

Maths

Teacher's Manual

Class III

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Vrindavan Books International

New Delhi

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1. (a) Two hundred Fifty six (b) Eight hundred six
(c) Nine hundred Twenty one (d) Nine hundred ninety nine
(e) Six hundred
2. (a) 756 (b) 430 (c) 309 (d) 228
(e) 906
3. (a) Pattern of adding 2 = 33, 35, 37, 39
(b) Pattern of adding 5 = 35, 40, 45, 50
(c) Pattern of adding 5 = 51, 56, 61, 66
(d) Pattern of adding 10 = 172, 182, 192, 202
(e) Pattern of adding 25 = 410, 435, 460, 485
4. 115, 118, 121, 124, 127
5. (a) nine (b) ninety (c) nine hundred
6. (a) 99 (b) 10 (c) 999 (d) 100
7. 368 8. 750
9. (a) < (b) > (c) < (d) >
(e) < (f) < (g) < (h) >
(i) <
10. Neha got = 475 marks; Rahul got = 457 marks; Kruti got = 379 marks
Because by comparing them = $475 > 457$; $457 > 379$
Neha got highest marks. So, she got first position, Rahul got second position and Kruti got third position.
11. (a) 104, 106 (b) 147, 149 (c) 298, 300 (d) 277, 279
12. (a) $40 < 572 < 710 < 741 < 860$
(b) $299 < 331 < 546 < 650 < 736$
(c) $695 < 771 < 825 < 881 < 890$
13. (a) $764 > 508 > 364 > 355 > 209$
(b) $312 > 231 > 211 > 121 > 112$

$$(c) 982 > 928 > 829 > 298 > 289$$

14. (a) 529 (b) 736 (c) 803 (d) 4, 8, 5
(e) 7, 0, 8

15. (a)
$$\begin{array}{r} 843 \\ + 132 \\ \hline 975 \end{array}$$
 (b)
$$\begin{array}{r} 526 \\ + 286 \\ \hline 812 \end{array}$$
 (c)
$$\begin{array}{r} 909 \\ + 89 \\ \hline 998 \end{array}$$

(d)
$$\begin{array}{r} 101 \\ + 179 \\ \hline 280 \end{array}$$
 (e)
$$\begin{array}{r} 621 \\ + 106 \\ + 39 \\ \hline 766 \end{array}$$

16. (a)
$$\begin{array}{r} 618 \\ - 435 \\ \hline 183 \end{array}$$
 (b)
$$\begin{array}{r} 473 \\ - 287 \\ \hline 186 \end{array}$$
 (c)
$$\begin{array}{r} 514 \\ - 389 \\ \hline 125 \end{array}$$

(d)
$$\begin{array}{r} 700 \\ - 623 \\ \hline 77 \end{array}$$
 (e)
$$\begin{array}{r} 611 \\ - 219 \\ \hline 392 \end{array}$$

17. On Van Mahotsav

I school planted = 128 trees

II school planted = 119 trees

III school planted = 98 trees

Total number of trees planted on that day = $128 + 119 + 98$

$$\begin{array}{r} 128 \\ + 119 \\ + 98 \\ \hline 345 \end{array}$$

∴ Total number of trees planted on that day were 345 trees.

- $$\begin{array}{r} 381 \\ -312 \\ \hline 69 \text{ runs} \end{array}$$

19. (a) $\times$ (b) $+$ (c) $\times$ (d) $+$
(e) $+$

20. (a) 56 (b) 104 (c) 904 (d) 342
(e) 270 (f) 625

21. (a) 9 (b) 9 (c) 9
(d) $5 \overline{)32} 6 = \text{quotient}$ (e) $9 \overline{)84} 9 = \text{quotient}$
 $\frac{30}{2} = \text{Remainder}$ $\frac{81}{3} = \text{Remainder}$

- $$\begin{array}{r} 18 \\ \times 8 \\ \hline 144 \end{array}$$

23. Number of books distributed = 56 books
 Number of books each boy got = 8 books
 So number of boys = $56 \div 8$

$$\begin{array}{r} 8 \overline{) 567} \\ \underline{56} \\ \times \end{array}$$

24. (a) $\frac{1}{4}$ or 1/4 (b) $\frac{2}{4}$ or 2/4 (c) $\frac{3}{4}$ or 3/4

25. Businessman bought cloth from the wholesale dealer = 28m 75cm

He bought cloth from another wholesale dealer = 43m 50cm

Total length of cloth he bought = 28m 75cm + 43m 50cm

$$\begin{array}{r} 28\text{m } 75\text{cm} \\ + 43\text{m } 50\text{cm} \\ \hline 72\text{m } 25\text{cm} \end{array}$$

∴ Total length of cloth he bought = 72m 25cm

26. Length of the rope = 59 m 37 cm

Length of rope in black = 35m 25 cm

Length of rope in yellow = 59m 37 cm – 35m 25cm

$$\begin{array}{r} 59\text{m } 37\text{cm} \\ - 35\text{m } 25\text{cm} \\ \hline 24\text{m } 12\text{cm} \end{array}$$

∴ The length of yellow part of the rope is 24m 12cm.

27. Coolie carries weight

= 19kg 368g and 22kg 517g.

Total weight he carried

= 19kg 368g + 22kg + 517g

$$\begin{array}{r} 19\text{kg } 368\text{g} \\ + 22\text{kg } 517\text{g} \\ \hline 41\text{kg } 885\text{g} \end{array}$$

∴ The total weight coolie carried was 41.885 kg.

28. Weight of Lovey = 44 kg

Weight she lost due to illness = 3kg 225g

Lovey's weight now = 44kg – 3kg 225g

$$\begin{array}{r} 44\text{kg } 000\text{g} \\ - 3\text{kg } 225\text{g} \\ \hline 40\text{kg } 775\text{g} \end{array}$$

So, Lovey's weight now = 40kg 775g

29. Rajesh collected milk from first dairy farm = 9lt 750 ml

He collected milk from second dairy farm = 5lt 500 ml

Total milk he collected = 9lt 750ml + 5lt 500ml

$$\begin{array}{r} 9\text{lt } 750\text{ml} \\ + 5\text{lt } 500\text{ml} \\ \hline 15\text{lt } 250\text{ml} \end{array}$$

∴ Total milk he collected = 15lt 250ml

30. Mustard oil shopkeeper had = 50lt 400ml

Mustard oil he sold = 21lt 375ml

Quantity of left over oil = 50lt 400ml – 21lt 375ml

$$\begin{array}{r} 50\text{lt } 400\text{ml} \\ - 21\text{lt } 375\text{ml} \\ \hline 29\text{lt } 025\text{ml} \end{array}$$

So, quantity of oil left with the shopkeeper was 29.025lt.

31. Vijay earned on first day = ₹215	₹215
Vijay earned on second day = ₹272	₹272
Vijay earned on third day = ₹178	+ ₹178
He earned in all = ₹215 + ₹272 + ₹178	<u>₹665</u>

Total money he earned in three days was ₹665.

32. Money Riya gave to the shopkeeper = ₹100

Money shopkeeper gave back to her = ₹84.50

The price of notebook = ₹100 – ₹84.50

$$\begin{array}{r} ₹100.00\text{ps} \\ - ₹84.50\text{ps} \\ \hline ₹15.50\text{ps} \end{array}$$

The price of note book was ₹15.50.

33. (a) 3:30 (b) 7:15 (c) 3:45

34. Do yourself

35. Cylinder, cuboid, sphere, cone, cylinder, cube

36. (a) 40 books (b) Ajay, 50 books
(c) Anshul, 20 books

Test Paper

I. 1. (ii) 714

2. (iii) One hundred forty-nine

3. (ii) Number of buses = 8 buses

Number of students each bus took = 45 students

Total number of students went to the theatre = 8×45

$$\begin{array}{r} 45 \\ \times 8 \\ \hline 360 \end{array}$$

360 students went to the theatre.

4. (i) Number of students from Shimla hill school = 1624

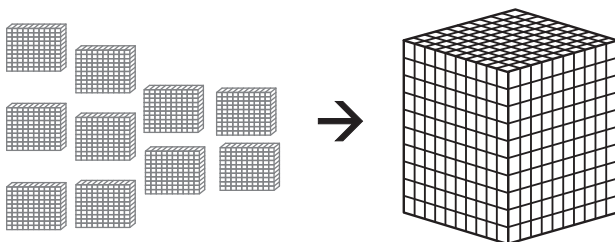
Number of events during field day = 8 events

Students in each event = $1624 \div 8$

$$\begin{array}{r} 8 \overline{)1624} \quad 203 \\ \underline{16} \\ 024 \\ \underline{24} \\ 0 \end{array}$$

There were 203 students in each event.

II. 1.



2. No. of hours in a day = 24 hours

No of days in a week = 7 days

No. of hours in a weeks = 24×7

$\therefore$ there are 168 hours in a week.

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

No. of months in one year = 12 months

No. of months in ten years = 12×10

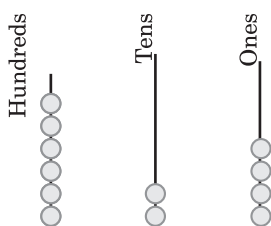
There are 120 months in ten years.

$168 > 120$

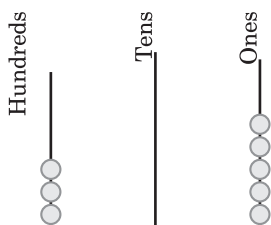
$$\begin{array}{r} 12 \\ \times 10 \\ \hline 120 \end{array}$$

$$\begin{array}{r} 168 \\ - 120 \\ \hline 48 \end{array}$$

3. (a)



(b)



2

Number System

Exercise 1

1. (a) 1003, 1004, 1005, 1006, 1007
 (b) 1127, 1128, 1129, 1130, 1131
 (c) 2352, 2353, 2354, 2355, 2356
 (d) 5001, 5002, 5003, 5004, 5005
 (e) 7779, 7780, 7781, 7782, 7783
2. (a) 1007, 1006, 1005, 1004, 1003
 (b) 2375, 2374, 2373, 2372, 2371
 (c) 3998, 3997, 3996, 3995, 3994
 (d) 3548, 3547, 3546, 3545, 3544
 (e) 8305, 8304, 8303, 8302, 8301
3. (a) Two thousand two hundred and two
 (b) Eight thousand eight hundred and fifty eight
 (c) One thousand eight hundred and eighty six
 (d) Three thousand seven hundred and ninety three.
 (e) Four thousand six hundred and seventy eight
 (f) Eight thousand nine hundred and fifty six
 (g) Seven thousand and fifty six.
 (h) Eight thousand and six.
 (i) Five thousand six hundred and nine
 (j) Three thousand eight hundred and seventy.
4. (a) 2048 (b) 7802 (c) 9457 (d) 8711
 (e) 1830 (f) 8977 (g) 1019 (h) 7400
 (i) 2824 (j) 7306
5. (a) 2608 (b) 3694
 $\begin{array}{l} \text{└─} \rightarrow 600 \end{array}$ $\begin{array}{l} \text{└─} \rightarrow 600 \end{array}$
 (c) 6141 (d) 9628
 $\begin{array}{l} \text{└─} \rightarrow 6000 \end{array}$ $\begin{array}{l} \text{└─} \rightarrow 600 \end{array}$



$$\text{Difference} = 4000 - 4 = 3996$$

7. (a) Hundreds, 800 (b) Tens, 50
 (c) Ones, 8 (d) Hundreds, 000
 (e) Thousands, 6000 (f) Hundreds, 800
 (g) Ones, 2 (h) Hundreds, 800
 (i) Tens 80 (j) Tens, 30
8. (a) 5, 2, 4, 7 (b) 4, 6, 2, 7
 (c) 5, 0, 6, 9 (d) 8, 7, 4, 3
 (e) 5, 4, 3, 0 (f) 2, 5, 9, 6
 (g) 1, 8, 7, 7 (h) 3, 6, 8, 5
 (i) 3, 0, 0, 9
9. (a) 2012 (b) 4334 (c) 3415 (d) 8038
 (e) 6586 (f) 5875 (g) 4000 (h) 7123
 (i) 7809
10. (a) 4562 (b) 4936 (c) 6903 (d) 8942
 (e) 2384 (f) 9003
11. (a) 4381 (b) 5342 (c) 8306 (d) 6981
 (e) 7002 (f) 5971

Exercise 2

1. (a) 2034, 4320 (b) 4789, 9874
 (c) 3456, 6543 (d) 2085, 8520
 (e) 4069, 9640
2. (a) 900, 898 (b) 4057, 4055
 (c) 9981, 9979 (d) 5001, 4999
 (e) 8660, 8658
3. (a) > (b) > (c) < (d) >
 (e) < (f) > (g) < (h) >
 (i) < (j) <
4. (a) 4703 (b) 8222 (c) 4440 (d) 2561

- (e) 8000
5. (a) 945 (b) 4808 (c) 298 (d) 525
(e) 456
6. (a) Ascending order (b) Descending order
(c) Ascending order (d) Descending order
7. (a) 5250, 5205, 5025, 1525, 525
(b) 4201, 3039, 3021, 2986, 0298
(c) 7536, 6999, 6537, 5736, 5004
(d) 5207, 5200, 3209, 2587, 845
(e) 3906, 3602, 3056, 2910, 356
8. (a) 0756, 0987, 1048, 1234, 2996
(b) 698, 985, 987, 991, 7603
(c) 675, 1676, 4523, 5786, 5980
(d) 356, 686, 866, 2402, 9358
(e) 789, 900, 7891, 8000, 9000
9. 1000 10. Yes 11. 9999 12. No
13. 1000, Yes, Yes
14. No. of males in the village = 8650
No. of females in the village = 8065
 $8650 > 8065$ So, females are less in numbers.

