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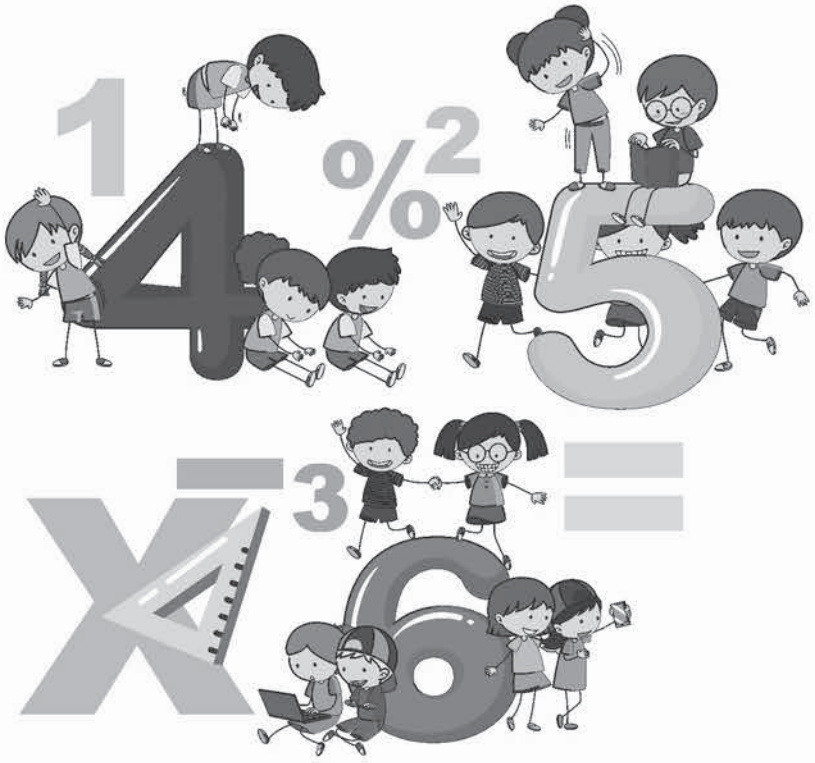
ADVANCE MATHEMATICS



Class 3

Teacher's Resource Book

Revision

15. Sharad jumped = 120 centimetres
Jai jumped = 95 centimetres
120 > 95
So, Sharad jumped more.

19. Mona's length = 108 centimetres
Roma's length = 121 centimetres
Priya's length = 119 centimetres
We know 121 > 119 > 108
So, position of Mona is III, Roma is I and Priya is II.

25. Number of buffaloes in a cattle farm = 329
Number of cows in a cattle farm = 145
Total number of animals in a cattle farm = 329 + 145 = **474**
There are 474 animals in a cattle farm.

28. Number of students in a school = 536
Number of girls in a school = 278
∴ Number of boys in a school = 536 – 278 = **258**
There are 258 boys in a school.

31. Number of marbles in a box = 54
Number of boxes Sudha have = 6
∴ Number of total marbles she have = 54 × 6 = **324**
Sudha had 324 marbles in all.

33. Total number of crayons = 48
Number of children among which they are shared equally = 6
∴ Each child will get = 48 ÷ 6 = **8 crayons**
Each child will get 8 crayons.

36. Total amount of money Josef had = ₹ 10
Amount of money spend on eating an ice cream cone = ₹ 7.50
Amount of money left with Josef = 10 – 7.50 = ₹ **2.50**
₹ 2.50 were left with Josef after spending.

41. Ali threw a ball to a distance of = 15 m 22 cm
= 1500 cm + 22 cm
= 1522 cm
Mayank threw a ball 5 m 88 cm distance farther then Ali.
∴ Mayank threw a ball to a distance of = 1522 cm + 5 m 88 cm
= 1522 cm + 500 cm + 88 cm
= 1522 cm + 588 cm
= 2110 cm = **21 m 10 cm**
Mayank threw a ball to a distance of 21 m 10 cm.

42. Amount of milk in the vessel = 2 L 250 mL
= 2000 mL + 250 mL
= 2250 mL
Amount of milk which children drank = 1 L 350 mL
= 1000 mL + 350 mL
= 1350 mL
Amount of milk left in the vessel = 2250 mL – 1350 mL
= **900 mL**
900 mL of milk is left in the vessel.

44. Weight of an empty container = 1 kg 150 g
= 1000 g + 150 g
= 1150 g
Weight of the biscuits in it = 5 kg 750 g = 5000 g + 750 g
= 5750 g
Total weight of container and biscuits together
= 1150 g + 5750 g
= 6900 g
= **6 kg 900 g**
Total weight of container and biscuits together is 6 kg 900 g.

Unit-II : Fundamental Operations

3. Addition

Exercise 3.5

1. Packets of milk in a dairy = 650
Mother Dairy truck delivered packets = 297
Total packets of milk in the dairy = 650 + 297
= **947 packets**
There are 947 packets of milk are in the dairy now.

2. People in a compartment of a train = 365
People in other compartment of the train = 289
People in both compartment = 365 + 289 = **654**
There are 654 people in both compartment of the train.

3. Pencils in the box = 1499
Pencils in the carton box = 788
Pencils in both, box and carton box = 1499 + 788
= **2287**
There are 2287 pencils in the box and in the carton box both.

4. Boys present in the school = 875
Girls present in the school = 562
Total number of students present in the school = 875 + 562
= **1437**
There are 1437 students present in the school.

5. There are roses in the garden = 375
There are marigolds the garden = 642
There are lilies in the garden = 142
Total flowers in the garden = 375 + 642 + 142 = **1159**
There are 1159 flowers in the garden.

