. (a) $84 \text{ m } 40 \text{ cm} \div 4 = 21 \text{ m } 10 \text{ cm}$

$$\begin{array}{r} 21 \text{ m } 10 \text{ cm} \\ 4 \overline{) 84 \text{ m } 40 \text{ cm}} \\ \underline{- 8 \text{ m}} \\ 4 \text{ m} \\ \underline{- 4 \text{ m}} \\ 4 \text{ cm} \\ \underline{- 4 \text{ cm}} \\ 0 \end{array}$$

- (b) $360 \text{ km } 540 \text{ m} \div 9 = 40 \text{ km } 60 \text{ m}$

$$\begin{array}{r} 40 \text{ km } 060 \text{ m} \\ 9 \overline{) 360 \text{ km } 540 \text{ m}} \\ \underline{- 36 \text{ km}} \\ 0 \\ 54 \text{ m} \\ \underline{- 54 \text{ m}} \\ 0 \end{array}$$

- (c) $750 \text{ m } 45 \text{ cm} \div 5 = 150 \text{ m } 09 \text{ cm}$

$$\begin{array}{r} 150 \text{ m } 09 \text{ cm} \\ 5 \overline{) 750 \text{ m } 450 \text{ cm}} \\ \underline{- 5 \text{ m}} \\ 25 \text{ m} \\ \underline{- 25 \text{ m}} \\ 0 \\ 45 \text{ cm} \\ \underline{- 45 \text{ cm}} \\ 0 \end{array}$$

- (d) $49 \text{ km } 630 \text{ m} \div 7 = 7 \text{ km } 90 \text{ m}$

$$\begin{array}{r} 7 \text{ km } 090 \text{ m} \\ 7 \overline{) 49 \text{ km } 630 \text{ m}} \\ \underline{- 49 \text{ km}} \\ 63 \text{ m} \\ \underline{- 63 \text{ m}} \\ 0 \end{array}$$

- (e) $770 \text{ km } 550 \text{ m} \div 11 = 70 \text{ km } 50 \text{ m}$

$$\begin{array}{r} 70 \text{ km } 050 \text{ m} \\ 11 \overline{) 770 \text{ km } 550 \text{ m}} \\ \underline{- 77 \text{ km}} \\ 0 \text{ km} \\ \underline{- 0 \text{ km}} \\ 55 \text{ m} \\ \underline{- 55 \text{ m}} \\ 0 \end{array}$$

(f) $49\text{ m } 770\text{ mm} \div 7 = 7\text{ m } 100\text{ mm}$

$$\begin{array}{r} 7\text{ m } 110\text{ mm} \\ 7 \overline{) 49\text{ m } 770\text{ mm}} \\ \underline{-49\text{ m}} \\ 7\text{ mm} \\ \underline{-7\text{ mm}} \\ 7\text{ mm} \\ \underline{-7\text{ mm}} \\ 0 \end{array}$$

(g) $172\text{ m } 48\text{ cm} \div 4 = 43\text{ m } 12\text{ cm}$

$$\begin{array}{r} 43\text{ m } 12\text{ mm} \\ 4 \overline{) 172\text{ m } 48\text{ cm}} \\ \underline{-16\text{ m}} \\ 12\text{ m} \\ \underline{-12\text{ m}} \\ 4\text{ cm} \\ \underline{-4\text{ cm}} \\ 8\text{ cm} \\ \underline{-8\text{ cm}} \\ 0 \end{array}$$

(h) $75\text{ kg } 190\text{ g} \div 5 = 15\text{ kg } 038\text{ g}$

$$\begin{array}{r} 15\text{ kg } 038\text{ g} \\ 5 \overline{) 75\text{ kg } 190\text{ g}} \\ \underline{-5\text{ kg}} \\ 25\text{ kg} \\ \underline{-25\text{ kg}} \\ 19\text{ g} \\ \underline{-15\text{ g}} \\ 40\text{ g} \\ \underline{-40\text{ g}} \\ 0 \end{array}$$

(i) $66\text{ kg } 600\text{ g} \div 15 = 4\text{ kg } 440\text{ g}$

$$\begin{array}{r} 4\text{ kg } 440\text{ g} \\ 15 \overline{) 66\text{ kg } 600\text{ g}} \\ \underline{-60\text{ kg}} \\ 66\text{ g} \\ \underline{-60\text{ g}} \\ 60\text{ g} \\ \underline{-60\text{ g}} \\ 0 \end{array}$$

Exercise-8.4

1. The capacity of one sack of rice
= 37 kg 600g

The capacity of 36 sack of rice

$$\begin{array}{r} = 37\text{ kg } 600\text{ g} \times 36 \\ 225\text{ kg } 600\text{ g} \\ \underline{1128\text{ kg } 00} \\ 1353\text{ kg } 600\text{ g} \end{array}$$

2. Mita need length of one shirt cloth
= 2 m 70 cm

She need length of 9 shirt cloth

$$= 2\text{ m } 70\text{ cm} \times 9$$

$$\underline{24\text{ m } 30\text{ cm}}$$

3. Quantity of milk is given per day to each student = 200 ml

Quantity of milk is given per day to 425 students = $\underline{200\text{ ml} \times 425}$

$$1000\text{ ml}$$

$$400 \times$$

$$+ 800 \times$$

$$\underline{85000\text{ ml}}$$

$$\text{ie } 85\text{ L}$$

4. Quantity of 4 bangles gold had Seema
= 72 g 200 mg

Quantity of 1 bangle had Seema

$$= 72\text{ g } 200\text{ mg} \div 4$$

$$= 18\text{ g } 50\text{ mg}$$

$$\begin{array}{r} 18\text{ g } 050\text{ mg} \\ 4 \overline{) 72\text{ g } 200\text{ mg}} \\ \underline{-4\text{ g}} \\ 32\text{ g} \\ \underline{-32\text{ g}} \\ 0200\text{ mg} \\ \underline{-200\text{ mg}} \\ 0 \end{array}$$

5. The total length of 12 bed sheets
= 25 m 44 cm

The length of 1 bed sheet

$$= 25\text{ m } 44\text{ cm} \div 12$$

$$= 2\text{ m } 12\text{ cm}$$

$$\begin{array}{r} 1\text{ m } 12\text{ cm} \\ 12 \overline{) 25\text{ m } 44\text{ cm}} \\ \underline{-24\text{ m}} \\ 144\text{ cm} \\ \underline{-12} \\ 24\text{ cm} \\ \underline{-24\text{ cm}} \end{array}$$

6. In 7 days quantity of milk purchased Mah mood = 20 l 500 ml

In 1 day quantity of milk required

$$= 20\text{ L } 500\text{ ml} \div 7$$

$$= 2\text{ l } 928\text{ ml}$$

94 Answer Key 3 to 5

$$\begin{array}{r}
 2 \text{ L } 928 \text{ ml} \\
 7 \overline{) 20 \text{ L } 500 \text{ ml}} \\
 \underline{-14 \text{ L}} \\
 6500 \text{ ml} \\
 \underline{-63 \text{ ml}} \\
 20 \text{ ml} \\
 \underline{-14 \text{ ml}} \\
 60 \text{ ml} \\
 \underline{-56 \text{ ml}} \\
 4 \text{ ml}
 \end{array}$$