Exercise 3

1. (a) even (b) odd (c) odd (d) even
2. 282, 902, 3654, 6786, 5174, 9630
3. 569, 1501, 4575, 607, 8475, 3105

Exercise 4

1. (a) 1206, 1208, 1210, 1212, 1214
(b) 3052, 3054, 3056, 3058, 3060
(c) 4058, 4060, 4062, 4064, 4066
(d) 6092, 6094, 6096, 6098, 6100
(e) 8769, 8771, 8773, 8775, 8777
2. (a) 5116, 5119, 5122, 5125, 5128
(b) 3486, 3489, 3492, 3495, 3498

- (c) 6007, 6110, 6013, 6016, 6019
- (d) 6116, 6119, 6122, 6125, 6128
- (e) 7690, 7693, 7696, 7699, 7702
- 3. (a) 4008, 4012, 4016, 4020, 4024
- (b) 2084, 2088, 2092, 2096, 2100
- (c) 4304, 4308, 4312, 4316, 4320
- (d) 6008, 6012, 6016, 6020, 6024
- (e) 7690, 7694, 7698, 7702, 7706
- 4. (a) 2890, 2900, 2910, 2920, 2930
- (b) 5010, 5020, 5030, 5040, 5050
- (c) 6020, 6030, 6040, 6050, 6060
- (d) 7940, 7950, 7960, 7970, 7980
- (e) 8795, 8805, 8815, 8825, 8835

Exercise 5

- 1. (a) 6 (b) 9 (c) 15 (d) 40
- (e) 91 (f) 30 (g) 29 (h) 17
- 2. (a) (5) (b) (1) (c) (6) (d) (2)
- (e) (4) (f) (3)
- 3. (a) VI (b) XIII (c) XV (d) XXIV
- (e) XXVIII (f) XXXIII (g) XL (h) LXIV
- 4. (a) seventy (b) forty-two
- (c) ninety-two (d) Ninety-five
- (e) seventy-one (f) forty-six
- (g) twenty-five (h) twenty-two
- 5. (a) 𐌸𐌺 (b) 𐌺𐌺𐌹 (c) 𐌺𐌺𐌺 (d) 𐌺𐌺𐌺
- (e) 𐌹𐌹𐌺𐌺 (f) 𐌺𐌺𐌺𐌺
- 6. (a) seventy-five (b) forty-four
- (c) two hundred and six (d) three hundred fifty-one
- (e) one thousand seven hundred and two
- (f) six hundred seventy
- 7. (a) LXIV (b) CXVI (c) CCXXX
- (d) CCCLXXXV (e) DCCCXLVI

8. (a) < (b) > (c) > (d) =
 (e) = (f) > (g) = (h) = (i) <

Test Paper

- I.** 1. 93 and 99
 2. 6038, 6083, 6380, 6308, 6803, 6830, 3068, 3086, 3608, 3680, 3860, 3806, 8036, 8063, 8306, 8360, 8603, 8630, = Total 18
 3. Yes 4. 230 5. 7619 6. XLIX
- II.** 1. (iii) 3136 2. (i) thousands
 3. (ii) $946 > 853$ 4. (ii) 552
 5. (i) an even number 6. (iv) $7000 + 500 + 60 + 4$
 7. (iii) hundreds place
- III.** (a) (iv) (b) (i) (c) (v) (d) (iii)
 (e) (ii)
- IV.** 1. Do yourself 2. Do yourself
 3. Do yourself 4. Odd
 5. Answer is always odd

3

Fundamental Operations

Exercise 6

1. 8858

2. 8789

3. 9688

4. 9176

5. 8688

6. 8797

7. 9499

8. 5888

9. 6675

10. 9796

11. 1 5 0 1

12. 3 2 0 0

13. 3 6

14. 5 2 8 0

+ 2 0 1 3

+ 5 1 2

+ 1 2 1

+ 4 0 6

+ 1 0 5 0

+ 2 2 7 4

+ 7 5 1 2

+ 2 0 0 1

4 5 6 4

5 9 8 6

7 6 6 9

7 6 8 7

15. 4 0 1 7

16. 5 5 0 3

+ 2 5 0

+ 2 0 3

+ 1 7 2

+ 1 7 2

4 4 3 9

5 8 7 8

Exercise 7

1. 8132

2. 8313

3. 9108

4. 8524

5. 9246

6. 9440

7. 7276

8. 5222

9. 9419

10. 9761

11. 11234

12. 8969

13. 1 6 8 1

14. 3 4 9 7

15. 6 4 3 8

16. 7 8 2 3

+ 6 3 2 5

+ 4 8 7 3

+ 6 5 4

+ 1 4 7 5

+ 8 2 1

+ 3 0 6

+ 2 5 4 0

+ 5 0 8

8 8 2 7

8 6 7 6

9 6 3 2

9 8 0 6

17. 6 5 3 8

18. 9

+ 1 7 1 9

+ 9 9

+ 9 9 9

+ 8 7 0

+ 8 8 8 8

9 1 2 7

9 9 9 5

Exercise 8

- | | | |
|---|---|------------------|
| 1. No. of men | = | 1 6 3 9 |
| No. of women | = | + 1 8 9 4 |
| No of children | = | + 4 2 3 0 |
| | | <u>7 7 6 3</u> |
| 2. No. of apples fruit seller has | = | 1 4 8 9 |
| No. of mangoes fruit seller has | = | + 1 7 4 3 |
| No. of oranges fruit seller has | = | + 4 2 3 1 |
| | | <u>7 4 6 3</u> |
| 3. Soap-cakes factory makes in first day = | | 3 6 3 8 |
| Soap-ckaes factory makes in second day= | | + 3 7 0 9 |
| Soap-cakes factory makes in third day= | | + 2 1 8 5 |
| | | <u>9 5 3 2</u> |
| 4. No. of males primary teachers | = | 4 8 7 9 |
| No. of female primary teacher | = | + 4 7 2 9 |
| Total no. of teachers in the state | = | <u>9 6 0 8</u> |
| 5. No. of goats in the village | = | 2 5 9 2 |
| No. of cows in the village | = | + 1 7 8 9 |
| No. of buffaloes in the village | = | + 3 8 8 9 |
| Total no. of cattle in the village | = | <u>8 2 7 0</u> |
| 6. No. of persons visited the zoo on Sunday = | | 2 4 8 3 |
| No. of persons visited the zoo on Monday= | | + 2 8 2 4 |
| No. of persons visited the zoo on Wed. = | | + 1 7 9 8 |
| Total no. of persons visited the zoo
in three days | = | <u>7 1 0 5</u> |
| 7. Votes Yusuf got in election | = | 3 8 8 4 |
| Votes Laxmikant got in election | = | + 3 8 9 5 |
| Votes other candidates got in election= | | + 5 3 4 5 |
| Votes polled in all | = | <u>1 3 1 2 4</u> |
| 8. Bags of rice in the store | = | 3 8 9 8 |
| Bags of wheat in the store | = | 2 3 6 6 |
| Bags of sugar in the store | = | 1 8 5 4 |
| Total no. of bags in the store | = | <u>8 1 1 8</u> |

9. Man gets mangoes from first farm = 2208
 Man gets mangoes from second farm = +4605
 Man gets mangoes from third farm = +2500
 Total no. of mangoes he get in all = 9313
10. Cost of cooler = ₹ 3450
 Cost of almirah = ₹ 3450 + 1875
- $$\begin{array}{r} \text{₹} \quad 3450 \\ \text{₹} \quad 1875 \\ \hline \text{₹} \quad 5325 \end{array}$$

∴ Cost of almirah = ₹ 5325

Total cost of both cooler and almirah = 3450 + 5325

$$\begin{array}{r} 3450 \\ + 5325 \\ \hline 8775 \end{array}$$

∴ Total cost of both cooler and almirah = ₹ 8775

Exercise 9

- | | | | |
|---------|---------|---------|---------|
| 1. 476 | 2. 5231 | 3. 718 | 4. 4180 |
| 5. 1005 | 6. 1521 | 7. 1827 | 8. 4568 |
| 9. 8450 | 10. 0 | | |

Exercise 10

- | | | | |
|----------|----------|----------|----------|
| 1. 5511 | 2. 4212 | 3. 2132 | 4. 2124 |
| 5. 6522 | 6. 4227 | 7. 6348 | 8. 634 |
| 9. 1231 | 10. 7473 | 11. 3306 | 12. 4241 |
| 13. 2423 | | | |

Check :

$$\begin{array}{rcl} \text{Smaller No.} & = & 2456 \\ \text{Answer} & = & + 2423 \\ \hline \text{Larger No.} & = & 4879 \end{array}$$

It shows the answer of the given sum is correct.

14. 4344

Check :

$$\text{Smaller No.} = 5340$$

$$\text{Answer} = +4344$$

$$\text{Larger No.} = \underline{9684}$$

It shows the answer of the given sum is correct.

15. 4326

Check :

$$\text{Smaller No.} = 4320$$

$$\text{Answer} = +4326$$

$$\text{Larger No.} = \underline{8646}$$

It shows the answer of the given sum is correct.

Exercise 11

1. 1709

2. 2173

3. 1677

4. 1378

5. 1654

6. 2558

7. 2217

8. 3732

9. 1174

10. 2966

11. 1578

12. 789

13. 5000

14. 4344

15. 4444

16. 8040

$$\begin{array}{r} -2183 \\ \hline \end{array}$$

$$\begin{array}{r} 2817 \\ \hline \end{array}$$

$$\begin{array}{r} -1676 \\ \hline \end{array}$$

$$\begin{array}{r} 2668 \\ \hline \end{array}$$

$$\begin{array}{r} -2557 \\ \hline \end{array}$$

$$\begin{array}{r} 1887 \\ \hline \end{array}$$

$$\begin{array}{r} -4382 \\ \hline \end{array}$$

$$\begin{array}{r} 3658 \\ \hline \end{array}$$

17. 6231

18. 6000

$$\begin{array}{r} -3155 \\ \hline \end{array}$$

$$\begin{array}{r} 3076 \\ \hline \end{array}$$

$$\begin{array}{r} -3285 \\ \hline \end{array}$$

$$\begin{array}{r} 2715 \\ \hline \end{array}$$

19. 2345

20. 9347

$$\begin{array}{r} -1469 \\ \hline \end{array}$$

$$\begin{array}{r} 876 \\ \hline \end{array}$$

$$\begin{array}{r} -2897 \\ \hline \end{array}$$

$$\begin{array}{r} 6450 \\ \hline \end{array}$$

Check :

$$\text{Smaller No.} = 1469$$

$$\text{Answer} = +876$$

$$\text{Larger No.} = \underline{2345}$$

Check :

$$\text{Smaller No.} = 2897$$

$$\text{Answer} = +6450$$

$$\text{Larger No.} = \underline{9347}$$

$$\begin{array}{r} 21. \quad 5332 \\ - 2645 \\ \hline 2687 \end{array}$$

Check:

$$\text{Smaller No.} = 2645$$

$$\text{Answer} = +3687$$

$$\text{Larger No.} = \underline{5332}$$

It shows the answer of the given sum is correct.

$$23. 6845 - 3419 = 3426$$

$$25. 6251 - 2368 = 3888$$

$$\begin{array}{r} 22. \quad 3430 \\ - 2999 \\ \hline 431 \end{array}$$

Check:

$$\text{Smaller No.} = 2999$$

$$\text{Answer} = +431$$

$$\text{Larger No.} = \underline{3430}$$

It shows the answer of the given sum is correct.

$$24. 5370 - 2884 = 2486$$

Exercise 12

$$\begin{array}{r} 1. \quad 4982 \\ - 2996 \\ \hline 1986 \end{array}$$

So, the number should be subtracted = 1986.

$$\begin{array}{r} 2. \quad 7204 \\ - 4015 \\ \hline 3189 \end{array}$$

So, the number should be added = 3189.

3. No of bags of wheat in godown	=	8925
No. of bags of wheat were sold	=	<u>-6876</u>
No. of bags left in godown	=	<u>2049</u>
4. Population in 2008	=	9500
Population in 2007	=	<u>-8454</u>
Increase in population	=	<u>1046</u>
5. No. of bottles of cold drinks arranged	=	2440
No. of bottles of cold drinks were used	=	<u>-1375</u>
No. of bottles were left unused	=	<u>1065</u>

- | | | |
|---|---|------------------|
| 6. No. of people in the village | = | 8 6 5 0 |
| No. of people cast their votes | = | <u>-4 7 8 0</u> |
| No. of people not cast their votes | = | <u>3 8 7 0</u> |
| 7. Money Rupesh had in his bank account | = | ₹ 9 0 0 0 |
| Money he took out for buying a cooler | = | <u>₹ 4 9 8 7</u> |
| Money left in his bank account | = | <u>₹ 4 0 1 3</u> |
| 8. No. of candidates appeared in exam. | = | 6 8 7 5 |
| No. of candidates passed in exam. | = | <u>-4 9 8 5</u> |
| No. of candidates failed in exam. | = | <u>1 8 9 0</u> |
| 9. Soaps produced on Monday | = | 3 5 7 6 |
| Soaps produced on Tuesday | = | 4 8 6 5 |
| Production was more = $4865 - 3576 = 1289$ | | |
| ∴ Production was more on Tuesday by 1289 soaps. | | |

$$\begin{array}{r}
 10. \quad 4\ 8\ 4\ 9 \\
 - 3\ 9\ 4\ 8 \\
 \hline
 9\ 0\ 1
 \end{array}$$

∴ The other number is 901.