6. On Saturday, men visited = 1475
On Saturday, women visited = 309
On Saturday, children visited = 2787
On Saturday, total people visited the museum
= 1475 + 309 + 2787
= **4571**
On Saturday, total 4571 people visited the museum.

7. The public library bought books from Delhi Book Fair = 2947
The public library bought books from World Book Fair = 5050
The public library bought total books = 2947 + 5050 = **7997**
The public library bought 7997 books from Delhi Book Fair and World Book Fair in 2019.

Let's Recall

8. **(c)** Number of herbs in the garden = 1500
Number of shrubs in the garden = 1440
Number of trees in the garden = 500
Total number of plants in the garden = 1500 + 1440 + 500
= **3440**
Thus, there are total 3440 plants in the garden.

4. Subtraction

Exercise 4.5

1. Number of Pepsi bottles in a van = 2500
Number of bottles delivered = 1698
∴ Number of bottles left = 2500 – 1698 = **802**
There were 802 bottles left undelivered.

2. Number of people that came to a meeting = 4207
Number of chairs available = 2460
∴ Number of people left standing = 4207 – 2460 = **1747**
1747 people had to stand.

3. Smallest 4-digit number = 1000
Greatest 3-digit number = 999
On subtracting greatest 3-digit number from smallest 4-digit number = 1000 – 999
We get = 1000 – 999
= **1**

4. Number of apples bought on Republic day = 4000
Number of apples distributed = 3166
∴ Number of apples left = 4000 – 3166 = **834**
834 apples were left after distribution.

5. Total number of seats in a cinema hall = 1500
Number of persons who viewed a show on Sunday = 1278
∴ No. of seats left vacant = 1500 – 1278 = **222**
There were 222 seats vacant on Sunday's show.

6. Total number of children in a village = 2784
Number of boys in a village = 1238
Number of girls in a village = 2784 – 1238
= **1546**
There are 1546 girls in a village.

7. Height of Mount Everest = 8848 m
Height of Mount Kanchenjunga = 8598 m
Height of Mount Everest exceeding Mount Kanchenjunga
= 8848 – 8598
= **250 m**
Mount Everest is 250 m higher than Mount Kanchenjunga.

8. Number of wheat bags in a godown = 8088
Number of bags sold out = 6386
∴ Number of bags left = 8088 – 6386 = **1702**
There were 1702 bags left in the godown.

Let's Recall

7. **(c)** 1000 less than 7700 is = 7700 – 1000
= **6700**

8. (d) Number of baseball cards Rajiv had = 8
Total number of baseball cards = 17
Number of baseball cards that Rajiv got on his birthday
= 17 – 8
= **9**
Thus, Rajiv got 9 baseball cards on his birthday.

5. Multiplication

Exercise 5.1

2. Number of wool's ball required to weave a sweater = 16
Number of sweaters to weave = 8
∴ Total number of wool balls required to weave 8 sweaters
$= 16 \times 8$
$= \mathbf{128}$
128 balls of wool will be required to weave 8 such sweaters.

3. Number of stories Mona reads in 1 day = 5
Total number of days she read stories = 15
Number of stories she reads in 15 days = $15 \times 5 = \mathbf{75}$
Mona will read 75 stories in 15 days.

4. Number of bananas in 1 bunch = 12
∴ Number of bananas in 8 bunches = $12 \times 8 = \mathbf{96}$
There will be 96 bananas in 8 bunches.

5. Number of desks in 1 row = 15
Total number of rows = 9
∴ Number of desks in a hall = $15 \times 9 = \mathbf{135}$
There are 135 desks in that hall.

6. One student gets = 7 books
Number of students in a class = 17
∴ Total number of books required = 17×7
$= \mathbf{119}$
119 books will be required for whole class.

Exercise 5.7

1. Number of Pepsi bottles in 1 crate = 24
Number of crates = 75
∴ Total number of bottles = $75 \times 24 = \mathbf{1800}$
There are 1800 bottles in 75 crates.

2. Amount of milk Sania buys daily = 24 litres
Number of days in a year = 365
∴ Total amount of milk Sania buys in a year = 24×365
$= \mathbf{8760\ litres}$
Sania buys 8760 litres of milk in 1 year.

3. Number of children in each bus = 50
Number of total buses that visited zoo = 20
∴ Total number of children who visited the zoo = 50×20
$= \mathbf{1000}$
There were 1000 children who visited the zoo.

4. Number of crayons in each packet = 12
Number of total packets = 20
∴ Total number of crayons in all = 20 × 12
= **240**
There are 240 crayons in all.

5. Number of candles in a box = 48
Number of boxes = 54
∴ Total number of candles in 54 boxes = 54 × 48
= **2592**
There are 2592 candles in 54 boxes.

6. Number of apples on each tree = 25
Number of apples trees in a garden = 128
Total number of apples in a garden = 25 × 128
= **3200**
There are 3200 apples in a garden.

7. Weight of each rice bag = 98 kg
Number of rice bags = 96
Total weight of 96 rice bags = 98 × 96
= **9408 kg**
Weight of 96 rice bags is 9408 kg.

8. Number of hours in a week = 168
Number of weeks = 52
Total number of hours in 52 weeks = 168 × 52
= **8736**
There are 8736 hours in 52 weeks.

9. Cost of one shirt = ₹ 224
Number of shirts = 44
Total cost of 44 shirts = 224 × 44
= ₹ **9856**
Cost of 44 shirts is ₹ 9856.

10. Cost of 1 lamp = ₹ 255
Number of lamps = 36
Total cost of 36 lamps = 255 × 36
= ₹ **9180**
Cost of 36 lamps is ₹ 9180.

11. Number of mangoes in 1 box = 48
Number of boxes = 188
∴ Total number of mangoes in 188 boxes = 48 × 188
= **9024**
There are 9024 mangoes in 188 boxes.