7. The length of 4 pieces of cloth = 8 m 60 cm
 The length of 1 piece of Cloth = $8 \text{ m } 60 \text{ cm} \div 4$
 = 2 m 15 cm

$$\begin{array}{r}
 2 \text{ m } 15 \text{ cm} \\
 4 \overline{) 8 \text{ m } 60 \text{ cm}} \\
 \underline{-8 \text{ m}} \\
 6 \text{ cm} \\
 \underline{-4 \text{ cm}} \\
 20 \text{ cm} \\
 \underline{-20 \text{ cm}} \\
 0
 \end{array}$$

8. The length of 1 rope = 4 m 25 cm
 The length of 49 ropes = 4 m 25 cm
 $\times 49$
 38 m 25 cm
 170 m 0 cm
208 m 25 cm

9. The length of ground covering by John along the boundary in 7 days = 46 m 98 cm
 The length of the ground covering in 1 day = $46 \text{ m } 98 \text{ cm} \div 7$
 = 6 m 71 cm

$$\begin{array}{r}
 6 \text{ m } 71 \text{ cm} \\
 7 \overline{) 46 \text{ m } 98 \text{ cm}} \\
 \underline{-42 \text{ m}} \\
 498 \text{ cm} \\
 \underline{-49} \\
 8 \text{ cm} \\
 \underline{-7 \text{ cm}}
 \end{array}$$

10. Weight of 1 bath soap = 90 g
 Weight of 96 bath shops = 90×96
 $\begin{array}{r} 540 \\ 810 \times \\ \hline 8640 \end{array}$
 ie 8 kg 640 g

BRUSH UP YOUR CONCEPTS

Right or wrong
 Do yourself

9. Time

Exercise-9.1

1. (a)

	hr.s	Mins
	19	19
+	1	12
	20	31

(b)

	hr.s	Mins
	12	01
+	1	16
	13	17

(c)

	hr.s	Mins
	20	17
+	1	23
	21	40

(d)

	hr.s	Mins
	17	10
+	6	31
	23	41

(e)

	hr.s	Mins
	18	49
+	1	01
	19	50

(f)

	hr.s	Mins
	10	39
+	11	10
	21	49

(g)

	hr.s	Mins
	13	19
+	1	42
	14	61
=	+ 1	- 60
	15	01

← is more than 60 mins

(h)

	hr.s	Mins
	1	39
+	9	05
	10	44

(i)

	hr.s	Mins
	16	12
+	2	11
	18	23

(j)

	hr.s	Mins
	12	01
+	3	29
	15	30

(k)

	hr.s	Mins
	7	12
+	4	09
	11	21

(l)

	hr.s	Mins
	16	40
+	5	15
	21	55

(m)

	hr.s	Mins
	1	43
+	5	51
	6	94
	+ 1	- 60
	7	34

←is more than 60 mins

(n)

	hr.s	Mins
	1	21
+	6	39
	7	60
	+ 1	- 60
	8	00

←is more than 60 mins

(o)

	hr.s	Mins
	14	11
+	3	58
	17	69
	+ 1	- 60
=	18	09

←is more than 60 mins

(p)

	hr.s	Mins
	13	19
+	1	42
	14	61
	+ 1	- 60
=	15	01

←is more than 60 mins

(q)

	hr.s	Mins
	10	39
+	11	10
	21	49

(r)

	hr.s	Mins
	15	12
+	5	42
	20	54

2. (a)

$$\begin{array}{r}
 8 \text{ hrs } 40 \text{ mins} \\
 + \quad 17 \text{ hrs } 32 \text{ mins} \\
 \hline
 + \quad 25 \text{ hrs } 72 \text{ mins} \quad \leftarrow \text{is more than} \\
 \quad 1 \text{ hr } - 60 \text{ mins} \quad 60 \text{ mins} \\
 \hline
 = 26 \text{ hrs } 12 \text{ mins}
 \end{array}$$

(b)

$$\begin{array}{r}
 23 \text{ hrs } 52 \text{ mins} \\
 + \quad 5 \text{ hrs } 06 \text{ mins} \\
 \hline
 28 \text{ hrs } 58 \text{ mins}
 \end{array}$$

(c)

$$\begin{array}{r}
 23 \text{ hrs } 29 \text{ mins} \\
 + \quad 9 \text{ hrs } 54 \text{ mins} \\
 \hline
 32 \text{ hrs } 83 \text{ mins} \quad \leftarrow \text{is more than} \\
 + \quad 1 \text{ hr } - 60 \text{ mins} \quad 60 \text{ mins} \\
 \hline
 33 \text{ hrs } 23 \text{ mins}
 \end{array}$$

96 Answer Key 3 to 5

(d)
$$\begin{array}{r} 22 \text{ hrs } 51 \text{ mins} \\ + 14 \text{ hrs } 33 \text{ mins} \\ \hline 36 \text{ hrs } 84 \text{ mins} \leftarrow \text{is more than} \\ 1 \text{ hr } -60 \text{ mins} \quad 60 \text{ mins} \\ \hline = 37 \text{ hrs } 24 \text{ mins} \end{array}$$

(e)
$$\begin{array}{r} 11 \text{ hrs } 11 \text{ mins} \\ + 21 \text{ hrs } 52 \text{ mins} \\ \hline 32 \text{ hrs } 63 \text{ mins} \leftarrow \text{is more than} \\ + 1 \text{ hr } -60 \text{ mins} \quad 60 \text{ mins} \\ \hline = 33 \text{ hrs } 03 \text{ mins} \end{array}$$

(f)
$$\begin{array}{r} 19 \text{ hrs } 30 \text{ mins} \\ + 6 \text{ hrs } 33 \text{ mins} \\ \hline 25 \text{ hrs } 63 \text{ mins} \leftarrow \text{is more than} \\ + 1 \text{ hr } -60 \text{ mins} \quad 60 \text{ mins} \\ \hline = 26 \text{ hrs } 03 \text{ mins} \end{array}$$

(g)
$$\begin{array}{r} 19 \text{ hrs } 52 \text{ mins} \\ + 21 \text{ hrs } 25 \text{ mins} \\ \hline 40 \text{ hrs } 77 \text{ mins} \leftarrow \text{is more than} \\ + 1 \text{ hr } -60 \text{ mins} \quad 60 \text{ mins} \\ \hline = 41 \text{ hrs } 17 \text{ mins} \end{array}$$

(h)
$$\begin{array}{r} 10 \text{ hrs } 35 \text{ mins} \\ + 19 \text{ hrs } 05 \text{ mins} \\ \hline 29 \text{ hrs } 40 \text{ mins} \end{array}$$