Exercise 13

- $3254 - 2132 + 486$
 $= 3254 + 486 - 2132$
 $= 3740 - 2132$
 $= 1608$
- $4361 - 588 + 529 - 2121$
 $= 4361 + 529 - 588 - 2121$
 $= 4890 - 2709$
 $= 2181$
- $3176 - 5282 + 6471 - 2883$
 $= 3176 + 6471 - 5282 - 2883$
 $= 9647 - 8165$
 $= 1482$

4. $3063 - 1899 - 1027 + 4284$
 $= 3063 + 4284 - 1899 - 1027$
 $= 7347 - 2926$
 $= 4421$
5. $7575 + 838 - 7839 - 210$
 $= 8413 - 8049$
 $= 364$
6. $4304 + 2587 - 3719 - 885$
 $= 6891 - 4604$
 $= 2287$
7. $2489 - 4780 + 3145$
 $= 2489 + 3145 - 4780$
 $= 5634 - 4780$
 $= 854$
8. $9678 - 2875 - 3712$
 $= 9678 - 6587$
 $= 3091$
9. Sum of $4058 + 2697 = 6755$
Sum of $3853 + 3980 = 7833$
Subtract $= 7833 - 6755 = 1078$
10. Difference of $5811 - 979 = 4832$
Difference of $4305 - 3839 = 466$
Subtract $= 4366$
11. Sum of $2526 + 4830 = 7356$
Difference of $5607 - 4941 = 666$
Subtract $= 6690$
12. No. of bags of rice $= 9598$
Total No. of bags sold in three days $= 654 + 1580 + 3465 = 5699$
No. of bags left in godown $= 3899$
13. Anju spent on food $= ₹ 1550$
Anju spent on house rent $= ₹ 1825$
Anju spent on other items $= ₹ 2100$

Anju's husband income = ₹9000

Total money she spend = $1550 + 1825 + 2100 = ₹ 5475$

Money she saved = $9000 - 5475 = ₹3525$

14. No. of books in library = 6900

No. of books on science = 1785

No. of books on geography = 2458

Total books on science and geography = $1785 + 2458 = 4243$

No. of books on other subjects = $6900 - 4243 = 2657$

Exercise 14

1. Multiplicand 2. Product 3. Multiplier

4. Multiplicand 5. Multiplicand 6. Product

7. 3 8. 5 9. 7 10. 19

11. 1 12. 0 13. 459 14. 0

15. 1 16. 0 17. 20 18. 72

19. 70 20. 81 21. 100 22. 108

23. 120 24. 112 25. 136

26. No. of days in a week = 7 days

No. of days in 19 weeks = $19 \times 7 = 133$ days

27. No. of mango trees in a row = 9 trees

No. of trees required for plantation in 13 rows = $13 \times 9 = 117$

Exercise 15

1. 996 2. 426 3. 608 4. 1005

5. 993 6. 702 7. 2535 8. 1512

9. 996 10. 1902 11. 2592 12. 3432

13. 5536 14. 7126 15. 9835 16. 9688

17. 6252 18. 8691 19. 7602 20. 7134

Exercise 16

1. 640 2. 780 3. 880 4. 2900

5. 9000 6. 1400 7. 2535 8. 1512

9. 996 10. 1902 11. 2592 12. 2592

13. No of chalk sticks in a box = 48

No. of chalk sticks in 20 boxes = 48×20

$$\begin{array}{r}
 48 \\
 \times 20 \\
 \hline
 00 \\
 960 \\
 \hline
 960
 \end{array}$$

∴ 960 chalk sticks will be there in 20 such boxes.

14. No. of seats in a row = 30

No. of rows in the cinema hall = 35

No. of seats there in all = 35×30

$$\begin{array}{r}
 35 \\
 \times 30 \\
 \hline
 00 \\
 1050 \\
 \hline
 1050
 \end{array}$$

∴ 1050 seats will be there in the cinema hall.

15. Notes of 100 rupees Rita has = 75 notes

Rupees Ritu has = 100×75

$$\begin{array}{r}
 100 \\
 \times 75 \\
 \hline
 500 \\
 7000 \\
 \hline
 7500
 \end{array}$$

Ritu has 7500 rupees in all.

16. No. of beads in the chain = 108 beads

No. of beads in 40 chains = 108×40

$$\begin{array}{r}
 108 \\
 \times 40 \\
 \hline
 000 \\
 4320 \\
 \hline
 4320
 \end{array}$$

∴ There are 4320 beads in such 40 chains.

17. Notes man gave of hundred rupees = $65 \times 100 = 6500$

Notes man gave of fifty rupees = $12 \times 50 = 600$

Money he paid for the scooter = $6500 + 600 = 7100$

18. Bags of wheat trucks carries = 145

Bags of wheat carried in 60 trucks = 145×60

$$\begin{array}{r} 145 \\ \times 60 \\ \hline 000 \\ 8700 \\ \hline 8700 \end{array}$$

Hence, 8700 bags of wheat can be carried.

Exercise 17

1. 795 2. 1200 3. 1584 4. 1416
 5. 1128 6. 2065 7. 4140 8. 3311
 9. 6336 10. 3584 11. 3724 12. 5916
 13. 3848 14. 4484 15. 9984 16. 7285
 17. 9434 18. 7875 19. 8820 20. 5850
21. No. of chalk sticks a box contain = 48 chalk sticks
No. of chalk stick 56 boxes contain = $48 \times 56 = 2688$ chalk
22. No. of trees in a row = 24 trees
No. of trees in 79 rows = $79 \times 24 = 1896$ trees
23. No. of bags truck can carry = 76 bags
No. of bags 93 trucks can carry = $76 \times 93 = 7068$ bags
24. Passengers a plane can carry = 236 passengers
Passengers 23 planes can carry = $236 \times 23 = 6372$ passengers
25. Balloons in a packet = 138 balloons
Balloons in 16 packets = $138 \times 16 = 2208$ balloons

Exercise 18

1. dividend = 14, divisor = 2, quotient = 7
2. dividend = 15, divisor = 3, quotient = 5
3. dividend = 20, divisor = 4, quotient = 5

4. dividend = 36, divisor = 6, quotient = 6
5. dividend = 30, divisor = 10, quotient = 3
6. dividend = 44, divisor = 11, quotient = 4
7. dividend = 36, divisor = 12, quotient = 3
8. dividend = 75, divisor = 15, quotient = 5
9. dividend = 65, divisor = 13, quotient = 5
10. $24 \div 6 = 4$, $24 \div 4 = 6$
11. $56 \div 8 = 7$, $56 \div 7 = 8$
12. $28 \div 7 = 4$, $28 \div 4 = 7$
13. $48 \div 12 = 4$, $48 \div 4 = 12$
14. $78 \div 13 = 6$, $78 \div 6 = 13$
15. $76 \div 4 = 19$, $76 \div 19 = 4$
16. $7 \times 4 = 28$, $4 \times 7 = 28$
17. $5 \times 9 = 45$, $9 \times 5 = 45$
18. $8 \times 7 = 56$, $7 \times 8 = 56$
19. $4 \times 13 = 52$, $13 \times 4 = 52$
20. $17 \times 6 = 102$, $6 \times 17 = 102$
21. $19 \times 4 = 76$, $4 \times 19 = 76$
22. 5
23. 7
24. 9
25. 49
26. 63
27. 6
28. 66
29. 6
30. 5

Exercise 19

1. 5
2. 18
3. 0
4. 1
5. 1
6. 0
7. division not possible
8. 1
9. 0
10. 8
11. 49
12. 1
13. 125
14. 0
15. division not possible

Exercise 20

1. $36 \div 2$

$$\begin{array}{r} 2 \overline{) 36} 18 \\ \underline{36} \\ 0 \end{array}$$

Quotient = 18

3. $60 \div 5$

$$\begin{array}{r} 5 \overline{) 60} 12 \\ \underline{60} \\ 0 \end{array}$$

Quotient = 12

2. $48 \div 3$

$$\begin{array}{r} 3 \overline{) 48} 16 \\ \underline{48} \\ 0 \end{array}$$

Quotient = 16

4. $963 \div 3$

$$\begin{array}{r} 3 \overline{) 963} 321 \\ \underline{963} \\ 0 \end{array}$$

Quotient = 321

5. $432 \div 3$

$$\begin{array}{r} 3 \overline{)432} \quad 144 \\ \underline{432} \\ 0 \end{array}$$

Quotient = 144

7. $856 \div 8$

$$\begin{array}{r} 8 \overline{)856} \quad 107 \\ \underline{856} \\ 0 \end{array}$$

Quotient = 107

9. $9303 \div 7$

$$\begin{array}{r} 7 \overline{)9303} \quad 1329 \\ \underline{9303} \\ 0 \end{array}$$

Quotient = 1329

11. $9416 \div 8$

$$\begin{array}{r} 8 \overline{)9416} \quad 1177 \\ \underline{9416} \\ 0 \end{array}$$

Quotient = 1177

13. $433 \div 3$

$$\begin{array}{r} 3 \overline{)433} \quad 144 \quad \text{Quotient} \\ \underline{3 \downarrow} \\ 13 \\ \underline{12 \downarrow} \\ 13 \\ \underline{12} \\ 1 \quad \text{Remainder} \end{array}$$

6. $912 \div 8$

$$\begin{array}{r} 8 \overline{)912} \quad 114 \\ \underline{912} \\ 0 \end{array}$$

Quotient = 114

8. $9056 \div 4$

$$\begin{array}{r} 4 \overline{)9056} \quad 2264 \\ \underline{9056} \\ 0 \end{array}$$

Quotient = 2264

10. $9135 \div 9$

$$\begin{array}{r} 9 \overline{)9135} \quad 1015 \\ \underline{9135} \\ 0 \end{array}$$

Quotient = 1015

12. $5418 \div 7$

$$\begin{array}{r} 7 \overline{)5418} \quad 774 \\ \underline{5418} \\ 0 \end{array}$$

Quotient = 774

14. $787 \div 8$

$$\begin{array}{r} 8 \overline{)787} \quad 98 \quad \text{Quotient} \\ \underline{72 \downarrow} \\ 67 \\ \underline{64} \\ 3 \quad \text{Remainder} \end{array}$$

15. $3516 \div 8$

$$\begin{array}{r}
 8 \overline{) 3516} \quad 439 \text{ Quotient} \\
 \underline{32} \downarrow \\
 31 \downarrow \\
 \underline{24} \downarrow \\
 76 \\
 \underline{72} \\
 4 \text{ Remainder}
 \end{array}$$

16. $357 \div 4$

$$\begin{array}{r}
 4 \overline{) 357} \quad 89 \\
 \underline{32} \downarrow \\
 37 \text{ Quotient} \\
 \underline{36} \\
 1 \text{ Remainder}
 \end{array}$$

Check :

Dividend = Divisor $\times$ Quotient + Remainder

$$357 = 4 \times 89 + 1$$

$$357 = 356 + 1$$

$$357 = 357$$

Hence the answer is correct.

17. $458 \div 6$

$$\begin{array}{r}
 6 \overline{) 458} \quad 76 \\
 \underline{42} \downarrow \\
 38 \text{ Quotient} \\
 \underline{36} \\
 2 \text{ Remainder}
 \end{array}$$

Check :

Dividend = Divisor $\times$ Quotient + Remainder

$$458 = 6 \times 76 + 2$$

$$458 = 456 + 2$$

$$458 = 458$$

Hence the answer is correct.

18. $2803 \div 9$

$$\begin{array}{r}
 9 \overline{) 2803} \quad 311 \\
 \underline{27} \downarrow \\
 10 \downarrow \\
 \underline{9} \downarrow \\
 13 \\
 \underline{9} \\
 4 \text{ Remainder}
 \end{array}$$

Check :

Dividend = Divisor $\times$ Quotient + Remainder

$$2803 = 9 \times 311 + 4$$

$$2803 = 2799 + 4$$

$$2803 = 2803$$

Hence the answer is correct.

Exercise 21

1. $58 \div 10$

$$\begin{array}{r} 10 \overline{) 58} \quad 5 \\ \underline{50} \\ 8 \end{array}$$

Dividend = Divisor $\times$ Quotient + Remainder

$58 = 10 \times 5 + 8$

$58 = 50 + 8$

$58 = 58$ Hence verified

2. $65 \div 10$

$$\begin{array}{r} 10 \overline{) 65} \quad 6 \\ \underline{60} \\ 5 \end{array}$$

Dividend = Divisor $\times$ Quotient + Remainder

$65 = 10 \times 6 + 5$

$65 = 60 + 5$

$65 = 65$ Hence verified

3. $746 \div 10$

$$\begin{array}{r} 10 \overline{) 746} \quad 74 \\ \underline{740} \\ 6 \end{array}$$

Dividend = Divisor $\times$ Quotient + Remainder

$746 = 10 \times 74 + 6$

$746 = 740 + 6$

$746 = 746$ Hence verified

4. $908 \div 10$

$$\begin{array}{r} 10 \overline{) 908} \quad 90 \\ \underline{900} \\ 8 \end{array}$$

Dividend = Divisor $\times$ Quotient + Remainder

$908 = 10 \times 90 + 8$

$908 = 900 + 8$

$908 = 908$ Hence verified

5. $2236 \div 10$

$$\begin{array}{r} 10 \overline{) 2236} \quad 223 \\ \underline{2230} \\ 6 \end{array}$$

Dividend = Divisor $\times$ Quotient + Remainder

$2236 = 10 \times 223 + 6$

$2236 = 2230 + 6$

$2236 = 2236$ Hence verified

6. 9, 8

7. 7, 5

8. 5, 9

9. 8, 4

10. 17, 9

11. 18, 8

12. 34, 6

13. 54, 9

14. 280, 9

15. 630, 5

Exercise 22

1. No. of boxes of apples = 448 boxes

No. of trucks can carry 448 boxes of apples

= 7 trucks

No. of boxes of apples each truck can carry = $448 \div 7$

$\therefore$ 1 truck can carry 64 boxes of apples.

$$\begin{array}{r} 7 \overline{) 448} \quad 64 \\ \underline{42} \\ 28 \\ \underline{28} \\ 0 \end{array}$$

2. Atul travelled in 3 days = 483 kilometres

Atul travelled in 1 day = $483 \div 3$

$$\begin{array}{r} 3\overline{)483} \quad 161 \\ \underline{483} \\ 0 \end{array}$$

$\therefore$ Atul travelled 161 kilometres each day.