12. Number of balloons in one packet = 144
Number of balloon packets = 65
Total number of balloons in 65 packets = 144×65
= **9360**

There are 9360 balloons in 65 packets.

Let's Recall

4. Number of wheels need for making 8 tricycles = 8×3
= **24**

Thus, there will be 24 wheels in 8 tricycles.

7. (b) Number of glasses = 24
Number of breaking glasses = 8
Number of glasses left = **24 − 8**

There are breaking glasses is 24 − 8.

8. (c) The number of days in 15 simple years = **15 × 365 days.**
[∵ 1 year = 365 days]

9. (a) Number of boys in the class = 25
Number of girls in the class = 15
Total number of students in the class = **25 + 15**
There are (25 + 15 = 40) students in the class.

10. (c) Cost of 1 toy = ₹ 95
Number of toys = 10
Total cost of 10 toys = 95×10
Cost of 10 toys is = **95 × 10**
The cost of 10 toys will be (95×10).

6. Division

Exercise 6.7

1. Total number of beds available in rest house = 168
Number of halls available for their equal arrangement = 6
∴ Number of beds in each hall = $\frac{168}{6}$
= **28**

28 beds are there in each hall.

2. Number of benches required for 5 students to sit = 1
Total number of students = 635
∴ Number of benches required for 635 students to sit = $\frac{635}{5}$
= **127**

127 benches are required for 635 students to sit.

3. Total number of marbles = 1642
Number of marbles to be packed in each packet = 6
To find number of packets made we divide 1642 (total marbles) by 6 (marbles in each packet) $= \frac{1642}{6}$

$\Rightarrow$ Quotient = **273**; Remainder = **4**
Therefore, 4 marbles will be left over.

4. Total number of students = 5625
Number of equal groups = 9

$\therefore$ Number of students in each group $= \frac{5625}{9}$

$= \mathbf{625}$

625 students were there in each group.

5. Number of mangoes in each packet = 16
Total number of mangoes available = 1024

Total packets made from these mangoes $= \frac{1024}{16}$

$= \mathbf{64}$

Therefore, 64 packets will be made from these mangoes.

6. Total number of crayons to be shared = 385
Number of girls among whom these crayons are shared = 3
We divide 385 (total crayons) by 3 (total girls) to calculate each share $= \frac{385}{3}$

Quotient = **128**; Remainder = **1**
Therefore each girl will get 128 crayons and 1 crayon will be left over.

7. Total number of bananas = 4112
Number of boxes in which they are packed equally = 8

$\therefore$ Number of bananas in each boxes $= \frac{4112}{8}$

$= \mathbf{514}$

There are 514 bananas in each box.

8. Total mass of all containers = 2790 kg
Number of containers = 5

$\therefore$ Mass of each container $= \frac{2790}{5} = \mathbf{558\ kg}$

Mass of each container is 558 kg.

9. Number of children walked in a rally = 2865
Number of children in each group = 15

$\therefore$ Total number of groups formed $= \frac{2865}{15} =$ **191**

191 groups were formed.

10. Total number of pages = 1792

Number of story book = 8

$\therefore$ Number of pages in each story book $= \frac{1792}{8} =$ **224**

There were 224 pages in each story book.

11. Total number of marbles = 3096

Number of boxes in which these are to be packed = 12

Number of marbles in each box $= \frac{3096}{12}$

$=$ **258**

There are 258 marbles in each box.

12. Amount of milk sold = 3340 litres

Number of days it was sold = 20

$\therefore$ Amount of milk sold in a day $= \frac{3340}{20}$

$=$ **167 litres**

167 litres of milk was sold in a day.

Let's Recall

6. (a) Number of fish in one fish bowl = 2

Total number of bowls = 20

Number of fish in 20 bowls = 20×2

$=$ **40**

So, 40 fishes will to put in 20 bowls.

7. (a) Cost of each 5-star balloons = ₹ 5

Total rupees = ₹ 50

Number of 5-star balloons for ₹ 50 = **50 ÷ 5**

So, 50 ÷ 5 5-star balloons cost will be ₹ 50.

8. (a) A car can to take 6 people = 1 trip

Total number of people = 30

Number of trips to take 30 people $= \frac{30}{6}$

$=$ **5 trips**

There will be 5 trips to take 30 people.

9. (a) Number of plants in a row = 12

Total number of rows = 40

Number of plants in 40 rows = **12 × 40**

There will be 12×40 plants in 40 rows.

7. Common Fractions

Exercise 7.4

4. Number of hours Dinesh sleeps = 7

Total hours in a day = 24

Fraction of the day that Dinesh sleeps = $\frac{\mathbf{7}}{\mathbf{24}}$.

5. Number of mangoes Anju bought = 8

Number of rotten mangoes = 3

Number of good mangoes = 8 – 3 = 5

Fraction of mangoes that were good = $\frac{\mathbf{5}}{\mathbf{8}}$.

6. Marks that Roma got = 33 out of 50

We can divide 50 marks into fraction.

Here, Roma got 33 marks of 50 equal marks.

$\therefore$ Fraction of marks that Roma got = $\frac{\mathbf{33}}{\mathbf{50}}$

Exercise 7.7

26. Fraction of book Komal read in one hour = $\frac{9}{13}$ part

Fraction of book Savita read in one hour = $\frac{7}{13}$ part

Thus, Komal read more than Savita (as $\frac{9}{13} > \frac{7}{13}$)

Hence, Komal read more.

27. Fraction of an apple Swati ate = $\frac{1}{3}$ part

Fraction of an apple Reema ate = $\frac{1}{4}$ part

Thus, Swati ate more part than Reema $\left(\text{as } \frac{1}{3} > \frac{1}{4}\right)$

Hence, Swati ate more.