3. (a)

	hr.s	Mins
	18	43
–	03	03
	15	40

(b)

	hr.s	Mins
	43	44
–	20	46
	22	58

(c)

	hr.s	Mins
	19	47
–	16	41
	3	6

(d)

	hr.s	Mins
	23	14
–	03	54
	19	20

$\leftarrow -60 + 14 = 74$

(e)

	hr.s	Mins
	21	30
–	07	13
	14	17

(f)

	hr.s	Mins
	17	46
–	08	43
	9	03

(g)

	hr.s	Mins
	28	54
–	20	00
	8	54

(h)

	hr.s	Mins
	33	28
–	17	50
	15	38

$\leftarrow -60 + 28 = 88 \text{ mins}$

(i)

	hr.s	Mins
	28	41
–	14	29
	14	12

(j)

	hr.s	Mins
	39	07
–	24	29
	14	38

$\leftarrow -60 + 7 = 67$

(k)

	hr.s	Mins
	45	04
–	25	59
	19	05

$\leftarrow -60 + 4 = 64$

(l)

	hr.s	Mins
	41	08
–	24	02
	17	06

4. (a)
$$\begin{array}{r} 18 \text{ hrs } 90 \text{ mins} \\ 19 \text{ hrs } 30 \text{ mins} \\ - \quad 6 \text{ hrs } 59 \text{ mins} \\ \hline 12 \text{ hrs } 31 \text{ mins} \end{array}$$
- (b)
$$\begin{array}{r} 13 \text{ hrs } 16 \text{ mins} \\ - \quad 3 \text{ hrs } 11 \text{ mins} \\ \hline 10 \text{ hrs } 05 \text{ mins} \end{array}$$
- (c)
$$\begin{array}{r} 36 \text{ hrs } 46 \text{ mins} \\ - \quad 17 \text{ hrs } 16 \text{ mins} \\ \hline 19 \text{ hrs } 30 \text{ mins} \end{array}$$
- (d)
$$\begin{array}{r} 15 \text{ hrs } 64 \text{ mins} \\ 16 \text{ hrs } 04 \text{ mins} \\ - \quad 13 \text{ hrs } 18 \text{ mins} \\ \hline 2 \text{ hrs } 46 \text{ mins} \end{array}$$
- (e)
$$\begin{array}{r} 41 \text{ hrs } 39 \text{ mins} \\ - \quad 18 \text{ hrs } 04 \text{ mins} \\ \hline 23 \text{ hrs } 35 \text{ mins} \end{array}$$
- (f)
$$\begin{array}{r} 42 \text{ hrs } 104 \text{ mins} \\ 43 \text{ hrs } 44 \text{ mins} \\ - \quad 19 \text{ hrs } 53 \text{ mins} \\ \hline 23 \text{ hrs } 51 \text{ mins} \end{array}$$
- (g)
$$\begin{array}{r} 25 \text{ hrs } 29 \text{ mins} \\ - \quad 23 \text{ hrs } 29 \text{ mins} \\ \hline 2 \text{ hrs } 00 \text{ mins} \end{array}$$
- (h)
$$\begin{array}{r} 40 \text{ hrs } 46 \text{ mins} \\ - \quad 17 \text{ hrs } 30 \text{ mins} \\ \hline 23 \text{ hrs } 16 \text{ mins} \end{array}$$

Exercise-9.2

1. Time for distance travelled by car = 1 hr 35 mins
 Time for distance travelled by train = 2 hrs 40 mins
 Time for distance travelled by auto rickshaw = + 45 mins
 Total time taken by Rosie to reach her home town 3 hrs 120 mins
3 + 2 = 5 Hours 0 mins

Answer Key 3 to 5 97

2. Jessica puts cookies in oven at = 7 : 00 am
 They need to cook for = 1 hr 18 mins
 What time should Jessica take the cookies out of the oven = 7 : 00 + 1 : 18 = 8 : 18 am
3. Sarah rent a movie that is = 1 hr 34 mins
 she starts watching the movie at = 6 : 00 P. m
 What time will the movie end = 1 : 34 + 6: 00 = 7 : 34 P. m
4. Catherine's watch says it is = 4 : 00 p. m.
 She will go for dinner in = 3 hrs 20 mins
 What time will the movie end = 4 : 00 + 3 : 20 = 7 : 20 P. m
5. Mike goes by bike ride every day for = 1 hr 15 mins
 on Monday, he begins his bike ride at = 3 : 45 p. m.
 What time will he finish riding = 1 : 15 + 3 : 45 = 5 : 00 p. m.
6. Jennie begins her morning jog at = 5:10 am
 The time she jogs for = : 45 minutes
 What time Jennie finishes her = 5 : 10 + 45 = 5 : 55 P. m.
 Jogging

BRUSH UP YOUR CONCEPTS

How many

1. Seconds are there in 1 minute 60
2. Minutes are there in 1 hours 60
3. Hours in 1 day 24
4. Days in 1 week 7
5. Days in 1 year 365
6. Weeks in 1 year 52

Fill UP

1. 2 minutes = 120 seconds
2. 5 hours = 300 seconds
3. 49 days = 7 Weeks
4. 3 days = 72 hours
5. 48 hours = 2 days
6. 5 weeks = 35 days

98 Answer Key 3 to 5

Minutes and Seconds

- How many minutes are there in 21.5 hours = 1290 minutes
And 35 hours = 2100 minutes

- How many seconds are there in 13.5 minutes = 810 seconds
- And 23 minutes = 1380 minutes

Time Comprehension Math

Movie	Morning session	Afternoon Session	Evening Session
Stuart Litter (84 mins)	10 : 00 a.m. 84 mins = 1 hr 24 mins 10 : 00 am + 84 mins = 11 hrs 24 mins	01 : 35 P. m. = 1 : 35 + 0 : 84 = 2 : 59 P. m.	08 : 15 P. m. 08 : 15 + : 84 = 08 : 99 = 9 : 39 P. m.
Tom and Jerry (101 mins)	10 : 15 a. m. 10 : 15 + 0 : 101 = 11 : 56 a.m.	02 : 00 P. m. = 2 : 00 + 0 : 101 = 2 + 1 : 41 = 3 : 41 P.m.	09 : 20 P. m. = 9 : 20 + 0 : 101 = 11 : 01 P. m.
Halo (92 mins)	0 : 9 : 45 a.m. = 9 : 45 + 0 : 92 = 11 : 17 a. m.	12 : 30 p. m. = 12 : 30 + 0 : 92 = 14 : 02 P. m.	07 : 20 P. m. = 7 : 20 + 0 : 92 = 8 : 52 P.m.
The blue umbrella (92 mins)	10 : 30 a. m. = 10 : 30 + 0 : 92 = 12 : 02 P.m	01 : 45 P. m. = 1 : 45 + 0 : 92 = 3 : 17 P. m	06 : 40 P. m. = 06 : 40 + 0 : 92 = 08 : 12 P. m.

- At the time in the morning session of Stuart Little finish = 10 : 00 + : 84 = 11 : 24 a.m.
- Halo is shorter than Tom and Jerry = 101 - 92 = 0 : 9 mins
- The blue umbrella movie will finish at 3 : 17 P. m.
- At 8 : 12 P. m the evening session of the blue umbrella-end.

Race Challenge

Name	Time in seconds	Time in minutes and seconds	Rank
Monoj	75 Seconds	1 minute and 15 seconds`	2nd
Mukesh	140 seconds	2 minute 20 seconds	6th
Puneet	100 seconds	1 minutes 40 seconds	4th
Dev	90 seconds	1 minutes 30 seconds	IIIrd
Anu	120 seconds	2 minutes	5th
Rohit	70 seconds	1 minute 10 seconds	Ist

10. Money

Exercise-10.1

Solutions

- ₹ 500.00
- ₹ 348.25
₹ 151.75
- The amount I had = ₹ 625.00
The amount given by my father to me as pocket money = ₹ 450.75