3. No. of trees in 9 rows = 837 trees

No. of trees in 1 row = $837 \div 9$

$$\begin{array}{r} 9\overline{)837} \quad 93 \\ \underline{81} \\ 27 \\ \underline{27} \\ 0 \end{array}$$

$\therefore$ There are 93 trees in each row.

4. No. of students in a school = 984

No. of classes in the school = 8

No. of students in each class = $984 \div 8$

$$\begin{array}{r} 8\overline{)984} \quad 123 \\ \underline{984} \\ 0 \end{array}$$

$\therefore$ There are 123 students in each class.

5. No. of persons planted 828 trees = 6 persons

No. of trees planted by each person = $828 \div 6$

$$\begin{array}{r} 6\overline{)828} \quad 138 \\ \underline{828} \\ 0 \end{array}$$

$\therefore$ 138 trees are planted by each person.

6. No. of notebooks having 960 pages altogether = 5 notebooks

No. of pages each notebook have = $960 \div 5$

$$\begin{array}{r} 5 \overline{)960} \quad 192 \\ \underline{960} \\ 0 \end{array}$$

∴ There are 192 pages in each note book.

7. Flowers Nidhi picked = 378 flowers
 Flowers she put in each vase = 10 flowers
 No. of flowers vase she used = $378 \div 10$

$$\begin{array}{r} 10 \overline{)378} \quad 37 \\ \underline{370} \\ 8 \end{array}$$

∴ She used 37 vases and 8 flowers were left over.

8. Product of two numbers = 1224
 First number = 6
 Second number = $1224 \div 6$

$$\begin{array}{r} 6 \overline{)1224} \quad 204 \\ \underline{1224} \\ 0 \end{array}$$

∴ the second number is 204.

9. No. of days in a week = 7 days
 No. of eggs produced in 1 week = 1743 eggs
 No. of eggs produced in 1 day = $1743 \div 7$

$$\begin{array}{r} 7 \overline{)1743} \quad 249 \\ \underline{1743} \\ 0 \end{array}$$

∴ No. of eggs produced each day = 249.

10. Cost of each book = ₹9
 Money he gave to the wholesaler = ₹7820
 No. of books he bought = $7820 \div 9$

$$\begin{array}{r} 9 \overline{)7820} \quad 867 \\ \underline{7803} \\ 17 \end{array}$$

∴ He bought 867 books and got ₹17 back from the wholesaler.

Test Paper

- I. (a) 7, 15, 3, 10 (b) 4, 20, 12, 19
 (c) 60, 10, 100, 90 (d) 8, 64, 76, 61
 (e) 10, 200, 300, 220

II. 1. (i) 8560

2. (b) zero plus any number equals that number

3. Baseball cards Mickey has = 288

Baseball cards Joy has = 363

Baseball cards John has = 412

Baseball cards Kevin has = 126

Total baseball cards altogether = 1179

4. (iii) People visited zoo on Friday = 1250

People visited zoo on Saturday = $1250 \times 3 = 3750$

5. Naman bought shoes for = ₹ 430

Naman bought shirt for = ₹ 300

Naman bought belt for = + ₹ 100

Total money Naman spent = ₹ 830

Money shopkeeper gave Naman back = $1000 - 830$

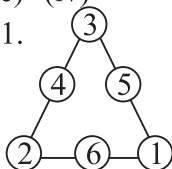
$$\begin{array}{r} 1000 \\ - 830 \\ \hline 170 \end{array}$$

(iii) The shopkeeper gave ₹ 170 to Naman.

6. (iii) Dividend = (Divisor $\times$ Quotient) + Remainder

- III. (a) (iii) (b) (i) (c) (v) (d) (ii)
 (e) (iv)

IV. 1.



2.

	<u>800</u>	
<u>300</u>		<u>500</u>
<u>100</u>	<u>200</u>	<u>300</u>

3. 30, yes.

4

Fractional Numbers

Exercise 23

1. Do yourself
2. (a) $\frac{3}{4}, \frac{1}{4}$ (b) $\frac{3}{6}, \frac{3}{6}$ (c) $\frac{6}{9}, \frac{3}{9}$
3. (a) 2 (b) 3 (c) 6 (d) 9
4. (a) three-fifths (b) five-ninths
(c) eight-ninths (d) four-sevenths
(e) nine-tenths (f) six-eighths
5. (a) $\frac{7}{8}$ (b) $\frac{1}{6}$ (c) $\frac{3}{7}$ (d) $\frac{3}{8}$
(e) $\frac{2}{9}$ (f) $\frac{7}{9}$
6. (a) $\frac{2}{5}$ (b) $\frac{3}{7}$ (c) $\frac{5}{9}$ (d) $\frac{8}{11}$
(e) $\frac{15}{17}$
7. (a) 3, 8 (b) 11, 13 (c) 13, 17 (d) 17, 25
(e) 19, 31

Exercise 24

1. (a) $\frac{2}{5} \times \frac{4}{4} = \frac{8}{20}, \frac{2}{5} \times \frac{5}{5} = \frac{10}{25}, \frac{2}{5} \times \frac{6}{6} = \frac{12}{30}$
(b) $\frac{3}{4} \times \frac{4}{4} = \frac{12}{16}, \frac{3}{4} \times \frac{5}{5} = \frac{15}{20}, \frac{3}{4} \times \frac{6}{6} = \frac{18}{24}$
(c) $\frac{4}{7} \times \frac{4}{4} = \frac{16}{28}, \frac{4}{7} \times \frac{5}{5} = \frac{20}{35}, \frac{4}{7} \times \frac{6}{6} = \frac{24}{42}$
(d) $\frac{3}{5} \times \frac{4}{4} = \frac{12}{20}, \frac{3}{5} \times \frac{5}{5} = \frac{15}{25}, \frac{3}{5} \times \frac{6}{6} = \frac{18}{30}$
(e) $\frac{2}{9} \times \frac{4}{4} = \frac{8}{36}, \frac{2}{9} \times \frac{5}{5} = \frac{10}{45}, \frac{2}{9} \times \frac{6}{6} = \frac{12}{54}$

$$2. \quad (a) \quad \frac{1}{4} \times \frac{4}{4} = \frac{4}{16}$$

$$(b) \quad \frac{16}{25} \times \frac{2}{2} = \frac{32}{50}$$

$$(c) \quad \frac{15}{20} \div \frac{5}{5} = \frac{3}{4}$$

$$(d) \quad \frac{9}{21} \div \frac{3}{3} = \frac{3}{7}$$

$$(e) \quad \frac{6}{7} \times \frac{4}{4} = \frac{24}{28}$$

$$(f) \quad \frac{7}{9} \times \frac{7}{7} = \frac{49}{63}$$

$$3. \quad (a) \quad \frac{8}{20} \quad \text{and} \quad \frac{10}{25}$$

$$= \frac{8}{20} \times \frac{10}{25}$$

$$= 8 \times 25 = 200 \quad \text{and} \quad 20 \times 10 = 200$$

$\therefore$ they both are equivalent fractions.

$$(b) \quad \frac{4}{6} \quad \text{and} \quad \frac{12}{18}$$

$$= \frac{4}{6} \times \frac{12}{18}$$

$$= 4 \times 18 = 72 \quad \text{and} \quad 6 \times 12 = 72$$

$\therefore$ they both are equivalent fractions.

$$(c) \quad \frac{4}{16} \quad \text{and} \quad \frac{16}{48}$$

$$= \frac{4}{16} \times \frac{16}{48}$$

$$= 4 \times 48 = 192 \quad \text{and} \quad 16 \times 16 = 256$$

$\therefore$ they both are not equivalent fractions.

$$(d) \quad \frac{6}{8} \quad \text{and} \quad \frac{12}{21}$$

$$= \frac{6}{8} \times \frac{12}{21}$$

$$= 6 \times 21 = 126 \text{ and } 8 \times 12 = 96$$

$\therefore$ they both are not equivalent fractions.

$$\begin{aligned} \text{(e)} \quad & \frac{3}{15} \quad \text{and} \quad \frac{4}{20} \\ & = \frac{3}{15} \times \frac{4}{20} \end{aligned}$$

$$= 3 \times 20 = 60 \text{ and } 15 \times 4 = 60$$

$\therefore$ they both are equivalent fractions.

$$\begin{aligned} \text{(f)} \quad & \frac{4}{12} \quad \text{and} \quad \frac{5}{16} \\ & = \frac{4}{12} \times \frac{5}{16} \end{aligned}$$

$$= 4 \times 16 = 64 \text{ and } 12 \times 5 = 60$$

$\therefore$ they both are not equivalent fractions.

$$\begin{aligned} \text{(g)} \quad & \frac{8}{12} \quad \text{and} \quad \frac{14}{21} \\ & = \frac{8}{12} \times \frac{14}{21} \end{aligned}$$

$$= 8 \times 21 = 168 \text{ and } 12 \times 14 = 168$$

$\therefore$ they both are equivalent fractions.

$$\begin{aligned} \text{(h)} \quad & \frac{9}{27} \quad \text{and} \quad \frac{1}{3} \\ & = \frac{9}{27} \times \frac{1}{3} \end{aligned}$$

$$= 9 \times 3 = 27 \text{ and } 27 \times 1 = 27$$

$\therefore$ they both are equivalent fractions.

Exercise 25

$$1. \quad (a) \quad \frac{5}{7} \times \frac{6}{7} \\ = 35 < 42$$

$$= \frac{5}{7} < \frac{6}{7}$$

$$(b) \quad \frac{3}{5} \times \frac{3}{8} \\ = 24 > 15$$

$$= \frac{3}{5} > \frac{3}{8}$$

$$(c) \quad \frac{9}{10} \times \frac{3}{10} \\ = 90 > 30 \\ = \frac{9}{10} > \frac{3}{10}$$

$$(d) \quad \frac{5}{12} \times \frac{5}{14} \\ = 70 > 60 \\ = \frac{5}{12} < \frac{5}{14}$$

$$(e) \quad \frac{6}{8} \times \frac{7}{8} \\ = 48 < 56 \\ = \frac{6}{8} < \frac{7}{8}$$

$$(f) \quad \frac{16}{19} \times \frac{16}{25} \\ = 400 > 304$$

$$= \frac{16}{19} > \frac{16}{25}$$

$$(g) \quad \frac{4}{9} \times \frac{7}{9} \\ = 36 < 63$$

$$= \frac{4}{9} < \frac{7}{9}$$

$$(h) \quad \frac{3}{4} \times \frac{3}{8} \\ = 24 > 12$$

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

$$(i) \quad \frac{12}{39} \times \frac{12}{19} \\ = 248 < 408$$

$$= \frac{12}{39} < \frac{13}{19}$$

$$(j) \quad \frac{7}{9} \times \frac{5}{9} \\ = 63 > 45$$

$$= \frac{7}{9} > \frac{5}{9}$$

$$2. \quad (a) \quad \frac{2}{5} \times \frac{1}{5}$$

$$10 > 5$$

$$= \frac{2}{5} > \frac{1}{5}$$

$$\therefore \frac{1}{5} \text{ is smaller}$$

$$(b) \quad \frac{4}{9} \times \frac{4}{5}$$

$$20 < 36$$

$$= \frac{4}{9} < \frac{4}{5}$$

$$\therefore \frac{4}{9} \text{ is smaller}$$

$$(c) \quad \frac{21}{25} \times \frac{19}{25}$$

$$525 > 475$$

$$= \frac{21}{25} > \frac{19}{25}$$

$$\therefore \frac{19}{25} \text{ is smaller}$$

$$(d) \quad \frac{6}{11} \times \frac{6}{8}$$

$$48 < 66$$

$$\frac{6}{11} < \frac{6}{8}$$

$$\therefore \frac{6}{11} \text{ is smaller}$$

$$(e) \quad \frac{5}{16} \times \frac{5}{13}$$

$$65 < 80$$

$$= \frac{5}{16} > \frac{5}{13}$$

$$\therefore \frac{5}{16} \text{ is smaller}$$

$$(f) \quad \frac{2}{3} \times \frac{2}{13}$$

$$26 > 6$$

$$\frac{2}{3} > \frac{2}{13}$$

$$\therefore \frac{2}{13} \text{ is smaller}$$

$$(g) \quad \frac{8}{11} \times \frac{10}{11}$$

$$88 < 110$$

$$= \frac{8}{11} < \frac{10}{11}$$

$$\therefore \frac{8}{11} \text{ is smaller}$$

$$(h) \quad \frac{63}{100} \times \frac{79}{100}$$

$$6300 < 7900$$

$$\frac{63}{100} < \frac{79}{100}$$

$$\therefore \frac{79}{100} \text{ is smaller}$$

$$(i) \quad \frac{55}{94} \times \frac{64}{94}$$

$$4700 < 6016$$

$$= \frac{55}{94} < \frac{64}{94}$$

$$\therefore \frac{55}{94} \text{ is smaller}$$

$$3. \quad (a) \quad \frac{5}{8} \times \frac{5}{7}$$

$$35 < 40$$

$$\frac{5}{8} < \frac{5}{7}$$

$$(b) \quad \frac{3}{21} \times \frac{5}{21}$$

$$63 < 105$$

$$\frac{3}{21} < \frac{5}{21}$$

$$(c) \quad \frac{11}{13} \times \frac{11}{16}$$

$$176 > 143$$

$$\frac{11}{13} > \frac{11}{16}$$

$$(d) \quad \frac{3}{11} \times \frac{3}{16}$$

$$48 > 33$$

$$\frac{3}{11} > \frac{3}{16}$$

$$(e) \quad \frac{7}{17} \times \frac{10}{17}$$

$$119 < 170$$

$$\frac{7}{17} < \frac{10}{17}$$

$$(f) \quad \frac{7}{15} \times \frac{14}{15}$$

$$105 < 210$$

$$\frac{7}{15} < \frac{14}{15}$$

$$(g) \quad \frac{9}{11} \times \frac{9}{9}$$

$$81 < 99$$

$$\frac{9}{11} > \frac{9}{9}$$

$$(h) \quad \frac{11}{13} \times \frac{11}{15}$$

$$165 > 143$$

$$\frac{11}{13} > \frac{11}{15}$$

$$(i) \quad \frac{25}{39} \times \frac{25}{27}$$

$$675 < 975$$

$$\frac{25}{39} < \frac{25}{27}$$

$$4. \quad (a) \quad \frac{1}{9}, \frac{8}{9}, \frac{3}{9}, \frac{7}{9}$$

In this question denominators are same.