Exercise 7.10

1. Distance moved by an ant in first minute = $\frac{7}{16}$ m

Distance moved by an ant in second minute = $\frac{5}{16}$ m

Total distance moved $= \frac{7}{16} + \frac{5}{16} = \frac{12}{16}$

$= \mathbf{\frac{12}{16}}$ **metre**

Ant moves $\frac{12}{16}$ m in all.

2. In first hour, Shyam read $= \frac{5}{16}$ part

In second hour, he read $= \frac{7}{16}$ part

In third hour, he read $= \frac{3}{16}$ part

Fraction of book Shyam read in three hours $= \frac{5}{16} + \frac{7}{16} + \frac{3}{16}$

$= \mathbf{\frac{15}{16}}$ **part**

Shyam read $\frac{15}{16}$ part of book in these three hours.

3. Fraction of sweater Mona knit on first day $= \frac{3}{10}$ part

On second day, she knit $= \frac{4}{10}$ part

On third day, she knit $= \frac{2}{10}$ part

Fraction of sweater she knit in three days $= \frac{3}{10} + \frac{4}{10} + \frac{2}{10}$

$= \mathbf{\frac{9}{10}}$

Mona knit $\frac{9}{10}$ part of the sweater in three days.

4. Distance ran by Tina in one hour $= \frac{5}{8}$ km

Distance ran by Anshu in one hour $= \frac{3}{8}$ km

Thus, Tina ran more distance in one hour (as $5 > 3$)

Distance that Tina ran more than Anshu in one hour $= \frac{5}{8} - \frac{3}{8}$

$= \mathbf{\frac{2}{8}}$ **km**

Thus, Tina ran $\frac{2}{8}$ km distance more than Anshu in one hour.

5. Fraction of money Ansh spent on sweets $= \frac{4}{9}$ part

Fraction of money he spent on fruits $= \frac{1}{9}$ part

Total fraction of money which he spent all together $= \frac{4}{9} + \frac{1}{9}$

$= \mathbf{\frac{5}{9}}$ **part**

Ansh spent $\frac{5}{9}$ part of his money.

6. Fraction of a book that Pari read in 1 hour $= \frac{11}{15}$ part

Fraction of a book that Shiva read in 1 hour $= \frac{13}{15}$ part

Thus, Shiva read more than Pari (as $13 > 11$)

Fraction of book that Shiva read more than Pari $= \frac{13}{15} - \frac{11}{15}$

$= \mathbf{\frac{2}{15}}$ **part**

Hence, Shiva read $\frac{2}{15}$ part more than Pari.

7. Fraction of property that a man gave to his daughter $= \frac{5}{8}$ part

Fraction of property that he gave to his son $= \frac{3}{8}$ part

Thus, his daughter got more property than his son (as $5 > 3$)

Fraction of property that his daughter got more than his son

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

$= \mathbf{\frac{2}{8}}$ **part**

Thus, his daughter got $\frac{2}{8}$ part of the property more than his son.

Let's Recall

7. (b) Given fraction $= \frac{2}{7}$

To make it whole $= \left(1 - \frac{2}{7}\right) = \mathbf{\frac{5}{7}}$

By adding $\frac{5}{7}$ it will be whole

8. (a) Total spaces in a game board = 6
Shaded spaces = 3
Then fraction of the game board = $\frac{3}{6}$

9. (a) Total part = 3 (from given circle)
Unshaded part = 2
Shaded part = 1
Then, the fraction of unshaded part will be = $\frac{2}{3}$

Unit-IV : Indian Currency

8. Currency

Exercise 8.3

1. Money spent on purchasing some mangoes = ₹ 39.75
Money spent on purchasing some bananas = ₹ 97.50
Total money that Saif paid = 39.75 + 97.50
= ₹ **137.25**
Saif paid ₹ 137.25 in all.

2. Cost of a birthday present = ₹ 27.50
Cost of a card = ₹ 3.75
Total money that Ravi spend = 27.50 + 3.75
= ₹ **31.25**
Ravi spend of ₹ 31.25 in all.

3. Cost of a slab of biscuits = ₹ 12.50
Cost of chocolate = ₹ 6.50
Cost of toffee = ₹ 4.20
Total cost of 3 items = 12.50 + 6.50 + 4.20
= ₹ **23.20**
Neha paid ₹ 23.20 in all.

4. Money spent on purchasing rice = ₹ 325.25
Money spent on purchasing wheat = ₹ 85.75
Charges of cart-puller = ₹ 8.50
Total amount of money spent = 325.25 + 85.75 + 8.50
= ₹ **419.50**
Devid spend of ₹ 419.50 in all.

5. Cost of a chair = ₹ 1272.75
Cost of a table = ₹ 2170.50
Cost of an almirah = ₹ 4507.75

Total money spend = 1272.75 + 2170.50 + 4507.75
= ₹ **7951**

Manu spend total of ₹ 7951.

6. Amount of Mobile bill for first month = ₹ 203.50
Amount of Mobile bill for second month = ₹ 205.25
Amount of Mobile bill for third month = 202.75
Total amount paid by John = 203.50 + 205.25 + 202.75
= ₹ **611.50**

John paid ₹ 611.50 for three months.

Exercise 8.6

1. Cost price of a pencil = ₹ 7.50
Cost price of a ballpen = ₹ 9.25
Ballpen is costlier than pencil by = 9.25 – 7.50
= ₹ **1.75**

Ballpen is ₹ 1.75 costlier than a pencil.