The amount given my mother to me
= + ₹ 350.00

The total amount I have now = ₹ 1425.75

- The amount paid to shop keeper by Varun
₹ 500.00

The amount spent by Varun for sweets
= - ₹ 475.50

The amount get back by Varun = ₹ 24.50

- The amount spent to buy a pen by Mahesh
= ₹ 68.50

Answer Key 3 to 5 99

- The amount spent to buy a book by Mahesh = ₹ 150.75
 The amount spent to buy a bag by Mahesh = + ₹ 925.000
 The total cost of all three things = ₹ 1144.25
5. The amount spent for a dress by Rashia = ₹ 245.75
 The amount spent for a bag by her = + ₹ 115.68
 Total amount for spent both things = ₹ 361.43
 The amount had Rashia = ₹ 845.00
 The amount Spent-in both = ₹ 361.43
 The amount left with her = ₹ 483.57
6. The amount spent to buy for bean by Gracy = ₹ 136.50
 The amount spent to buy for tomatoes by her = + ₹ 112.25
 The amount paid to shop keeper by her = + ₹ 114.75
 The amount paid to shop keeper by her = ₹ 363.50
7. Amount given to her sister to buy a dress = ₹ 2745.75
 Amount spent to buy a saree for her self = + ₹ 15235.50
 Total amount spent in both cloth = ₹ 17981.25
 The amount had Purnima = ₹ 23425.00
 Total amount spent in both cloth = - ₹ 17981.25
 The amount left with her = 5443.75
8. The amount spent for purchasing a tractor by Surya = ₹ 53,079.57
 The amount spent for purchasing for thresher by him = + ₹ 32609.84
 The amount spent all together by her = ₹ 85689.41
9. The amount is in John account = ₹ 62, 500.00
 The amount withdraw by him = - ₹ 51800.75
 The amount left in his account = 10699.25
10. The amount is collected for other kinds of aid = ₹ 26,575
 The amount is collected for a certain project = ₹ 25000
 The amount did they exceed their target = ₹ 1575

Exercise-10.2**Solutions**

1. The amount get by 10 students for scholarship = ₹ 4000
 The amount get by 1 student for scholarship = ₹ $\frac{4000}{10}$ = ₹ 400
2. The cost of an egg = ₹ 4
 The cost of 12 eggs = 4 × 12 = ₹ 48
3. 1 m, cloth cost = ₹ 675
 58m, cloth cost = ₹ 675×58 = ₹ 39,150
4. 9 shirts cost = ₹ 1422
 1 shirts cost = ₹ $\frac{1422}{9}$ = ₹ 158
5. The cost of an umbrella = ₹ 225
 The cost of 115 umbrella = ₹ 225 × 115 = ₹ 25875
6. Total friends = 3
 Total amount distributed = ₹ 4,425
 Each friend get amount = ₹ $\frac{4425}{3}$ = ₹ 1475
7. The cost of 12 apples = ₹ 96
 The cost of 1 apple = ₹ 96 ÷ 12 = ₹ 8
8. The amount earn by a labourer in 1 day = ₹ 1525
 The amount earn by a labourer in 7 day = ₹ 1525 × 7 = ₹ 10675.00
9. In 6 days a carpenter earn amount = ₹ 9,666
 In 1 day a carpenter earn amount = ₹ 9,666 ÷ 6 = ₹ 1,611

100 Answer Key 3 to 5

10. The cost of table = ₹ 732
 The cost of 216 tables = ₹ 732 × 216
 = ₹ 158,112

Exercise-10.3

1. Venba kart 24/01/2018
 Name of the customer – Mohammad

S. No.	De-scriptin	Quan-tity	Cost per unit	Tatal cast (in ₹)
1	Sugar	3 kg	₹ 37	₹ 111
2	Rice	5 kg	₹ 25	₹ 125
3	Wheat	4 kg	₹ 18	₹ 72
4	Toor dal	2 kg	₹ 72	₹ 144
5	Graund-jut oil	2 kg	₹ 92	₹ 184
			Total	₹ 636

2. Fresh Vegetables & Fruits shop 16/07/23
 Name of the customer – Gayatri

S. No.	De-scriptin	Quan-tity	Cost per unit	Tatal cost (in ₹)
1	Apples	2 kg	₹ 35	₹ 70
2	Oranges	1 kg	₹ 28	₹ 28
3	Mangoes	3 kg	₹ 40	₹ 120
4	Bananas	1 kg	₹ 17	₹ 17
			Total	₹ 235

3. Jai Hardware 03/03/21
 Name of the customer – Rajbir Singh

S. No.	De-scriptin	Quan-tity	Cost per unit	Tatal cast (in ₹)
1	Ham-mers	2	₹ 85	₹ 170
2	Boxes of nails	6	₹ 25	₹ 150
3	Boxes of screws	8	₹ 30	₹ 240
4	Spanners	2	₹ 175	₹ 350
			Total	₹ 910

4. Complete the boxes 04/01/24
 Name of the customer – Gulshan

S. No.	De-scriptin	Quan-tity	Cost per unit	Tatal cast (in ₹)
1	Sugar	3 kg	₹ 38	₹ 114
2	Gram	2.5 kg	₹ 42	₹ 105
3	Tea	1kg	₹ 205	₹ 205
4	Wheat	5 kg	₹ 16	₹ 80
			Total	₹ 504

BRUSH UP YOUR CONCEPTS**School Bill Comprehension Math****Cash Bill****Furniture world New Delhi**

Bill no-728 Date-23/10/2019

S. No.	De-scriptin	Quan-tity	Cost per unit	Tatal cast (in ₹)
1	Sitting bench	50	1200	60,000
2	Writing desk	50	1500	75,000
3	Black board	2	3000	6,000
4	Chair	10	950	9,500
5	Table	10	1750	17,500
			Total	1,68,000

- The name of the store is 'Furniture word'.
- The serial no of bill is 728
- The cost of a black board is ₹ 3000
- The set of benches and decks are 50+50 ie 100
- The total bill amount is correct.

Observe and Find

Cost of 4 kg rice = $55 \times 4 = ₹ 220$
 Cost of 5 kg Wheat = $49 \times 5 = ₹ 245$
 Cost of 2 kg Jowar = $46 \times 2 = ₹ 92$
 Cost of 3 kg Soya bean = $98 \times 3 = ₹ 294$
 Cost of 6 kg Sugar = $65 \times 6 = ₹ 390$
 Cost of 3 kg peas = $83 \times 3 = ₹ 249$
 Total Cost of vegetables al together ₹1490

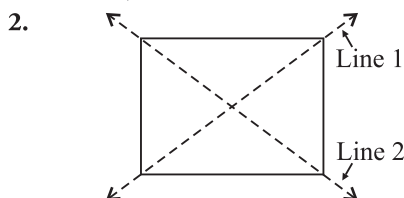
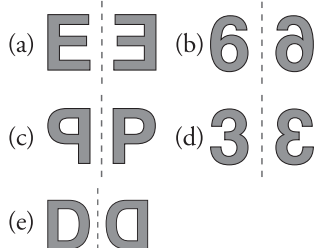
Check and correct challenge.

Bill is correct

11. Symmetry and Patterns

Exercise-11.1

1. The mirror images of given figures are:

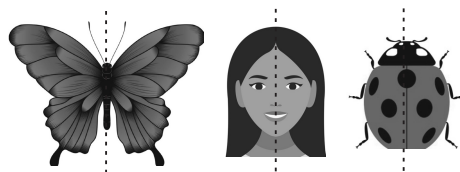


No, line 1 and line 2 in the given figure are not the lines of symmetry.

3. The rectangle has rotational symmetry at 180° and 360°
4. There are 2 lines of symmetry in a rectangle
5. False, the diagonal of a rectangle is not a line of symmetry.
6. Yes, rectangle has a rotational symmetry.
7. **Reflective Symmetry:**

If there exists at least one line that divides the objects into two halves such that one half is the mirror image of the other half, then, it is called reflective symmetry. In reflective, one half is reflective of the other half.