$$\text{So,} \quad \frac{1}{9} < \frac{3}{9} < \frac{7}{9} < \frac{8}{9}$$

Hence, in ascending order we will write it as,

$$\frac{1}{9} < \frac{3}{9} < \frac{7}{9} < \frac{8}{9}$$

$$(b) \quad \frac{3}{5}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$$

In this question denominators are same,

$$\text{So,} \quad \frac{1}{5} < \frac{2}{5} < \frac{3}{5} < \frac{4}{5}$$

Hence, in ascending order we will write it - as

$$\frac{1}{5} < \frac{2}{5} < \frac{3}{5} < \frac{4}{5}$$

$$(c) \quad \frac{11}{13}, \frac{7}{13}, \frac{5}{13}, \frac{9}{13}$$

In this question denominators are same.

$$\text{So,} \quad \frac{5}{13} < \frac{7}{13} < \frac{9}{13} < \frac{11}{13}$$

Hence in ascending order we will write it as

$$\frac{5}{13} < \frac{7}{13} < \frac{9}{13} < \frac{11}{13}$$

(d) $\frac{11}{25}, \frac{11}{27}, \frac{11}{13}, \frac{11}{19}$

In this question numerators are same.

So, $\frac{11}{27} < \frac{11}{25} < \frac{11}{19} < \frac{11}{13}$

Hence in ascending we will write it as

$$\frac{11}{27} < \frac{11}{25} < \frac{11}{19} < \frac{11}{13}$$

(e) $\frac{11}{55}, \frac{27}{55}, \frac{39}{55}, \frac{47}{55}$

In this question denominators are same.

So, $\frac{11}{55} < \frac{27}{55} < \frac{39}{55} < \frac{47}{55}$

Hence, in ascending order we will write it as

$$\frac{11}{55} < \frac{27}{55} < \frac{39}{55} < \frac{47}{55}$$

5. (a) $\frac{3}{7}, \frac{3}{8}, \frac{3}{10}, \frac{3}{5}$

In this question numerators are same.

So, $\frac{3}{5} > \frac{3}{7} > \frac{3}{8} > \frac{3}{10}$

Hence, in descending order we will write it as

$$\frac{3}{5} > \frac{3}{7} > \frac{3}{8} > \frac{3}{10}$$

(b) $\frac{1}{8}, \frac{2}{8}, \frac{5}{8}, \frac{7}{8}$

In this question demoninators are same.

So, $\frac{7}{8} > \frac{5}{8} > \frac{2}{8} > \frac{1}{8}$

Hence, in descending order we will write it as

$$\frac{7}{8} > \frac{5}{8} > \frac{2}{8} > \frac{1}{8}$$

(c) $\frac{13}{27}, \frac{14}{27}, \frac{16}{27}, \frac{12}{27}$

In this question denominators are same.

So, $\frac{16}{27} > \frac{14}{27} > \frac{13}{27} > \frac{12}{27}$

Hence, in descending order we will write it as

$$\frac{16}{27} > \frac{14}{27} > \frac{13}{27} > \frac{12}{27}$$

(d) $\frac{10}{25}, \frac{9}{25}, \frac{16}{25}, \frac{13}{25}$

In this question denominators are same.

So, $\frac{16}{25} > \frac{13}{25} > \frac{10}{25} > \frac{9}{25}$

Hence in descending order we will write it as

$$\frac{16}{25} > \frac{13}{25} > \frac{10}{25} > \frac{9}{25}$$

(e) $\frac{5}{7}, \frac{5}{8}, \frac{5}{11}, \frac{5}{6}$

In this question numerators are same.

$$\text{So, } \frac{5}{6} > \frac{5}{7} > \frac{5}{8} > \frac{5}{11}$$

Hence in descending order we will write it as

$$\frac{5}{6} > \frac{5}{7} > \frac{5}{8} > \frac{5}{11}$$

Exercise 26

$$1. \quad (a) \quad \frac{1}{3} + \frac{1}{3}$$

$$\Rightarrow \frac{1+1}{3} = \frac{2}{3}$$

$$(c) \quad \frac{3}{8} + \frac{2}{8}$$

$$\Rightarrow \frac{3+2}{8} = \frac{5}{8}$$

$$(e) \quad \frac{8}{13} + \frac{3}{13}$$

$$\Rightarrow \frac{8+3}{13} = \frac{11}{13}$$

$$(g) \quad \frac{11}{19} + \frac{4}{19}$$

$$\Rightarrow \frac{11+4}{19} = \frac{15}{19}$$

$$(i) \quad \frac{2}{10} + \frac{5}{10}$$

$$\Rightarrow \frac{2+5}{10} = \frac{7}{10}$$

$$2. \quad (a) \quad \frac{4}{9} - \frac{2}{9}$$

$$\Rightarrow \frac{4-2}{9} = \frac{2}{9}$$

$$(b) \quad \frac{2}{7} + \frac{3}{7}$$

$$\Rightarrow \frac{2+3}{7} = \frac{5}{7}$$

$$(d) \quad \frac{6}{11} + \frac{4}{11}$$

$$\Rightarrow \frac{6+4}{11} = \frac{10}{11}$$

$$(f) \quad \frac{9}{32} + \frac{8}{32}$$

$$\Rightarrow \frac{9+8}{32} = \frac{17}{32}$$

$$(h) \quad \frac{5}{16} + \frac{8}{16}$$

$$\Rightarrow \frac{5+8}{16} = \frac{13}{16}$$

$$(b) \quad \frac{5}{8} - \frac{2}{8}$$

$$\Rightarrow \frac{5-2}{8} = \frac{3}{8}$$

$$(c) \frac{7}{8} - \frac{2}{8}$$

$$\Rightarrow \frac{7-2}{8} = \frac{5}{8}$$

$$(e) \frac{17}{19} - \frac{11}{19}$$

$$\Rightarrow \frac{17-11}{19} = \frac{6}{19}$$

$$(g) \frac{35}{49} - \frac{11}{49}$$

$$\Rightarrow \frac{35-11}{49} = \frac{24}{49}$$

$$(i) \frac{45}{69} - \frac{13}{69}$$

$$\Rightarrow \frac{45-13}{69} = \frac{32}{69}$$

$$3. (a) \frac{8}{21} + \frac{3}{21}$$

$$\Rightarrow \frac{8+3}{21} = \frac{11}{21}$$

$$(c) \frac{19}{31} + \frac{8}{31}$$

$$\Rightarrow \frac{19+8}{31} = \frac{27}{31}$$

$$(e) \frac{9}{20} - \frac{8}{20}$$

$$\Rightarrow \frac{9-8}{20} = \frac{1}{20}$$

$$(g) \frac{21}{47} + \frac{10}{47}$$

$$\Rightarrow \frac{21+10}{47} = \frac{31}{47}$$

$$(d) \frac{4}{5} - \frac{2}{5}$$

$$\Rightarrow \frac{4-2}{5} = \frac{2}{5}$$

$$(f) \frac{27}{46} - \frac{18}{46}$$

$$\Rightarrow \frac{27-18}{46} = \frac{9}{46}$$

$$(h) \frac{61}{81} - \frac{9}{81}$$

$$\Rightarrow \frac{61-9}{81} = \frac{52}{81}$$

$$(b) \frac{19}{25} - \frac{14}{25}$$

$$\Rightarrow \frac{19-14}{25} = \frac{5}{25}$$

$$(d) \frac{37}{67} - \frac{25}{67}$$

$$\Rightarrow \frac{37-25}{67} = \frac{12}{67}$$

$$(f) \frac{16}{33} - \frac{12}{33}$$

$$\Rightarrow \frac{16-12}{33} = \frac{4}{33}$$

$$(h) \frac{4}{11} + \frac{5}{11}$$

$$\Rightarrow \frac{4+5}{11} = \frac{9}{11}$$

$$(i) \quad \frac{68}{79} - \frac{31}{79}$$

$$\Rightarrow \frac{68-31}{79} = \frac{37}{79}$$

Exercise 27

1. Property Aman gave to his son = $\frac{3}{5}$

Property Aman gave to his daughter = $\frac{2}{5}$

Who got more property = $\frac{3}{5} > \frac{2}{5}$

Aman gave more property to his son by = $\frac{3}{5} - \frac{2}{5} = \frac{3-2}{5} = \frac{1}{5}$

2. Part of book Riya read in one hour = $\frac{3}{16}$

Part of book Kruti read in one hour = $\frac{5}{16}$

Who read more book = $\frac{3}{16} < \frac{5}{16}$

Kruti read more book by = $\frac{5}{16} - \frac{3}{16} = \frac{5-3}{16} = \frac{2}{16}$ or $\frac{1}{8}$

3. $\frac{9}{11} - \frac{7}{11}$

$$\Rightarrow \frac{9-7}{11} = \frac{2}{11}$$

4. $\frac{18}{25} - \frac{6}{25}$

$$\Rightarrow \frac{18-6}{25} = \frac{12}{25}$$

5. Money Renu spent on fruits = $\frac{6}{13}$

Money Renu spent on vegetables = $\frac{4}{13}$

Total money she spent = $\frac{6}{13} + \frac{4}{13} = \frac{6+4}{13} = \frac{10}{13}$

6. Work Rahul did on first day = $\frac{4}{9}$

Work Rahul did on second day = $\frac{1}{9}$

Work he did in two days = $\frac{4}{9} + \frac{1}{9} = \frac{5}{9}$

7. Farmer ploughs his field on first day = $\frac{6}{13}$

Farmer ploughs his field on second day = $\frac{5}{13}$

Farmer ploughs his field in two days = $\frac{6}{13} + \frac{5}{13} = \frac{6+5}{13} = \frac{11}{13}$

8. Part of book Vicky read in one hour = $\frac{15}{64}$

Part of book Renu read in one hour = $\frac{19}{64}$

Who read more book = $\frac{15}{64} < \frac{19}{64}$

Renu read more book by = $\frac{19}{64} - \frac{15}{64} = \frac{19-15}{64} = \frac{4}{64}$

9. Population of city is women = $\frac{34}{103}$

Population of city is men = $\frac{61}{103}$

Population more in number = $\frac{61}{103} > \frac{34}{103}$

∴ Men are more in population.