2. Cost of stamps = ₹ 6.25
Amount of money Shikhar gave = ₹ 10
Amount of money left = 10 – 6.25
= ₹ **3.75**

Shikhar will get back ₹ 3.75

3. Cost of purchasing story book = ₹ 62.75
Cost of purchasing notebooks = ₹ 33.50
Amount of money she gave = ₹ 100
Amount of money left = 100 – (62.75 + 33.50)
= 100 – 96.25
= ₹ **3.75**

Shopkeeper will return ₹ 3.75 to Pari.

4. Amount of money Rahul had = ₹ 180.00
Amount of money he lent to Lovy = ₹ 94.50
Amount of money left with him = 180.00 – 94.50
= ₹ **85.50**

₹ 85.50 is left with Rahul.

5. Cost of purchasing saree = ₹ 344.75
Amount of money Kanak gave to shopkeeper = ₹ 500
Amount of money left = 500 – 344.75
= ₹ **155.25**

Kanak will get back ₹ 155.25.

6. Cost of raincoat = ₹ 143.25
Cost of an umbrella = ₹ 85.75
Number of one hundred rupees note Renu gave = 3

Total amount she gave = ₹ 300

Amount of money left with her = 300 – (143.25 + 85.75)

= 300 – 229.00

= ₹ **71**

Renu will get back ₹ 71.

7. Cost of a toffee = ₹ 6.75

Cost of chocolate = ₹ 13.75

Amount of money Pari gave = ₹ 50

Amount of money left = 50 – (6.75 + 13.75) = ₹ **29.50**

Pari will get back ₹ 29.50.

8. Cost of purchasing biscuits = ₹ 6.50

Cost of purchasing chips = ₹ 8.75

Cost of purchasing buns = ₹ 11.25

Total amount of money Rishi spend = 6.50 + 8.75 + 11.25

= ₹ **26.50**

Rishi spent ₹ 26.50 in all.

9. Amount of money in Jai's bank account = ₹ 125.50

Amount of money he wants in a bank = ₹ 160.00

Amount of money required = 160.00 – 125.50 = ₹ **34.50**

Thus, Jai should deposit ₹ 34.50 more.

10. Cost of purchasing *Chunni* = ₹ 55.75

Number of 10 rupee notes Renu gave to salesman = 6

Total amount she gave to salesman = 6 × 10 = 60

Amount of money left = 60 – 55.75

= ₹ **4.25**

Renu will get back a change of ₹ 4.25.

11. Money deposited by Rahul on Monday = ₹ 310.50

Money deposited by him on Tuesday = ₹ 125.75

Amount of money he withdrew on Friday = ₹ 284.50

Money left = (310.50 + 125.75) – 284.50 = ₹ **151.75**

Rahul had left with ₹ 151.75 in his account.

Exercise 8.7

19. Cost of 1 greeting card = ₹ 7.75

Cost of 8 greeting cards = 7.75 × 8

= ₹ **62**

Cost of 8 greeting cards ₹ 62.

₹	P
7	75
×	8
62	00

20. Cost of 1 eraser = ₹ 2.50

Cost of 10 erasers = 2.50 × 10

= ₹ **25**

Cost of 10 erasers is ₹ 25.

₹	P
2	50
×	10
25	00

21. Cost of one mango drink pack = ₹ 10.25
Cost of 10 mango drink packs = 10.25 × 10
= ₹ **102.50**
Cost of 10 mango drink packs is ₹ 102.50.

₹	P
10	25
×	10
102	50

22. Cost of 1 clock = ₹ 244.75
Cost of 8 clocks = 244.75 × 8
= ₹ **1958**
Cost of 8 such clocks is ₹ 1958.

₹	P
244	75
×	8
1958	00

23. Cost of 1 milk bottle = ₹ 7.50
Cost of 7 milk bottles = 7.50 × 7
= ₹ **52.50**
Cost of 7 such milk bottles is ₹ 52.50.

₹	P
7	50
×	7
52	50

24. Cost of 1 umbrella = ₹ 64.25
Cost of 4 umbrellas = 64.25 × 4
= ₹ **257**
Cost of 4 umbrellas is ₹ 257.

₹	P
64	25
×	4
257	00

25. Cost of 1 ticket of circus = ₹ 125.50
Number of people went to watch circus = 3
Cost of 3 tickets of circus = 125.50 × 3
= ₹ **376.50**
They require ₹ 376.50 for buying their tickets.

₹	P
125	50
×	3
376	50

Exercise 8.8

22. Amount of money 4 children share = ₹ 335.00
Amount of money each children share = 335 ÷ 4
= ₹ **83.75**
Each child will receive amount of ₹ 83.75.

```
   83.75
4)335.00
  32
  15
  12
  30
  28
  20
  20
   0
```

23. Cost of 6 pens = ₹ 337.50
Cost of 1 pen = 337.50 ÷ 6
= ₹ **56.25**
Cost of 1 pen is ₹ 56.25.

```
   56.25
6)337.50
  30
  37
  36
  15
  12
  30
  30
   0
```

24. Cost of 4 chocolates = ₹ 27.00
Cost of 1 chocolate = 27.00 ÷ 4
= ₹ **6.75**

Cost of 1 chocolate is ₹ 6.75.

$$\begin{array}{r} 6.75 \\ 4\overline{)27.00} \\ \underline{24} \\ 30 \\ \underline{28} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

25. Cost of a set of 8 glass spoons = ₹ 37.60
Cost of 1 glass spoons = 37.60 ÷ 8
= ₹ **4.70**

Cost of each glass spoon is ₹ 4.70.

$$\begin{array}{r} 4.70 \\ 8\overline{)37.60} \\ \underline{32} \\ 56 \\ \underline{56} \\ 0 \end{array}$$

26. Cost of 5 chairs = ₹ 1283.20
Cost of 1 chair = 1283.20 ÷ 5
= ₹ **256.64**

Cost of 1 chair is ₹ 256.64.