It is also known as mirror symmetry for example, butterfly wings, human, beetle. are identical on the left and right sides.

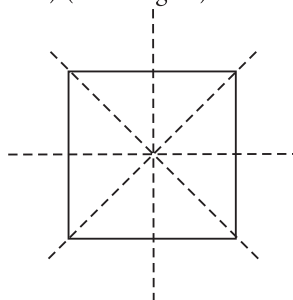


Rotational Symmetry

The object is said to have a rotational symmetry if after rotation the object remains the same.

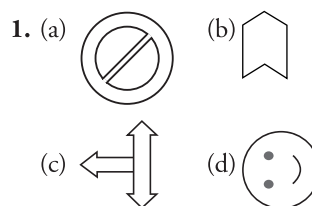
Geometrical shapes such as squares, rhombus, circles etc. exhibit rotational symmetry when an object is rotated the size and the shape of the object donot change.

8. In a square, there are four lines of symmetry each of which divides it into two identical parts. The symmetry lines of a square both its diagonals and the lines joining the midpoints of its opposite sides (bisectors) (See in figure)



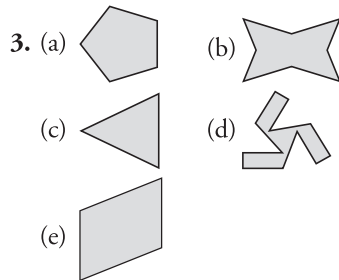
9. The imaginary line or axis along which you fold a figure to obtain the symmetrical halves is called the line of symmetry. It basically divides an object into two mirror images halves. The line of symmetry can be vertical, horizontal or diagonal.
10. The axis of symmetry is an imaginary straight line that divides a shape into two identical parts, there by creating one part as the mirror image of the other part. When folded along the axis of the symmetry, the two parts get superimposed. We can see axis of symmetry in nature such as flowers, buildings, leaves and so on.
11. (a) Square has 4 order of symmetry
(b) Rectangle 2 order of symmetry
(c) Rhombus 2 order of symmetry
12. The letters E, G, P and R have no line of symmetry.

Exercise-11.2



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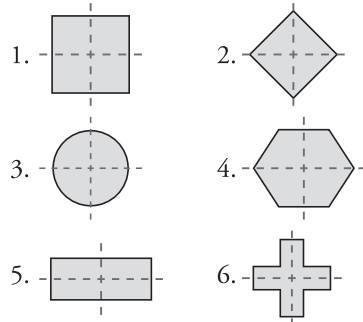
2. Do, yourself



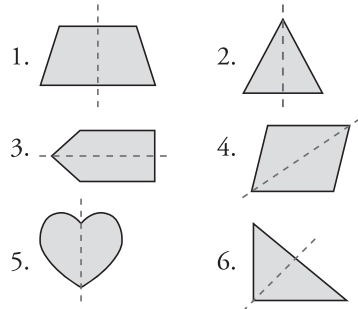
4. Do, yourself

BRUSH UP YOUR CONCEPTS

Two Lines of Symmetry!



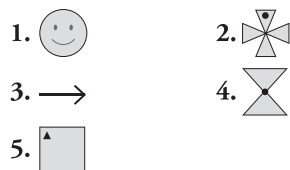
One Line of Symmetry!



Yes or No

1. Yes 2. No
3. No 4. Yes
5. No 6. Yes

What Next



Word Formation in Mirror

MOM	COM	HIDE	WICK
WOW	COW	HIDE	MICK

12. Mapping and Location Exercise-12

1. (a) $A = (5, 8)$ (b) $B = (1, 9)$ (c) $C = (8, 2)$ (d) $D = (4, 3)$ (e) $E = (0, 5)$ (f) $F = (4, 8)$ (g) $G = (7, 2)$ (h) $H = (9, 8)$ (i) $I = (7, 7)$ (j) $J = (8, 4)$
2. (a) $(A, 6)$ (b) $(C, 5)$ (c) $(B, 4)$ (d) $(F, 5)$
(e) $(E, 5)$ (f) $(D, 3)$ (g) $(A, 2)$ (h) $(C, 2)$
(i) $(F, 2)$ (j) $(E, 1)$

BRUSH UP YOUR CONCEPTS

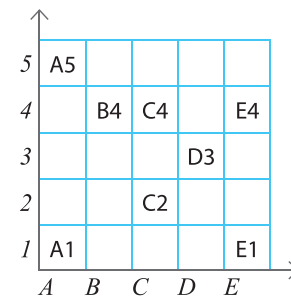
Pick the points

1. $(F, 1)$ 2. $(J, 8)$ 3. $(H, 9)$
4. $(B, 2)$ 5. $(D, 8)$ 6. $(B, 4)$
7. $(G, 6)$ 8. $(K, 2)$ 9. $(F, 10)$
10. $(A, 7)$ 11. $(C, 11)$ 12. $(L, 4)$
13. $(D, 5)$ 14. $(H, 3)$ 15. $(J, 12)$

Mark the points

1. is at $(6, 2)$ 2. is at $(7, 3)$ 3. is at $(2, 7)$
4. is at $(2, 2)$ 5. is at $(3, 4)$ 6. is at $(10, 7)$
7. is at $(9, 3)$ 8. is at $(3, 1)$ 9. is at $(4, 2)$
10. is at $(8, 1)$ 11. is at $(6, 7)$ 12. is at $(6, 5)$
13. is at $(2, 5)$ 14. is at $(10, 1)$ 15. is at $(1, 4)$

Grid.



1. A1 ▲ Green 5. C4 ■ Blue
2. B4 ● Blue 6. E1 ▲ Red
3. E4 ■ Red 7. A5 ▲ Yellow
4. D3 ● Green 8. C2 ● Yellow

Grid Decodes Charlleng.

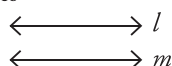
IF YOU HAVE FOUND THIS MESSAGE,
YOU HAVE WORKED HARD

13. Geometry

Exercise-13.1

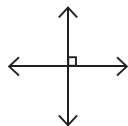
1. (a) Parallel Lines : When two straight lines move alongside each other and maintain a constant distance between each other, they are called parallel lines. The symbol $\parallel$ is used to represent the parallel lines.

In the given figure l , m and n are two parallel lines



- (b) Perpendicular lines

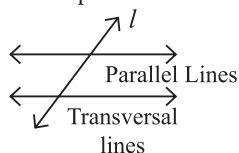
When two lines intersect each other, at an angle of 90° they are known as perpendicular lines. In the given figure line s and l are two perpendicular lines. Perpendicular lines are denoted by the symbol of $\perp$.



- (c) Transversal lines :

When a line intersects two lines at different respective points, then it is known as a transversal line. In the given figure, line l is a transversal.

In the transversal, the two lines may be parallel or non parallel.



2. The corner point of an angle is the common point, it is called the vertex of an angle. The two straight sides of the angle are called arms of the angle.
3. (a) An angle can have a value between 0° to 360°
- (b) The two straight sides of the angle are called arms of the angle.
- (c) The corner point of an angle is called the Vertex of an angle.
- (d) An angle is a figure formed by two rays that meet at a common end point.
- (e) An angle is denoted by the symbol $\angle$.