Test Paper

I. (a) 2

(b) 3

(c) 4

(d) 7 violet, indigo, blue, green, yellow, orange, red

II. 1. (ii) 5 2. (i) $\frac{3}{5} + \frac{2}{5} = \frac{2+3}{5} = \frac{5}{5}$

3. (i) $\frac{3}{6}$

4. (iii) $\frac{1}{5} > \frac{1}{8} = \frac{1}{5} \times \frac{1}{8} = 8 > 5 = \frac{1}{5} > \frac{1}{8}$

- III. (a) (iv) (b) (v) (c) (ii) (d) (i)
(e) (iii)

- IV. (a) $\frac{2}{3}$ (b) $\frac{1}{3}$ (c) 0 (d) $\frac{2}{3}$
(e) $\frac{3}{3}$

2. Do yourself

5

Money

Exercise 28

1. (a) Rupees twenty five and paise twenty five.
(b) Rupees eight and paise seventy-five.
(c) Paise seventy-five
(d) Rupees fifteen and paise eighty
2. (a) ₹20.75 (b) ₹30.60 (c) ₹80 (d) ₹0.78
3. (a) Rupees ninety paise eighty-five
(b) Rupees sixty-four and paise eight
(c) Paise eighty eight
(d) Paise seven
(e) Rupees seventy-five and paise eighty five.
4. (a) ₹25.75 (b) ₹36.55 (c) ₹42.05 (d) ₹86.35
(e) ₹97.09
5. (a) 8 rupees
= 1 rupees = 100 paise

$$= 8 \text{ rupees} = 8 \times 100 = 800 \text{ paise}$$

(b) 15 rupees

$$= 15 \text{ rupees} = 15 \times 100 = 1500 \text{ paise}$$

(c) 25 rupees = $25 \times 100 = 2500$ paise

(d) 36 rupees = $36 \times 100 = 3600$ paise

(e) 49 rupees = $49 \times 100 = 4900$ paise

(f) 72 rupees = $72 \times 100 = 7200$ paise

6. (a) ₹36.10 = $36 \times 100 + 10 = 3600 + 10 = 3610$ paise

(b) ₹55.85 = $55 \times 100 + 85 = 5500 + 85 = 5585$ paise

(c) ₹18.95 = $18 \times 100 + 95 = 1800 + 95 = 1895$ paise

(d) ₹40.08 = $40 \times 100 + 08 = 4000 + 08 = 4008$ paise

(e) ₹20.58 = $20 \times 100 + 58 = 2000 + 58 = 2058$ paise

(f) ₹0.75 = $0 \times 100 + 75 = 0 + 75 = 75$ paise

7. (a) 8 Rs. 75 paise = $8 \times 100 + 75 = 800 + 75 = 875$ paise

(b) 16 Rs. 5 paise = $16 \times 100 + 5 = 1600 + 5 = 1605$ paise

(c) 64 Rs. 8 paise = $64 \times 100 + 8 = 6400 + 8 = 6408$ paise

(d) 75 Rs. 90 paise = $75 \times 100 + 90 = 7500 + 90 = 7590$ paise

8. (a) 385 paise

$$1 \text{ paise} = \frac{1}{100}$$

$$385 \text{ p} = \frac{385}{100} = 3.85 = ₹3.85$$

$$(b) 805 \text{ p} = \frac{805}{100} = 8.05 = ₹8.05$$

$$(c) 999 \text{ p} = \frac{999}{100} = 9.99 = ₹9.99$$

$$(d) 2817 \text{ p} = \frac{2817}{100} = 28.17 = ₹28.17$$

$$9. (a) 218 \text{ p} = \frac{218}{100} = ₹2.18$$

$$(b) 520p = \frac{520}{100} = ₹5.20$$

$$(c) 908p = \frac{908}{100} = ₹9.08$$

$$(d) 1505p = \frac{1505}{100} = ₹15.05$$

Exercise 29

- | | | | |
|--------------|-------------|-------------|-------------|
| 1. ₹97.45 | 2. ₹133 | 3. ₹122.40 | 4. ₹177.38 |
| 5. ₹193.36 | 6. ₹168.77 | 7. ₹121.54 | 8. ₹149.19 |
| 9. ₹133.95 | 10. ₹65.79 | 11. ₹94.47 | 12. ₹127.06 |
| 13. ₹110.02 | 14. ₹173.15 | 15. ₹127.06 | 16. ₹215.65 |
| 17. ₹1064.80 | 18. ₹487.93 | 19. ₹36.33 | 20. ₹39.55 |
| 21. ₹46.57 | 22. ₹34.51 | 23. ₹27.50 | 24. ₹201.30 |
| 25. ₹30.91 | 26. ₹140.60 | 27. ₹114.30 | 28. ₹275.40 |
| 29. ₹405.39 | 30. ₹115.63 | 31. ₹26.15 | 32. ₹231.65 |

33. ₹99.60

- | | | |
|------------------------------|---|---------------|
| 34. Sneha bought a pen for | = | ₹15.25 |
| Sneha bought a note-book for | = | + ₹15.50 |
| Sneha bought a book for | = | + ₹29.95 |
| Money she spend in all | = | <u>₹60.72</u> |

- | | | |
|-------------------------------------|---|----------------|
| 35. Money Nonu got from his father | = | ₹45.00 |
| Money Nonu got from his mother | = | + ₹40.50 |
| Money Nanu got from his grandfather | = | + ₹48.75 |
| Total money he got in all | = | <u>₹154.25</u> |

- | | | |
|---------------------------------------|---|---------------|
| 36. Anju bought bread for | = | ₹10.00 |
| Anju bought butter for | = | + ₹20.50 |
| Anju bought eggs for | = | + ₹09.75 |
| Total money she spent in all | = | <u>₹40.25</u> |
| Money she gave to the shopkeeper | = | ₹100.00 |
| Money she will get back by shopkeeper | = | ₹100 – ₹40.25 |

$$\begin{array}{r}
 100.00 \\
 - 40.25 \\
 \hline
 59.75
 \end{array}$$

∴ Anju will get ₹59.75 from the shopkeeper.

Exercise 30

$$\begin{array}{r}
 1. \quad \text{₹} \quad \text{P.} \\
 8 \quad 35 \\
 \times \quad 8 \\
 \hline
 66 \quad 80
 \end{array}$$

$$\begin{array}{r}
 2. \quad \text{₹} \quad \text{P.} \\
 11 \quad 25 \\
 \times \quad 5 \\
 \hline
 56 \quad 25
 \end{array}$$

$$\begin{array}{r}
 3. \quad \text{₹} \quad \text{P.} \\
 17 \quad 08 \\
 \times \quad 8 \\
 \hline
 136 \quad 64
 \end{array}$$

$$\begin{array}{r}
 4. \quad \text{₹} \quad \text{P.} \\
 10 \quad 05 \\
 \times \quad 4 \\
 \hline
 40 \quad 20
 \end{array}$$

$$\begin{array}{r}
 5. \quad \text{₹} \quad \text{P.} \\
 15 \quad 25 \\
 \times \quad 6 \\
 \hline
 91 \quad 50
 \end{array}$$

$$\begin{array}{r}
 6. \quad \text{₹} \quad \text{P.} \\
 19 \quad 50 \\
 \times \quad 4 \\
 \hline
 78 \quad 00
 \end{array}$$

$$7. \text{ ₹}1031.10 \quad 8. \text{ ₹}1457.10 \quad 9. \text{ ₹}529.92 \quad 10. \text{ ₹}867.65$$

$$11. \text{ ₹}1198.80 \quad 12. \text{ ₹}1701.24$$

$$13. \text{ Cost of an envelope} = \text{₹}1.75$$

$$\text{Cost of 15 envelopes} = \text{₹}1.75 \times 15$$

$$\begin{array}{r}
 \text{₹} \quad \text{P.} \\
 1 \quad 75 \\
 \times \quad 15 \\
 \hline
 26 \quad 25
 \end{array}$$

$$\therefore \text{Cost of 15 envelopes} = \text{₹}26.25$$

$$14. \text{ Cost of one note-book} = \text{₹}10.50$$

Cost of 9 note-books = ₹10.50 × 9

$$\begin{array}{r}
 \text{₹} \quad \text{P.} \\
 10 \quad 50 \\
 \times \quad 9 \\
 \hline
 94 \quad 50
 \end{array}$$

∴ the cost of 9 note-books = ₹94.50

15. Cost of a chair = ₹250.50

Cost of one table = 8 × 250.50

$$\begin{array}{r}
 \text{₹} \quad \text{P.} \\
 250 \quad 50 \\
 \times \quad 8 \\
 \hline
 2004 \quad 00
 \end{array}$$

∴ Cost of one table = ₹2004

Test Paper

- I. 1. (a) ₹4 (b) 10 coins (c) left = ₹, right = p;
(d) ₹25.00 (e) Rupees = ₹ ; paise = p

II. 1. (iii) ₹12.25

$$\begin{array}{r}
 2. \text{ (iv)} \quad 8 \quad 7 \\
 + 1 \quad 9 \quad 2 \\
 + \quad 2 \quad 5 \\
 + 2 \quad 4 \quad 5 \\
 \hline
 5 \quad 4 \quad 9
 \end{array}$$

$$\begin{array}{r}
 3. \text{ (ii)} \quad \text{₹} \quad 5 \quad 0 \quad 0 \\
 - 1 \quad 2 \quad 5 \\
 \hline
 \text{₹} \quad 3 \quad 7 \quad 5
 \end{array}$$

$$\begin{array}{r}
 4. \text{ (ii)} \quad 15 \quad . \quad 50 \\
 \times 12 \\
 3100 \\
 15500 \\
 \hline
 \text{₹}186.00
 \end{array}$$

$$\begin{array}{r}
 5. \text{ (iii)} \quad 4 \quad 5 \\
 \times 5 \\
 \hline
 \text{₹} \quad 2 \quad 2 \quad 5
 \end{array}$$

III. (a) (i) (b) (v) (c) (iii) (d) (iv) (e) (ii)

IV. (a) ₹ 10.00 (b) ₹ 10.00 (c) ₹ 10.00 (d) ₹ 10.00

$$\begin{array}{r}
 - \text{₹} \quad 7.50 \\
 \hline
 \text{₹} \quad 2.50
 \end{array}$$

$$\begin{array}{r}
 - \text{₹} \quad 2.50 \\
 \hline
 \text{₹} \quad 7.50
 \end{array}$$

$$\begin{array}{r}
 - \text{₹} \quad 8.50 \\
 \hline
 \text{₹} \quad 1.50
 \end{array}$$

$$\begin{array}{r}
 - \text{₹} \quad 5.00 \\
 \hline
 \text{₹} \quad 5.00
 \end{array}$$

6

Metric Measures

Exercise 31

1. 4m

$$\Rightarrow 1\text{m} = 100\text{ cm}$$

$$4\text{m} = 400\text{ cm}$$

2. 13m

$$13\text{m} = 1300\text{ cm}$$

3. 35m = 3500 cm

4. 5m50cm

$$5\text{m}50\text{cm} = 5 \times 100 + 50 = 500 + 50 = 550\text{cm}$$

5. 20m 08cm

$$20\text{m } 08\text{cm} = 20 \times 100 + 08 = 2000 + 8 = 2008\text{cm}$$

6. 35m 85cm

$$35\text{m } 85\text{cm} = 35 \times 100 + 85 = 3500 + 85 = 3585\text{cm}$$

7. 70m 40cm

$$70\text{m } 40\text{cm} = 70 \times 100 + 40 = 7000 + 40 = 7040\text{cm}$$

8. 88m 99cm

$$88\text{m } 99\text{cm} = 88 \times 100 + 99 = 8800 + 99 = 8899\text{cm}$$

9. 70m6cm = 70 × 100 + 6 = 7000 + 6 = 7006cm

10. $1\text{cm} = \frac{1}{100}\text{ m}$

11. 1200 cm

$$400\text{ cm} = \frac{400}{100} = 4\text{m}$$

$$1200\text{cm} = \frac{1200}{100} = 12\text{m}$$

12. $180\text{cm} = \frac{180}{100} = 1.80 = 1\text{m } 80\text{cm}$

13. $666\text{cm} = \frac{666}{100} = 6\text{m } 66\text{cm}$

14. $550\text{cm} = \frac{550}{100} = 5\text{m } 50\text{cm}$

15. $809\text{ cm} = \frac{809}{100} = 8\text{m } 09\text{cm}$

$$16. 7766\text{cm} = \frac{7766}{100} = 77\text{m } 66\text{cm}$$

$$17. 4444\text{cm} = \frac{4444}{100} = 44\text{m } 44\text{cm}$$

$$18. 1305\text{cm} = \frac{1305}{100} = 13\text{m } 05\text{cm}$$

$$19. 1\text{ km} = 1000\text{m}$$

$$20. 16\text{km} = 16000\text{ m}$$

$$7\text{km} = 7000\text{ m}$$

$$21. 32\text{km} = 32000\text{m}$$

$$22. 8\text{km } 40\text{m} = 8000 + 40 = 8040\text{m}$$

$$23. 3\text{km } 150\text{m} = 3000 + 150 = 3150\text{m}$$

$$24. 4\text{km } 6\text{m} = 4000 + 6 = 4006\text{m}$$

$$25. 3\text{km } 205\text{m} = 3000 + 205 = 3205\text{m}$$

$$26. 4\text{km } 040\text{m} = 4000 + 040 = 4040\text{m}$$

$$27. 7\text{km } 300\text{m} = 7000 + 300 = 7300\text{m}$$

$$28. \text{ (a) } 700\text{cm} \quad \text{(b) } 850\text{cm} \quad \text{(c) } 1012\text{cm} \quad \text{(d) } 8\text{m}$$

$$\text{ (e) } 1575\text{m} \quad \text{(f) } 1606\text{cm} \quad \text{(g) } 5\text{km} \quad \text{(h) } 8\text{km}$$

$$\text{ (i) } 6060\text{m} \quad \text{(j) } 5550\text{m} \quad \text{(k) } 2\text{km } 50\text{m} \quad \text{(l) } 7030\text{m}$$

Exercise 32

$$1. \text{ (a) } 12\text{m } 36\text{cm} \text{ and } 37\text{m } 5\text{cm} \quad \text{(b)}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 12 \quad 36 \\ + 37 \quad 05 \\ \hline 49 \quad 41 \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 85 \quad 14 \\ + 44 \quad 06 \\ \hline 129 \quad 20 \end{array}$$

$$\text{ (c)} \quad \begin{array}{r} \text{m} \quad \text{cm} \\ 29 \quad 29 \\ + 40 \quad 78 \\ \hline 70 \quad 07 \end{array}$$

$$\text{ (d)} \quad \begin{array}{r} \text{m} \quad \text{cm} \\ 55 \quad 08 \\ + 22 \quad 76 \\ \hline 77 \quad 84 \end{array}$$

$$\begin{array}{r}
 \text{(e)} \quad \text{km} \quad \text{m} \\
 2 \ 175 \\
 + 2 \ 024 \\
 \hline
 4 \ 199
 \end{array}$$

$$\begin{array}{r}
 \text{(g)} \quad \text{km} \quad \text{m} \\
 16 \ 935 \\
 + 14 \ 185 \\
 \hline
 31 \ 020
 \end{array}$$