$$\begin{array}{r} 256.64 \\ 5\overline{)1283.20} \\ \underline{10} \\ 28 \\ \underline{25} \\ 33 \\ \underline{30} \\ 32 \\ \underline{30} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

27. Amount of money Mona gave to vendor = ₹ 100
Amount of money vendor returned to Mona
= ₹ 27.00

∴ Cost of 4 apples = 100 – 27 = ₹ 73
Cost of 1 apple = 73 ÷ 4
= ₹ **18.25**

Cost of 1 apple is ₹ 18.25.

$$\begin{array}{r} 18.25 \\ 4\overline{)73.00} \\ \underline{4} \\ 33 \\ \underline{32} \\ 10 \\ \underline{8} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

28. Cost of 5 fruit bathing soaps = ₹ 37.50
Cost of 1 fruit bathing soap = 37.50 ÷ 5
= ₹ **7.50**

Cost of 1 fruit bathing soap is ₹ 7.50.

$$\begin{array}{r} 7.50 \\ 5\overline{)37.50} \\ \underline{35} \\ 25 \\ \underline{25} \\ 0 \end{array}$$

29. Cost of 9 vests = ₹ 473.40

Cost of 1 vest = 473.40 ÷ 9

= ₹ **52.60**

$$\begin{array}{r} 52.60 \\ 9\overline{)473.40} \\ 45\downarrow \\ \hline 23 \\ 18 \\ \hline 54 \\ 54 \\ \hline 0 \end{array}$$

Cost of 1 vest is ₹ 52.60.

30. Cost of 8 stools = ₹ 1252.00

Cost of 1 stool = 1252.00 ÷ 8

= ₹ **156.50**

$$\begin{array}{r} 156.50 \\ 8\overline{)1252.00} \\ 8\downarrow \\ \hline 45 \\ 40 \\ \hline 52 \\ 48 \\ \hline 40 \\ 40 \\ \hline 0 \end{array}$$

Cost of 1 stool is ₹ 156.50.

Let's Recall

6. (c) 1 Paise = ₹ $\frac{1}{100}$

1205 Paise = ₹ $\frac{1}{100} \times 1205$

= ₹ **12.05**

7. (a) Total amount of money = ₹ 120

Number of children = 4

Amount received by each child = ₹ $\frac{120}{4}$ = ₹ **30**

Therefore each child will get ₹ 30.

8. (a) 2 rupees = 200 paise

$\frac{200}{50}$ = 4 coin

= **four 50-paise**

So, Number of four 50-paise.

9. (c) Total rupees = ₹ 17.50

In paise = 17.50 × 100 Paise (₹ 1 = 100 Paise)

= 1750 Paise

Number of 50 paise coins = 1750 ÷ 50 = $\frac{1750}{50}$ = **35**

So, Number of 50 paise coins is 35.

Unit-V : Measurement of Time

9. Clock and Calendar

Exercise 9.5

1. Starting time of news = 8 : 40

Duration time of news = 0 : 20

News will end = 8 : 40 + 0 : 20

Ending time of news = 8 : 40
+ 0 : 20
8 : 60

We know that 60 min = 1 hour

∴ Ending time of news = 8 + 1 = **9 : 00**

News will end at 9 o'clock in the night.

2. Time taken by car from Meerut to Delhi = 1 hour 45 min
= 1 : 45

Time at which car starts from Meerut = 8 : 15

Time at which car will reach Delhi = 8 : 15
+ 1 : 45
9 : 60

We know that 60 min = 1 hour

∴ Time at which car will reach Delhi = (9 + 1)
= **10 : 00**

Car will reach at 10 o'clock to Delhi.

3. Starting time of the movie = 3 : 30

Duration time of the movie = 2 : 30

Ending time of the movie = 3 : 30
+ 2 : 30
5 : 60

We know that 60 min = 1 hour

∴ Ending time of movie = (5 + 1)
= **6 : 00**

Movie will end at 6 o'clock.

4. School goes off at = 2 : 20 o' clock

Now time is = 1 : 35 o'clock

Time it will take to go off = 2 : 20 – 1 : 35

We know 1 hour = 60 min

$\therefore$

$$\begin{array}{rr} \boxed{1} & \boxed{80} \\ 2 \text{ hours} & 20 \text{ min} \\ -\ 1 \text{ hour} & 35 \text{ min} \\ \hline \textbf{0 hour} & \textbf{45 min} \end{array}$$

School will go off after 45 min.

5. Time at present = 9 : 25 o'clock

Desired time = 10 o'clock

Time it will take to make 10 o'clock = 10 : 00 − 9 : 25

We know 1 hr = 60 min

$\therefore$

$$\begin{array}{rrr} & \boxed{9} & \boxed{60} \\ \text{Required time} = & 10 \text{ hours} & : 00 \text{ min} \\ & -\ 9 \text{ hours} & : 25 \text{ min} \\ \hline & \textbf{0 hours} & \textbf{: 35 min} \end{array}$$

It will take 35 min.

6. Roma gets up in the morning = 5 : 45

Time taken by her to get ready = 0 : 45

$$\begin{array}{rr} \text{Time at which she is ready} = & 5 : 45 \\ + & 0 : 45 \\ \hline & 5 : 90 \end{array}$$

We know 60 min = 1 hour

$\therefore$ Time at which she is ready = 5 hr + (60 + 30) min

= 5 hr + 1 hr + 30 min

= **6 hr 30 min**

Roma will get ready at 6 : 30 o'clock.