Exercise-13.2

1. (a) Right angle (b) Straight angle
(c) acute angle (d) acute angle
(e) obtuse angle (f) Right angle
2. (a) obtuse angle (b) acute angle
(c) obtuse angle (d) Straight angle
(e) acute angle (f) acute angle
3. Do, yourself
4. Do, yourself
5. (a) 35° (b) 100° (c) 90° (d) 25° (e) 70°
(f) 130°
6. Do, yourself

BRUSH UP YOUR CONCEPTS

Time and angles

1. 180° 2. 90° 3. 60° 4. 150°

Find the angles

Do yourself

Name the angles

1. Obtuse angle 2. Right angle
3. Obtuse angle 4. acute angle
5. acute angle 6. acute angle
7. right angle 8. acute angle

Measure Angle challenge

1. $\angle COB = 30^\circ$ 2. $\angle AOB = 180^\circ$
3. $\angle GOB = 150^\circ$ 4. $\angle EOB = 90^\circ$
5. $\angle GOD = 90^\circ$ 6. $\angle FOC = 90^\circ$

14. Perimeter and Areas

Exercise-14

1. (a) Perimeter of given figure = $2(l + b)$
 $= 2(12 + 10)$
 $[L = 12\text{cm } B = 10\text{ cm}]$
 $= 2 \times 22$
 $= 44\text{ cm}$
- (b) We have
 Side of hexagon = 2 cm
 Perimeter of hexagon = $6 \times \text{side}$
 $= 6 \times 2$
 $= 12\text{ cm}$

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(c) We have

Side of the triangle are 7 cm, 10 cm and 15cm

Perimeter of triangle

$$\begin{aligned}
 &= \text{Sum of three sides} \\
 &= 7 + 10 + 15 \\
 &= 32 \text{ cm}
 \end{aligned}$$

(d) We have

Side of pentagon are 8ft, 6ft, 4ft, 6ft and 6ft

Perimeter of pentagon

$$\begin{aligned}
 &= \text{sum of side of the pentagon} \\
 &= 8 + 6 + 4 + 6 + 6 \\
 &= 30 \text{ ft}
 \end{aligned}$$

(e) We have

Side of a quadrilateral are 4 km, 3 km, 4 km and 2 km.

Perimeter of a quadrilateral = Sum of sides of quadrilateral

$$\begin{aligned}
 &= 4 + 3 + 4 + 2 \\
 &= 13 \text{ km}
 \end{aligned}$$

(f) We have

Length of a rectangle is 11 cm and breadth of it is 9 cm.

$$\begin{aligned}
 \text{Perimeter of a rectangle} &= 2(l + b) \\
 &= 2(11 + 9) \\
 &= 2 \times 20 \\
 &= 40 \text{ cm}
 \end{aligned}$$

2. Since each square ($\square$) is 1 cm^2

(a) Since, the given figure is square shape side of square is 3 units

$$\begin{aligned}
 \text{Perimeter of a square} &= 4 \times \text{Side of square} \\
 &= 4 \times 3 = 12 \text{ cm}
 \end{aligned}$$

(b) Perimeter of given figure

$$\begin{aligned}
 &= 3 + 2 + 1 + 1 + 2 + 1 \\
 &= 10 \text{ cm}
 \end{aligned}$$

(c) Perimeter of a given figure

$$\begin{aligned}
 &= 2 + 1 + 1 + 1 + 1 + 1 + 2 + 3 \\
 &= 12 \text{ cm}
 \end{aligned}$$

(d) Perimeter of given figure

$$\begin{aligned}
 &= 3 + 1 + 1 + 1 + 1 + 1 + 3 + 1 \\
 &\quad + 1 + 1 + 1 + 1 \\
 &= 16 \text{ cm}
 \end{aligned}$$

(e) Perimeter of given figure

$$\begin{aligned}
 &= 3 + 3 + 1 + 1 + 1 + 1 + 1 + 1 \\
 &= 12 \text{ cm}
 \end{aligned}$$

(f) Perimeter of given figure is

$$\begin{aligned}
 &= 3 + 2 + 2 + 1 + 1 + 1 \\
 &= 10 \text{ cm}
 \end{aligned}$$

3. We have

Length of side of a square = 9 cm

$$\begin{aligned}
 \text{Perimeter of a square} &= 4 \times \text{side} \\
 &= 4 \times 9 \\
 &= 36 \text{ cm}
 \end{aligned}$$

4. We have

Length of rectangular park is 70 cm and its breadth is 40 cm.

$$\begin{aligned}
 \text{Perimeter of a rectangular park} &= 2(l + b) \\
 &= 2(70 + 40) \\
 &= 2 \times 110 \\
 &= 220 \text{ cm}
 \end{aligned}$$

5. We have

Length of rectangular is 8 cm and its breadth is 5 cm

Wire will be needed to make a rectangle is perimeter of a rectangle.

$$\begin{aligned}
 \text{Perimeter of a rectangular} &= 2(l + b) \\
 &= 2(8 + 5) \\
 &= 2 \times 13 \\
 &= 26 \text{ cm}
 \end{aligned}$$

6. We have

Side of a square is 12 m

$$\begin{aligned}
 \text{Perimeter of a square} &= 4 \times \text{side} \\
 &= 4 \times 12 = 48 \text{ cm}
 \end{aligned}$$

7. We have

Side of a square is 15 cm

$$\begin{aligned}
 \text{Area of a square} &= \text{side}^2 \\
 &= 15^2 = 225 \text{ cm}^2
 \end{aligned}$$

8. We have

Length of rectangle = 18 cm

And breadth of rectangle = 6 cm

$$\begin{aligned}
 \text{Area of rectangle} &= L \times B \\
 &= 18 \times 6 \\
 &= 108 \text{ cm}^2
 \end{aligned}$$

Answer Key 3 to 5 **105**

9. (a) Side of a square is 10 m
 Area of a square = side²
 $= 10^2$
 $= 100\text{m}^2$
- (b) Side of a square is 18 cm
 Area of a square = 18×18
 $= 324\text{cm}^2$
- (c) Side of a square is 13 m
 Area of a square = 13^2
 $= 169\text{m}^2$
- (d) Side of a square is 16 cm
 Area of a square = 16×16
 $= 256\text{cm}^2$
10. (a) Length of a rectangle (l) = 6 cm
 And breadth of a rectangle (b) = 3 cm
 Area of a rectangle = $l \times b$
 $= 6 \times 3$
 $= 18\text{cm}^2$
- (b) Length of a rectangle (l) = 7 cm
 And breadth of a rectangle (b) = 4 m
 Area of a rectangle = $l \times b$
 $= 7 \times 4$
 $= 28\text{cm}^2$
- (c) Length of a rectangle (l) = 8 cm
 And breadth of a rectangle (b) = 5 cm
 Area of a rectangle = 8×5
 $= 40\text{cm}^2$
- (d) Length of a rectangle (l) = 9 m
 And breadth of a rectangle (b) = 6 m
 Area of a rectangle = 9×6
 $= 54\text{m}^2$

BRUSH UP YOUR CONCEPTS**Perimeter**

Do, yourself

Area

Do, yourself

Area

We have

1. Length of given rectangle is 5 cm and its breadth is 2 cm.

$$\begin{aligned}\text{Area of rectangle} &= 5 \times 2 \\ &= 10\text{cm}^2\end{aligned}$$