2. (a) 76m 15cm
 (c) 56m 97cm
 (e) 50km 576m

$$\begin{array}{r}
 3. \quad \text{(a)} \quad \text{m} \quad \text{cm} \\
 78 \ 13 \\
 - 24 \ 75 \\
 \hline
 53 \ 38
 \end{array}$$

$$\begin{array}{r}
 \text{(c)} \quad \text{m} \quad \text{cm} \\
 77 \ 15 \\
 - 42 \ 02 \\
 \hline
 35 \ 13
 \end{array}$$

$$\begin{array}{r}
 \text{(e)} \quad \text{km} \quad \text{m} \\
 8 \ 346 \\
 - 7 \ 185 \\
 \hline
 1 \ 161
 \end{array}$$

4. (a) 4m 40cm
 (c) 13m 75cm
 (e) 29km 676 m

$$\begin{array}{r}
 \text{(f)} \quad \text{km} \quad \text{m} \\
 09 \ 05 \\
 + 32 \ 78 \\
 \hline
 41 \ 83
 \end{array}$$

$$\begin{array}{r}
 \text{(h)} \quad \text{km} \quad \text{m} \\
 110 \ 05 \\
 + 025 \ 88 \\
 \hline
 135 \ 93
 \end{array}$$

- (b) 33m 38cm
 (d) 89cm 08m
 (f) 82km 272m

$$\begin{array}{r}
 \text{(b)} \quad \text{m} \quad \text{cm} \\
 92 \ 15 \\
 - 64 \ 28 \\
 \hline
 27 \ 90
 \end{array}$$

$$\begin{array}{r}
 \text{(d)} \quad \text{m} \quad \text{cm} \\
 28 \ 45 \\
 - 19 \ 65 \\
 \hline
 8 \ 80
 \end{array}$$

$$\begin{array}{r}
 \text{(f)} \quad \text{km} \quad \text{m} \\
 6 \ 087 \\
 - 4 \ 315 \\
 \hline
 1 \ 772
 \end{array}$$

- (b) 6m 89cm
 (d) 3km 586m
 (f) 8km 661m

Exercise 33

		m	cm
1. Cloth bought by merchant from first shop	=	25	50
Cloth bought by merchant from second shop	=	+ 36	75
Total length of cloth bought by merchant	=	<u>62</u>	<u>25</u>

		m	cm
2. Length of first thread in reel	=	120	05
Length of second thread in reel	=	128	85
Length of third thread in reel	=	+ 036	40
Total length of threads in reel	=	<u>315</u>	<u>30</u>

		km	m
3. Length of road bridge over river	=	4	280
Length of railway bridge over river	=	+ 3	625
Total length of the two bridges	=	<u>7</u>	<u>905</u>

		m	cm
4. Length of blue cloth in shop	=	100	00
Length of blue cloth sold	=	- 025	25
Length of blue cloth left in shop	=	<u>74</u>	<u>75</u>

5. Length of rope = 159m 27m
 Length of rope is red = 64m 22cm
 Length of rope is black = 36m 25cm
 Length of rope is yellow = 64m 22cm + 36m 25cm
 = 90m 47cm from 159m 27cm

	m	cm
	159	27
	- 090	47
	<u>68</u>	<u>80</u>

∴ 68m 80cm part of rope is yellow.

Exercise 34

1. (a) 2kg

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

$$2\text{kg} = 2000\text{g}$$

(b) 4kg

$$4\text{kg} = 4000\text{g}$$

(c) 6kg = 6000 gm

(d) $7\text{kg } 150\text{g} = 7 \times 1000 + 150 = 7000 + 150 = 7150\text{g}$

(e) $5\text{kg } 25\text{g} = 5 \times 1000 + 25 = 5000 + 25 = 5025\text{g}$

(f) $8\text{kg } 8\text{g} = 8 \times 1000 + 8 = 8000 + 8 = 8008\text{g}$

(g) $3\text{kg } 750\text{g} = 3 \times 1000 + 750 = 3000 + 750 = 3750\text{g}$

(h) $6\text{kg } 40\text{g} = 6 \times 1000 + 40 = 6000 + 40 = 6040\text{g}$

2. (a) 1234 g

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

$$1234\text{g} = \frac{1234}{1000} = 1\text{kg } 234\text{g}$$

(b) $2465\text{g} = \frac{2465}{1000} = 2\text{kg } 465\text{g}$

(c) $5687\text{g} = \frac{5687}{1000} = 5\text{kg } 687\text{g}$

(d) $7600\text{g} = \frac{7600}{1000} = 7\text{kg } 600\text{g}$

(e) $9005\text{g} = \frac{9005}{1000} = 9\text{kg } 005\text{g} = 9\text{kg } 5\text{g}$

(f) $8061\text{g} = \frac{8061}{1000} = 8\text{kg } 061\text{g}$

(g) $6007\text{g} = \frac{6007}{1000} = 6\text{kg } 007\text{g} = 6\text{kg } 7\text{g}$

(h) $2039\text{g} = \frac{2039}{1000} = 2\text{kg } 039\text{g} = 2\text{kg } 39\text{g}$

3. (a) 1kg (b) kilogram (c) 5000g (d) 4250g

(e) 3030g (f) 5005g (g) 83250g (h) 4kg

Exercise 35

$$\begin{array}{r}
 \text{(a)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 2 \quad 265 \\ + 6 \quad 125 \\ \hline 8 \quad 390 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(c)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 8 \quad 85 \\ + 2 \quad 35 \\ \hline 11 \quad 20 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(e)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 5 \quad 607 \\ + 1 \quad 125 \\ \hline 7 \quad 732 \end{array}
 \end{array}$$

2. (a) 9kg 704g

(c) 13kg 70g

(e) 14kg 285g

$$\begin{array}{r}
 \text{3. (a)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 9 \quad 370 \\ - 3 \quad 555 \\ \hline 5 \quad 815 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(c)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 5 \quad 150 \\ - 3 \quad 250 \\ \hline 1 \quad 900 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(e)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 5 \quad 105 \\ - 2 \quad 565 \\ \hline 2 \quad 540 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(b)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 3 \quad 145 \\ + 6 \quad 300 \\ \hline 9 \quad 445 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(d)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 6 \quad 570 \\ + 5 \quad 550 \\ \hline 12 \quad 120 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(f)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 8 \quad 07 \\ + 2 \quad 40 \\ \hline 10 \quad 47 \end{array}
 \end{array}$$

(b) 12kg 266g

(d) 10kg 470g

(f) 20kg 170g

$$\begin{array}{r}
 \text{(b)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 7 \quad 75 \\ - 2 \quad 50 \\ \hline 5 \quad 25 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(d)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 8 \quad 125 \\ - 5 \quad 345 \\ \hline 2 \quad 780 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(f)} \quad \begin{array}{r} \text{kg} \quad \text{g} \\ 35 \quad 125 \\ - 17 \quad 000 \\ \hline 18 \quad 125 \end{array}
 \end{array}$$

- | | |
|-----------------|---------------|
| 4. (a) 1kg 956g | (b) 7kg 189g |
| (c) 35kg 917g | (d) 2kg 060g |
| (e) 11kg 888g | (f) 21kg 809g |

Exercise 36

		kg	g
1. Apples Reema bought	=	3	500
Apples Rajni bought	=	+4	750
Total weight of apples	=	<u>8</u>	<u>250</u>
		kg	g
2. Weight of 1st packet	=	12	300
Weight of 2nd packet	=	+17	900
Total weight of two packets	=	<u>30</u>	<u>200</u>
		kg	g
3. Sugar Radhika purchased	=	9	500
Rice Radhika purchased	=	+8	500
Total weight of the articles	=	<u>18</u>	<u>000</u>
		kg	g
4. 1st packet of books weight	=	9	650
2nd packet of books weight	=	8	750
3rd packet of books weight	=	+7	350
Total weight of books	=	<u>25</u>	<u>750</u>
		kg	g
5. Weight of potatoes	=	5	250
Weight of tomatoes	=	0	450
Weight of onions	=	0	750
Total weight of vegetables	=	<u>6</u>	<u>450</u>
		kg	g
6. Refined oil boy bought from a shop	=	5	000
Weight after weighing again of oil	=	-3	575
Quantity of oil spill on ground	=	<u>1</u>	<u>425</u>

7. Weight of empty tin of ghee = 1kg 300 g
 Weight of tin after filling ghee = 19kg 100g
 Ghee the tin contain = 19kg 100g – 1kg 300 g

$$\begin{array}{r}
 \text{kg} \quad \text{g} \\
 19 \quad 100 \\
 - 1 \quad 300 \\
 \hline
 17 \quad 800
 \end{array}$$

∴ The tin contain 17kg 800g ghee.

8. Weight of girl = 36 000
 Weight she lost = -01 050
 Weight of girl now = 34 950

9. Weight of bucket full of water = 18 000
 Weight of empty bucket of water = -01 100
 Water bucket contain in it = 16 900

10. Difference of 22kg 35g and 21kg 893g = 142g
 Sum of 6kg 800g and 8kg 5g = 14kg 805g

$$\begin{array}{r}
 \text{kg} \quad \text{g} \\
 14 \quad 805 \\
 - 00 \quad 142 \\
 \hline
 14 \quad 663
 \end{array}$$

∴ The answer = 14kg 663g

Exercise 37

1. (a) 1ℓ = 1000ml
 5ℓ = 5000ml
 (c) 9ℓ = 9000ml
 (d) 2ℓ 250ml = 2 × 1000 + 250 = 2000 + 250 = 2250ml
 (e) 6ℓ 105ml = 6 × 1000 + 105 = 6000 + 105 = 6105ml
 (f) 2ℓ 50ml = 2 × 1000 + 50 = 2000 + 50 = 2050ml

$$(g) \quad 3\ell \, 209\text{ml} = 3 \times 1000 + 209 = 3000 + 209 = 3209\text{ml}$$

$$(h) \quad 4\ell \, 3\text{ml} = 4 \times 1000 + 3 = 4000 + 3 = 4003\text{ml}$$

$$(i) \quad 5\ell \, 423\text{ml} = 5 \times 1000 + 423 = 5000 + 423 = 5423\text{ml}$$

$$2. \quad (a) \quad 1\text{ml} = \frac{1}{1000} \ell$$

$$4000\text{ml} = \frac{4000}{1000} = 4\ell$$

$$(b) \quad 5300\text{ml} = \frac{5300}{1000} = 5.3\ell$$

$$(c) \quad 3468\text{ml} = \frac{3468}{1000} = 3.468\ell$$

$$(d) \quad 3075 \text{ ml} = \frac{3075}{1000} = 3.075\ell$$

$$(e) \quad 1330 \text{ ml} = \frac{1330}{1000} = 1.33\ell$$

$$(f) \quad 4005 \text{ ml} = \frac{4005}{1000} = 4.005\ell$$

$$(g) \quad 8070 \text{ ml} = \frac{8070}{1000} = 8.07\ell$$

$$(h) \quad 3058 \text{ ml} = \frac{3058}{1000} = 3.058\ell$$

$$(i) \quad 9375 \text{ ml} = \frac{9375}{1000} = 9.375\ell$$

$$3. \quad (a) \quad 8000\text{ml} \quad (b) \quad 9000\text{ml} \quad (c) \quad 6\ell \quad (d) \quad 4\ell$$

$$(e) \quad 2\ell \, 075\text{ml} \quad (f) \quad 3\ell \, 078\text{ml} \quad (g) \quad 8075\text{ml} \quad (h) \quad 8\ell \, 005\text{ml}$$

Exercise 38

$$1. \quad (a) \quad \begin{array}{r} \ell \quad \text{ml} \\ 7 \quad 557 \\ + 3 \quad 086 \\ \hline 10 \quad 543 \end{array}$$

$$(b) \quad \begin{array}{r} \ell \quad \text{ml} \\ 7 \quad 305 \\ + 9 \quad 488 \\ \hline 16 \quad 793 \end{array}$$

$$\begin{array}{r}
 \text{(c)} \quad \text{ℓ} \quad \text{mℓ} \\
 15 \quad 075 \\
 + 36 \quad 805 \\
 \hline
 51 \quad 880
 \end{array}$$

$$\begin{array}{r}
 \text{(e)} \quad \text{ℓ} \quad \text{mℓ} \\
 8 \quad 008 \\
 + 6 \quad 070 \\
 + 9 \quad 200 \\
 \hline
 23 \quad 278
 \end{array}$$

2. (a) 6ℓ 548mℓ

(c) 95ℓ 864mℓ

(e) 65ℓ 384mℓ

3. (a)

$$\begin{array}{r}
 \text{ℓ} \quad \text{mℓ} \\
 84 \quad 068 \\
 - 63 \quad 935 \\
 \hline
 20 \quad 133
 \end{array}$$

(c)

$$\begin{array}{r}
 \text{ℓ} \quad \text{mℓ} \\
 53 \quad 055 \\
 - 38 \quad 405 \\
 \hline
 14 \quad 650
 \end{array}$$

(e)

$$\begin{array}{r}
 \text{ℓ} \quad \text{mℓ} \\
 206 \quad 809 \\
 - 126 \quad 607 \\
 \hline
 80 \quad 202
 \end{array}$$