Unit VI : Metric Measures

10. Measures of Length

Exercise 10.2

8. Length of first side of the field = 35 m 75 cm

1 m = 100 cm

35 m = 35 × 100 = 3500 cm

$\therefore$ Length of first side of the field = 35 m 75 cm

= (3500 + 75) cm

= 3575 cm

Similarly, Length of second side of the field = 37 m 50 cm

= 37 × 100 cm + 50 cm

= (3700 + 50) cm

= 3750 cm

Length of third side of the field = 40 m 5 cm
= 40 × 100 cm + 5 cm
= (4000 + 5) cm
= 4005 cm

Length of fourth side of the field = 41 m
= 41 × 100 cm
= 4100 cm

Distance covered in one round = 3575 cm + 3750 cm
+ 4005 cm + 4100 cm
= 15430 cm
= **154 m 30 cm**

Mehul covered 154 m 30 cm in one round.

9. Length of part of a tree broken in a storm = 2 m 85 cm

1 m = 100 cm

2 m = 2 × 100 = 200 cm

∴ Length of broken part of tree = 2 m 85 cm
= 200 cm + 85 cm = 285 cm

Similarly,

Height of tree after breaking the upper part = 12 m 25 cm
= 12 × 100 cm + 25 cm
= (1200 + 25) cm
= 1225 cm

Total height of tree = 285 cm + 1225 cm
= 1510 cm = **15 m 10 cm**

Height of tree before breaking was 15 m 10 cm.

10. Length of first piece of iron rods = 2 m 25 cm

1 m = 100 cm

2m = 200 cm

∴ Length of first piece of iron rods = 2 m 25 cm
= 200 cm + 25 cm
= 225 cm

Similarly, length of second piece of iron rods = 1 m 75 cm
= 1 × 100 cm + 75 cm
= 100 + 75 = 175 cm

Length of the welded iron rods = 225 cm + 175 cm
= 400 cm = **4 m**

Length of welded iron rods is 4 m.

11. Length of first piece of cloth = 26 m 25 cm

1 m = 100 cm

26 m = 26 × 100 cm
= 2600 cm

$\therefore$ Length of first piece of cloth = 26 m 25 cm
= 2600 cm + 25 cm
= 2625 cm

Similarly,

Length of second piece of cloth = 22 m 75 cm
= 22 × 100 cm + 75 cm
= (2200 + 75) cm
= 2275 cm

Length of third piece of cloth = 24 m 50 cm
= 24 × 100 cm + 50 cm
= (2400 + 50) cm
= 2450 cm

Total length of three pieces of cloth = 2625 cm
+ 2275 cm + 2450 cm
= 7350 cm
= **73 m 50 cm**

Total length of cloth is 73 m 50 cm.

Exercise 10.3

7. Mona cycles in the morning = 6 km 85 m = 6000 m + 85 m
= 6085 m

Mona cycles in the evening = 5 km 925 = 5000 m + 925 m
= 5925 m

Total distance Mona covers in a day = 6085 m + 5925 m
= 12010 m
= **12 km 10 m**

Mona covers 12 km 10 m distance in a day.

8. Distance from Rajan home to airport = 2 km 65 m
= 2000 m + 65 m
= 2065 m

Distance from airport to Central Railway Station = 5 km 140 m
= 5000 m + 140 m
= 5140 m

Total distance Rajan covers to go Central Railway Station from his home
= 2065 m + 5140 m
= 7205 m
= **7 km 205 m**

Rajan covers 7 km 205 m to go Central Railway Station.

9. Distance covered by plane = 356 km 250 m = 356250 m

Distance covered by bus = 25 km 125 m = 25125 m

Distance covered by train = 50 km 75 m = 50075 m

Total distance covered = 356250 m + 25125 m + 50075 m

= 431450 m = **431 km 450 m**

David travelled 431 km 450 m.

10. Amita covered distance to go school = 3 km 125 m = 3125 m

Amita covered distance to go Mall Road = 5 km 85 m = 5085 m

Amita covered distance to go her house = 6 km 175 m

= 6175 m

Total distance covered by Amita = 3125 m + 5085 m + 6175 m

= 14385 m = **14 km 385 m**

Amita covered 14 km 385 m distance.

Exercise 10.4

12. Height to which Jai jumped = 1 m 5 cm

1 m = 100 cm

∴ Height to which Jai jumped = 100 cm + 5 cm

= 105 cm

Height to which Surjeet jumped = 95 cm

Difference in their jump = (105 – 95)

= **10 cm**

Jai jumped 10 cm higher than Surjeet.

13. Length of a roll of wire = 100 m

1 m = 100 cm

100 m = 100 × 100 cm

= 10000 cm

Length of first piece of wire = 48 m 35 cm

= 48 × 100 cm + 35 cm

= (4800 + 35) cm

= 4835 cm

Length of second piece of wire = 45 m 80 cm

= 45 × 100 cm + 80 cm

= 4500 + 80 = 4580 cm

Length of left wire = 10000 cm

– (4835 cm + 4580 cm)

= 10000 – 9415

= 585 cm

= **5 m 85 cm**

5 m 85 cm of wire was left in the roll.

14. Total length of cloth = 32 m 20 cm

1 m = 100 cm

32 m = 32 × 100 cm

= 3200 cm

∴ Total length of cloth = 3200 cm + 20 cm

= 3220 cm

Length of cloth which tailor cut out of it = 25 m 75 cm

= 25 × 100 cm + 75 cm

= (2500 + 75) cm

= 2575 cm

Length of cloth left = 3220 cm − 2575 cm

= 645 cm

= **6 m 45 cm**

6 m 45 cm of cloth was left after cutting.

15. Height of Roma = 1 m 15 cm

1 m = 100 cm

∴ Height of Roma = 100 cm + 15 cm

= 115 cm

Height of Shivani = 95 cm

Difference in their height = (115 − 95) cm = **20 cm**

Roma is 20 cm taller than Shivani.