2. Length of given rectangle is 9 cm and its breadth is 7 cm.

$$\text{Area of rectangle} = 9 \times 7 = 63\text{cm}^2$$

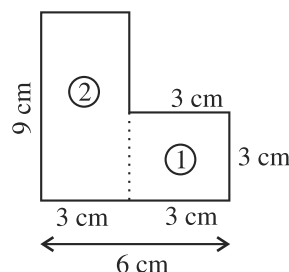
3. Side of a square = 3 cm

$$\text{Area of a square} = 3^2 = 9\text{cm}^2$$

4. Area of given figure

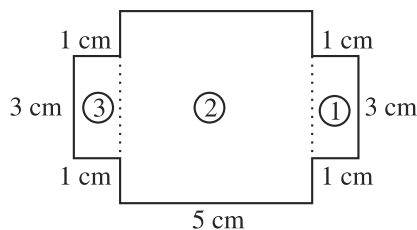
$$= \text{Area of figure (1)}$$

$$\begin{aligned}&+ \text{area of figure (2)} = \text{side}^2 + l \times b \\ &= 3^2 + 9 \times 3 \\ &= 9 + 27 \\ &= 36\text{cm}^2\end{aligned}$$



5. Area of given figure = Area of figure (1) + area of figure (2) + area of figure (3)

$$\begin{aligned}&= 1 \times 3 + 5 \times 5 + 1 \times 3 \\ &= 3 + 25 + 3 \\ &= 31\text{cm}^2\end{aligned}$$



6. Side of a square = 5 cm

$$\text{Area of a square} = 5^2 = 25\text{cm}^2$$

15. Data Handling**Exercise-15**

1. (a) Production of paddy during the years 2017 was $100 \times 3 = 300\text{ kg}$
- (b) In Years 2017 and 2019 paddy production 2018 and 2020 paddy production was equal.

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- (c) Quantity of paddy production in
2020 Production = $2 \times 100 = 200$ kg
- (d) Quantity of paddy production for year
2018 = $2 \times 100 = 200$ kg

Quantity of paddy production for year
2019 = $3 \times 100 = 300$ kg

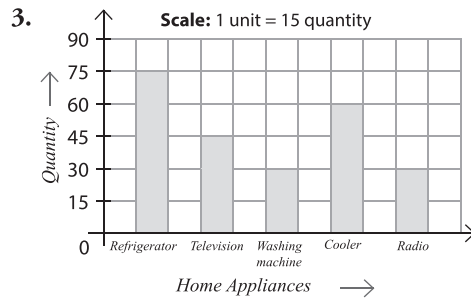
Quantity of paddy production for year
2020 = $2 \times 100 = 200$ kg

Total quantity of paddy production for the
years = $200 + 300 + 200 = 700$ kg

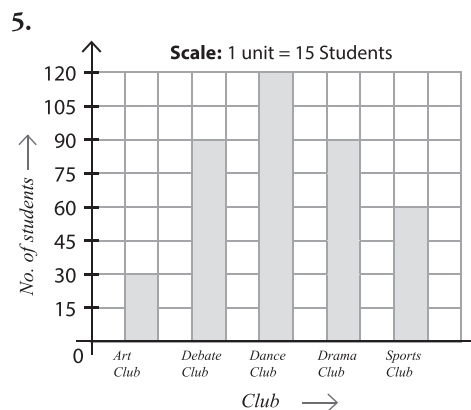
2. (a) 10 students attended the mathematics
examination.
- (b)

S. No.	Marks scored by students	Tally marks
1	41	
2	26	
3	58	
4	60	
5	20	
6	27	
7	52	
8	18	
9	46	

10	57	
----	----	------

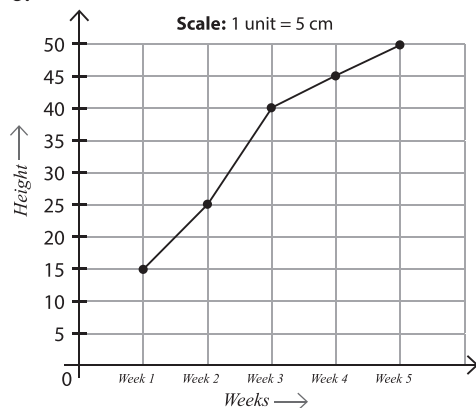


4. (a) The rain was there on all days of the
week = $3 \times 2 + 6 \times 2 + 5 \times 2 + 3 \times 2 + 4 \times$
 $2 + 10 \times 2 + 6 \times 2$
 $= 6 + 12 + 10 + 6 + 8 + 20 + 12$
74 millimetres
- (b) Most rain fall in city on Friday = 2×10
20 ml
- Least rein fall in city = $3 \times 2 = 6$ ml on
Sunday
- So, the rain fall on Friday has 20 ml – 6 ml
ie 14 ml more than the rainfall on Sunday
in a city
- (c) On (Sunday and Wednesday), (Monday
and Saturday the rain fall was same ie. 6 ml
and 12 ml



- (a) Art Club, 30 students
- (b) 30 and 90 students
- (c) 30 students
- (d) 390 students

6.



- (a) 25 cm (b) 10 cm (c) 20 cm (d) 35 cm
(e) Growth of the plant

7. (a) Students look the school bus in 2018 are 150.

(b) In 2017 year 250 students taking the school bus was the greatest.

(c) In 2020, the number of students taking the school bus = 225
In 2019, the number of students taking the school bus = -125
Increase the number of students taking the school bus = 100

(d) The greatest number of students (i.e. in years 2017) = 250
The least number of students (i.e. in year 2019) = -125
Difference between greatest and least students = 125

(e) The students took the school bus from 2017 to 2020
= 250 + 150 + 125 + 225
= 750

BRUSH UP YOUR CONCEPTS

Comprehension Bas Graph

- Total number of pencils = 700
Number of pencils are = -523
Used by Mrs Salini's class number of pencils are left = 177
- Total number of scissors = 300

Answer Key 3 to 5 107

Number of scissors are used by Mrs Kant's class = -156

Number of scissors are left = 144

3. Number of folders took by Mr John's class = 248

Number of folders took by Jordan's class = +176

Number of folders took by both = 424

Now, total number of folders = 600

Number of folders took by both = -424

Number of folders are left = 176

4. Number of glue stick used by Mrs Azan's class = 96

Number of glue sticks used by mrs Ahuja's class = +189

Number of glue sticks used by both = 285

Now, Total Number of glue stichs = 400

Number of glue sticks used by both = -285

Number of glue sticks are left = 115

5. Number of Markers needed by Mrs Barry's class = 275

Number of Markers needed by Mr Mathur's class = +398

Number of markers needed by both = 673

Total Number of markers = 900

Number of markers needed by both = -673

Number of markers are left = 227

Line Graph

1. In 2017, 750 Students and 2021, 900 students So, 150 students more in 2021

2. Huge rise in 2019 and it is 1500

3. Total number of students during 2019-2021 are 1500 + 1050 + 900 = 3450

4. Students in 2020 = 1050
Students in 2018 = -600
So, 450 Students more 2020 than 2018 = 450

5. Greatest number of Students = 1500
Least number of Students = -600
Difference between them = 900

Bar Graph and Table challenge

1. Jai, Tonny collected more than ₹ 200

108 Answer Key 3 to 5

2. Nancy and Rita collected the same amount of money
3. Tonny collected twice as much money as Kum Kum.
4. Total money $270 + 140 + 260 + 200 + 130 + 140 = 1140$
5. ₹ 860 more money did the children have to collect in order to reach ₹ 2000