4. (a) 4ℓ 160mℓ

(c) 7ℓ 890mℓ

(e) 19ℓ 500mℓ

(g) 39ℓ 800mℓ

(i) 37ℓ 445mℓ

$$\begin{array}{r}
 \text{(d)} \quad \text{ℓ} \quad \text{mℓ} \\
 66 \quad 66 \\
 + 72 \quad 72 \\
 \hline
 139 \quad 38
 \end{array}$$

(f)

$$\begin{array}{r}
 \text{ℓ} \quad \text{mℓ} \\
 6 \quad 09 \\
 + 5 \quad 99 \\
 + 8 \quad 99 \\
 \hline
 21 \quad 07
 \end{array}$$

(b) 13ℓ 512mℓ

(d) 98ℓ 842mℓ

(f) 109ℓ 525mℓ

(b)

$$\begin{array}{r}
 \text{ℓ} \quad \text{mℓ} \\
 23 \quad 04 \\
 - 02 \quad 59 \\
 \hline
 20 \quad 45
 \end{array}$$

(d)

$$\begin{array}{r}
 \text{ℓ} \quad \text{mℓ} \\
 90 \quad 05 \\
 - 27 \quad 58 \\
 \hline
 62 \quad 47
 \end{array}$$

(b) 5ℓ 950mℓ

(d) 6ℓ 530mℓ

(f) 31ℓ 36mℓ

(g) 12ℓ 145mℓ

Exercise 39

- | | | <i>ℓ</i> | ml |
|----------------------------------|---|------------|------------|
| 1. Milk one cow gives daily | = | 08 | 350 |
| Milk other cow gives daily | = | + 10 | 750 |
| Milk both cow gives daily | = | <u>19</u> | <u>100</u> |
| 2. | | <i>ℓ</i> | ml |
| Petrol Nikunj bought on Monday | = | 4 | 500 |
| Petrol Nikunj bought on Saturday | = | 3 | 250 |
| Petrol Nikunj bought in two days | = | <u>7</u> | <u>750</u> |
| 3. | | <i>ℓ</i> | ml |
| Petrol sold to first car owner | = | 35 | 500 |
| Petrol sold to second car owner | = | 70 | 800 |
| Petrol sold to third car owner | = | + 12 | 095 |
| Total quantity of petrol sold | = | <u>118</u> | <u>395</u> |
| 4. | | <i>ℓ</i> | ml |
| Capacity of one tin of paint | = | 15 | 700 |
| Capacity of other tin of paint | = | + 14 | 900 |
| Total paints purchased by Ankit | = | <u>30</u> | <u>600</u> |
| 5. | | <i>ℓ</i> | ml |
| Milk sold in the evening | = | 85 | 000 |
| Milk sold in the morning | = | - 58 | 300 |
| Milk sold more in evening by | = | <u>26</u> | <u>700</u> |
| 6. | $5\ell\ 338\text{ml} = 5 \times 1000 + 338 = 5000 + 338 = 5338\ \text{ml}$
$5338 < 6083$
$\therefore 6083$ is greater than 5338 by $= 6083 - 5338 = 745\ \text{ml}$ | | |
| 7. | | <i>ℓ</i> | ml |
| Petrol in Ajay's car | = | 25 | 500 |
| Petrol in his car after journey | = | - 05 | 985 |
| Petrol used in journey | = | <u>19</u> | <u>515</u> |

8.		ℓ	ml
Milk milkseller has	=	40	250
Milk he sold to one person	=	8	500
Milk he sold to other person	=	<u>7</u>	<u>250</u>

Total milk sold = $8\ell\ 500\ ml + 7\ell\ 250\ ml$

$$\begin{array}{r}
 \ell \quad ml \\
 8 \quad 500 \\
 + 7 \quad 250 \\
 \hline
 15 \quad 750
 \end{array}$$

Milk left unsold = $40\ell\ 250\ ml - 15\ell\ 750\ ml$

$$\begin{array}{r}
 \ell \quad ml \\
 40 \quad 250 \\
 + 15 \quad 750 \\
 \hline
 24 \quad 500
 \end{array}$$

Test Paper

I. 1. (a) $3265\ g = \frac{3265}{1000} = 3\text{kg}\ 265\text{g}$

(b) $3\text{kg}\ 2\text{g} = 3 \times 1000 + 2 = 3000 + 2 = 3002\text{g}$

(c) $1786 = \frac{1786}{1000} = 1\text{kg}\ 786\text{g}$

(d) $3\text{kg}\ 5\text{g} = 3 \times 1000 + 5 = 3000 + 5 = 3005\text{g}$

(e) $3968\ ml = \frac{3968}{1000} = 3\ell\ 968\ ml$

(f) $915\ ml = \frac{0915}{1000} = 0\ell\ 915\ ml$

(g) $2993\ ml = \frac{2993}{1000} = 2\ell\ 993\ ml$

- II. 1. (a) (i) (b) (i) (c) (ii) (d) (ii)
 2. (a) (ii) (b) (iii) (c) (iii) (d) (iii)
 3. (a) (i) (b) (ii) (c) (iii) (d) (ii)
- III. (a) (iii) (b) (iv) (c) (i) (d) (ii)
 (e) (v)
- IV. 1. $9\text{kg } 050\text{g} > 5\text{kg } 390$

$$\begin{array}{r}
 \text{Kg} \quad \text{g} \\
 9 \quad 050 \\
 - 5 \quad 390 \\
 \hline
 3 \quad 660
 \end{array}$$

$$\begin{array}{r}
 2. \quad \text{Kg} \quad \text{g} \\
 2 \quad 390 \\
 + 7 \quad 800 \\
 + 5 \quad 850 \\
 \hline
 16 \quad 040
 \end{array}$$

$$\begin{array}{r}
 3. \quad \text{Km} \quad \text{m} \\
 8 \quad 580 \\
 + 2 \quad 780 \\
 + 3 \quad 200 \\
 + 1 \quad 180 \\
 + 2 \quad 590 \\
 \hline
 18 \quad 330
 \end{array}$$

7

Measurement of Time

Exercise 40

- | | | | |
|----------|----------|----------|-----------|
| 1. 8:00 | 2. 9:20 | 3. 9:30 | 4. 4:30 |
| 5. 5:00 | 6. 5:45 | 7. 7:00 | 8. 8:10 |
| 9. 10:10 | 10. 3:45 | 11. 2:55 | 12. 12:00 |

Exercise 41

- (a) hour hand (b) hour hand (c) 60 minutes (d) 60 seconds
- (a) 4:30p.m. (b) 5:15a.m. (c) 10:10a.m.
(d) 12:50a.m.

3. (a) 7:30a.m. (b) 6:30p.m. (c) 5:30a.m.

Exercise 42

1. (a) 1 minute (b) 1 day (c) 60 minutes (d) 7 days
(e) 365 days (f) 366 days (g) December
2. (a) 1 month = 30 days
3 months = $30 \times 3 = 90$ days
(b) 5 months = $5 \times 30 = 150$ days
(c) 6 weeks = $7 \times 6 = 42$ days
(d) 12 weeks = $7 \times 12 = 84$ days
(e) 2 months 4 weeks = $2 \times 30 + 7 \times 4 = 60 + 28 = 88$ days
(f) 8 weeks 3 days = $8 \times 7 + 3 = 56 + 3 = 59$ days
3. (a) 1 day = 24 hours
5 days = $24 \times 5 = 120$ hours
(b) 13 days = $13 \times 24 = 312$ hours
(c) 30 days = $30 \times 24 = 720$ hours
(d) 8 days 6 hour = $8 \times 24 + 6 = 192 + 6 = 198$ hours
(e) 15 days 10 hours = $15 \times 24 + 10 = 360 + 10 = 370$ hours
(f) 1 week 7 hours = $7 \times 24 + 7 = 168 + 7 = 175$ hours
4. (a) 1 hour = 60 minutes
6 hours = $6 \times 60 = 360$ minutes
(b) 9 hours = $9 \times 60 = 540$ minutes
(c) 14 hours = $14 \times 60 = 840$ minutes
(d) 3 days = $3 \times 24 = 72 \times 60 = 4320$ minutes
(e) 15 hours 30 min. = $15 \times 60 + 30 = 900 + 30 = 930$ min.
(f) 4 hours 40 minutes = $4 \times 60 + 40 = 240 + 40 = 280$ min.
5. (a) 4 minutes = $4 \times 60 = 240$ seconds
(b) 7 minutes = $7 \times 60 = 420$ seconds
(c) 12 minutes = $12 \times 60 = 720$ seconds
(d) 10 minutes 12 sec. = $10 \times 60 + 12 = 600 + 12 = 612$ sec.
(e) 14 minutes 40 sec. = $14 \times 60 + 40 = 880$ seconds
(f) 20 min. 20 sec. = $20 \times 60 + 20 = 1200 + 20 = 1220$ sec.

Exercise 43

1. 1 hour 50 minutes
2. 3 hours 59 minutes
3. 18 hours 32 minutes
4. 1 hour 31 minutes
5. 1 hour 18 minutes
6. 10 hours 15 minutes

7.

Hour Min.

Anuradha studies in morning	=	2	10
Anuradha studies in evening	=	+2	45
Time Anuradha spend studying	=	<u>4</u>	<u>55</u>

- | | | | | |
|------------------------------|---|-----|----|--|
| 8. Workers hired to work for | = | 8 | 30 | |
| Workers has worked for | = | + 3 | 20 | |
| Time worker has to work | = | 11 | 50 | |

- | | | | |
|-----------------------------|---|----------|-----------|
| 9. Film in cinema starts at | = | 6 | 15 |
| Film in cinema lasts for | = | +2 | 30 |
| Time the film ends | = | <u>8</u> | <u>45</u> |

- | | | | |
|------------------------|---|----------|-----------|
| 10. Boy came school at | = | 8 | 45 |
| Boy was late by | = | -0 | 30 |
| School starts at | = | <u>8</u> | <u>15</u> |

Test Paper

- I. 1. (a) am (b) am (c) pm (d) pm
 (e) pm

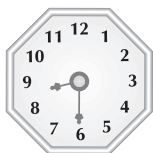
- 2.(a) 24 hours (b) 15 minutes
(c) 60 seconds (d) 30 minutes
(e) 300 seconds

- II. 1. (ii)
2. (iii) $7 \text{ minutes} = 7 \times 60 = 420 \text{ seconds}$

3. (ii) 4. (iv) 5. (ii)

- III. (a) (iii) (b) (iv) (c) (ii) (d) (v)
(e) (i)

IV.



8

Geometry

Exercise 44

1. (a) square, EF, FG, GH, HE; E, F, G, H
 (b) triangle; PQ, QR, RP; P, Q, R
 (c) Rectangle; AB, BC, CP, DA; A, B, C, D
 (d) Circle; no side; no vertex
 (e) Square; UV, VW, WX, XU; U, V, W, X
 (f) Triangle; XY, YZ, ZX; X, Y, Z
 (g) Rectangle; KL, LM, MN, NK; K, L, M, N
2. (a) four (b) three (c) No (d) four
 (e) Yes
3. (a) sides, square (b) opposite
 (c) 4, 4 (d) four, four
 (e) no, no

Exercise 45

1. (a) one (b) point (c) line (d) no
 (e) two (f) one
2. (a) T (b) T (c) F (d) T
 (e) F

3. (a) A, B, P, Q; AB, PB, BQ and PQ
- (b) A, B, C, D, E, F; AB, BC, CD, DE, FE, FA
- (c) P, Q, R, S; PQ, QR, RS, SP

Question No. 4 to 6 : Do yourself

Exercise 46

1. (a) Perimeter = sum of all sides
 $\text{Perimeter} = 2\text{cm} + 4\text{cm} + 3\text{cm} = 9\text{cm}$
- (b) Perimeter = Sum of all sides
 $\text{Perimeter} = 2\text{ cm} + 4\text{cm} + 2\text{ cm} + 4\text{ cm} = 12\text{ cm}$
- (c) Perimeter = sum of all sides
 $\text{Perimeter} = 2\text{ cm} + 2\text{ cm} + 2\text{ cm} + 2\text{ cm} = 8\text{ cm}$
2. Do yourself
3. $\text{Perimeter} = 7 \times 4 = 28\text{ cm}$
4. Length of table = 48 cm
 Breadth of table = 18 cm
 $\text{Perimeter of a rectangle} = 2(L+B)$
 $= 2(48 + 18)$
 $= 66 \times 2 = 132\text{ cm}$
5. Sides of the field are = 180 m, 160m, 150m and 120m
 $\text{Perimeter} = 180 + 160 + 150 + 120 = 610\text{ m}$
 Cow grazes in two rounds = $610 \times 2 = 1220\text{ m}$

Test Paper

- I. 1. (a) equal (b) 4 (c) vertex (d) 0, 0
 (e) circle or round
- II. 1. (i) 2. (i) 3. (i) 4. (iv)
 5. (iii)
- III. (a) (iii) (b) (iv) (c) (i) (d) (ii)
- IV. 1. Number of friends of Sara including her = 4
 Rows of square they draw = 8 rows
 Squares in each row = 6 squares
 Squares drawn on the poster = $8 \times 4 = 32 \times 6$
 $= 192\text{ squares}$
2. Do yourself.

Exercise 47

1. (a) elephants
(b) $20 + 10 + 40 + 25 + 30 = 125$
(c) Monkeys (d) 30 (e) 5
2. (a) Grapes (b) 10 (c) Papaya (d) 8
(e) About the children of a class and their favourite fruits
3. (a) Friday, 45
(b) $15 + 40 + 35 + 30 + 40 + 45 + 25 = 210$
(c) Sunday, 15
(d) Monday and Thursday

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.