Test Yourself – 1**Section A**

1. (b) 3,43,47,000
2. (b) $\because 16 = 1, 2, 4, 8, 16$
 $30 = 1, 2, 3, 5, 6, 10, 15, 30$
 $HCF = 1 \times 2 = 2$
3. (d) $\frac{3}{7}$ of $91 = 3 \times 13 = 39$
4. (d)
5. (d) $\because 1000000 + 1000 = 100\ 1000$
6. (d) $\because 1747.26$ is divided among 34 people
 $\therefore \text{share of each person} = \frac{1747.26}{34} = 51.39$

$$\begin{array}{r}
 51.39 \\
 34 \overline{) 1747.26} \\
 \underline{-170} \\
 47 \\
 \underline{-34} \\
 132 \\
 \underline{-102} \\
 306 \\
 \underline{-306} \\
 0
 \end{array}$$

7. (b) The area of an object is space occupied by the object
8. (a) The collected data which is not in any particular order is known as raw data

Section B

9. The place values of 5 = 5,00,000
and 5 = 5
10. $16432 = 16400$
11. 100 thousands make 1 lakh
12. $\because 60$ seconds = 1 minutes

$$5,469 \text{ seconds} = \frac{5469}{60}$$

$$\begin{array}{r}
 91 \text{ min} \\
 60 \overline{) 5469 \text{ sec}} \\
 \underline{540} \\
 69 \\
 \underline{60} \\
 9 \text{ sec}
 \end{array}$$

$\therefore 5469 \text{ seconds} = 91 \text{ minutes } 9 \text{ sec.}$

13. When two rays meet at a common end point, they form a figure called angle.
14. Do yourself.
15. The rectangular bars can be drawn horizontal or vertically.

Section C

$$\begin{array}{r}
 3783 \\
 12 \overline{) 45,399} \\
 \underline{-36} \\
 93 \\
 \underline{-84} \\
 99 \\
 \underline{-96} \\
 39 \\
 \underline{-36} \\
 3
 \end{array}$$

17. Since 8.2 is not divisible by 4. So, it is not divisible by 4 and 6
18. The pattern is 2, 4, 8, 16, 32, 64, 128, 256
19. $16 \text{ hrs } 36 \text{ mins } 25 \text{ sec}$
 $\underline{-12 \text{ hrs } 48 \text{ mins } 29 \text{ sec}}$
 $3 \text{ hrs } 47 \text{ mins } 56 \text{ secs}$

20. The side of a square garden is 41 m.
The perimeter of garden = $41 \times 4 = 164 \text{ m.}$
21. $251 \text{ L } 402 \text{ ml} \times 12$
 $\underline{301 \text{ L } 6 \text{ L } 8 \text{ L } 24 \text{ ml}}$

22. 1, 4, 9, 16, 25, 36, 49, 64, 81, 100
23. Distance covered in 1 round = 126×4
= 504 dm
The total distance covered in 3 rounds
= 504×3
= 1512 dm

24.

	Marks scored	Tally marks
English	42	
Maths	38	
Science	43	
Social Science	30	
Hindi	35	

Test Yourself – 2

Section A

- (c) Quotient is obtained = 5,984
- (d) $\frac{4}{16} = \frac{1}{4}$ is odd one out
- (a) $3 \text{ L } 450 \text{ ml} \times 14$
 $48,300 \text{ ml}$
- (c) If cost of 8 articles is ₹ 984
So, the cost of 1 articles is ₹ $\frac{984}{8}$
 $= ₹ 123$
- (c) 90°
- (d) A circle has infinite lines of symmetry.
- (d)
- (a) origin

Section B

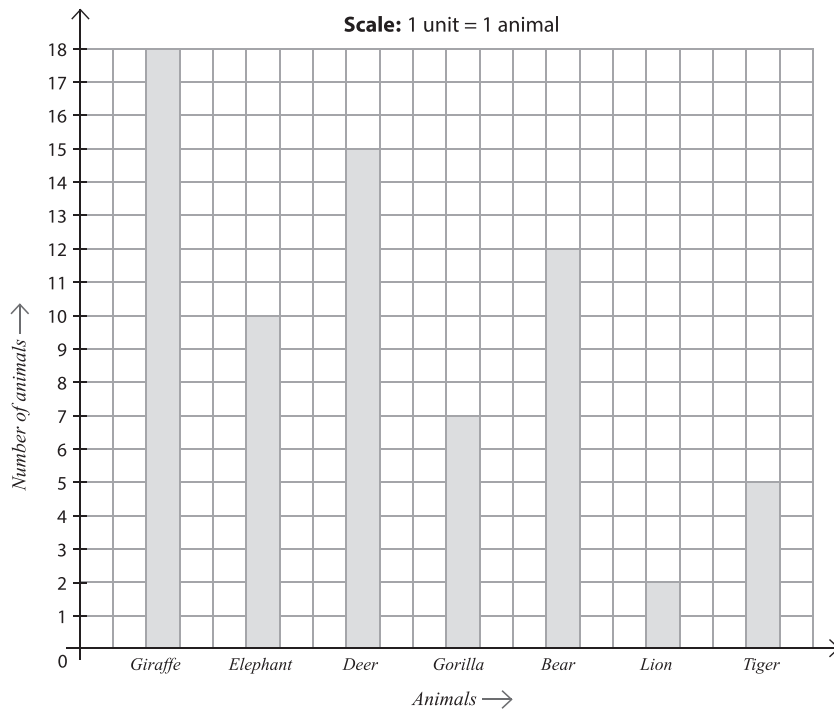
- $\frac{13}{2}$ is the greatest
- $540 \text{ ml} = \frac{540}{1000} \text{ L} = 0.54 \text{ L}$
- Railway lines
- A11, B12, C13, D14 E15 F16
- 9999876
- $\frac{2}{5}$ of 30 hours = 12 hours = 12×60
 $= 720 \text{ minutes}$
- Sum of two numbers = 65,25,871
one number = - 42,00,889
other number = 23,24,982

Section C

- $10,998 + 54,659 - 30,625$
 $= 65,657 - 30,625 = 35,032$
- $\frac{3}{11} > \frac{2}{11}$
- 378 of books are arranged in shelf = 1
4,70,988 books are arranged in self
 $= \frac{4,70,988}{378} = 1246 \text{ shelves}$
$$\begin{array}{r} 1246 \\ 378 \overline{) 4,70,988} \\ \underline{-378} \\ 929 \\ \underline{-756} \\ 1738 \\ \underline{-1512} \\ 2268 \\ \underline{-2268} \\ 0 \end{array}$$
- Length of rectangular box = 18 cm
And breadth of rectangular box = 7 cm
Perimeter of rectangular box = $2(18 + 7)$
 $= 2 \times 25$
 $= 50 \text{ cm}$
And area of rectangular box = 18×7
 $= 126 \text{ cm}^2$
- Price of hand bad is ₹ 1500
Price of a jacket is ₹ 2500
And price of a coat is + ₹ 1000
Total amount to be paid = ₹ 5000

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21.



22. 22 hrs 58 mins 26 secs

$$\begin{array}{r}
 22 \text{ hrs } 58 \text{ mins } 26 \text{ secs} \\
 + 12 \text{ hrs } 22 \text{ mins } 28 \text{ secs} \\
 \hline
 34 \text{ hrs } 80 \text{ mins } 54 \text{ secs} \\
 = 35 \text{ hrs } 20 \text{ mins } 54 \text{ secs}
 \end{array}$$

23. Factors of 28 = 1, 2, 4, 7, 14, 28

24. Place value of 5 = 50000

Place value of 5 = - 500

Difference = 49500