Exercise 10.5

10. My village is from Patna = 51 km 250 m = 51250 m

Rahul's village is from Patna = 39 km 470 m = 39470 m

∵ 51250 > 39470

51250 m − 39470 m = 11780 m = **11 km 780 m**

So, my village is at 11 km 780 m greater distance that Rahul's village.

11. Train-route = 72 km 725 m = 72725 m

Bus-route = 70 km 850 m = 70850 m

Difference in two routes = 72725 m − 70850 m = 1875 m

= **1 km 875 m**

So, difference of two routes is 1 km 875 m.

12. Total journey = 120 km = 120000 m

Distance covered by car = 70 km 400 m = 70400 m

Distance covered by bus = 120000 m − 70400 m

= 49600 m

= **49 km 600 m**

Distance covered by bus is 49 km 600 m.

Exercise 10.6

10. Distance crawls by earthworm in 1 minute = 7 m 50 cm

1 m = 100 cm

$7\text{ m} = 7 \times 100\text{ cm}$

$= 700\text{ cm}$

$\therefore$ Distance crawls by earthworm in 1 minute $= 7\text{ m } 50\text{ cm}$

$= 700\text{ cm} + 50\text{ cm}$

$= 750\text{ cm}$

Now, $1\text{ hour} = 60\text{ min}$

$\therefore$ Distance crawls by earthworm in 60 min (one hour)

$= 60 \times 750\text{ cm}$

$= 45000\text{ cm} =$ **450 m**

Earthworm will crawls 450 m in one hour.

11. Length of cable wire in a roll $= 97\text{ m } 36\text{ cm}$

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

$97\text{ m} = 97 \times 100\text{ cm}$

$= 9700\text{ cm}$

$\therefore$ Length of cable wire in a roll $= 97\text{ m } 36\text{ cm}$

$= 9700\text{ cm} + 36\text{ cm}$

$= 9736\text{ cm}$

Length of cable wire in 26 rools $= 26 \times 9736\text{ cm}$

$= 253136\text{ cm}$

$=$ **2531 m 36 cm**

Length of cable wire in 26 rolls is 2531 m 36 cm.

12. Length of cloth required for *Salwar-Kurta* $= 3\text{ m } 75\text{ cm}$

$3\text{ m} = 3 \times 100\text{ cm}$

$= 300\text{ cm}$

Length of cloth required $= 3\text{ m } 75\text{ cm}$

$= 300\text{ cm} + 75\text{ cm}$

$= 375\text{ cm}$

Length of cloth required for 9 *Salwar-Kurta* $= 9 \times 375\text{ cm}$

$= 3375\text{ cm}$

$=$ **33 m 75 cm**

Length of cloth required for 9 *Salwar-kurta* is 33 m 75 cm.

13. Distance covered by bike in 1 minute $= 80\text{ m } 25\text{ cm}$

$80\text{ m} = (80 \times 100)\text{ cm} = 8000\text{ cm}$

$\therefore$ Distance covered by bike in 1 minute $= 80\text{ m } 25\text{ cm}$

$= 8000\text{ cm} + 25\text{ cm}$

$= 8025\text{ cm}$

Distance covered by bike in 25 minutes $= 25 \times 8025\text{ cm}$

$= 200625$

$=$ **2006 m 25 cm**

Distance covered by bike in 25 minutes is 2006 m 25 cm.

14. Length of wire in 1 roll = 45 m 75 cm

1 m = 100 cm

45 m = 45 × 100 cm

= 4500 cm

∴ Length of wire in 1 roll = 45 m 75 cm

= 4500 cm + 75 cm

= 4575 cm

Length of wire in 53 rolls = 53 × 4575

= 242475 cm = **2424 m 75 cm**

Length of thread in 53 rolls is 2424 m 75 cm.

15. Length of each string = 35 m 16 cm

1 m = 100 cm

35 m = 3500 cm

∴ Length of each string = 35 m 16 cm

= 3500 cm + 16 cm

= 3516 cm

Length of 15 strings = 15 × 3516 cm

= 52740 cm

= **527 m 40 cm**

Length of 15 strings is 527 m 40 cm.

Exercise 10.7

17. Length of total cloth = 11 m

1 m = 100 cm

11 m = 11 × 100 cm

∴ Length of total cloth = 1100 cm

It is cut into 5 equal pieces.

Length of each piece of cloth = 1100 cm ÷ 5

= 220 cm

= **2 m 20 cm**

Length of one piece of cloth is 2 m 20 cm.

$$\begin{array}{r} 220 \\ 5\overline{)1100} \\ \underline{10}\downarrow \\ 10 \\ \underline{10}\downarrow \\ 00 \end{array}$$

18. Total length of ribbon = 19 m 52 cm

1 m = 100 cm; 19 m = 19 × 100 cm = 1900 cm

∴ Total length of ribbon = 19 m 52 cm

= 1900 cm + 52 cm

= 1952 cm

It is divided into 4 equal pieces.

Length of each piece of ribbon = 1952 cm ÷ 4

= 488 cm

= **4 m 88 cm**

Length of one piece of ribbon is 4 m 88 cm.

$$\begin{array}{r} 488 \\ 4\overline{)1952} \\ \underline{16}\downarrow \\ 35 \\ \underline{32}\downarrow \\ 32 \\ \underline{32} \\ 0 \end{array}$$

19. Total length of thread reel = 85 m 32 cm
1 m = 100 cm
85 m = 85 × 100 cm
= 8500 cm
∴ Total length of thread reel = 85 m 32 cm
= 8500 cm + 32 cm
= 8532 cm

$$\begin{array}{r|l} & 1422 \\ \hline 6 & 8532 \\ & 6\downarrow \\ \hline & 25 \\ & 24\downarrow \\ \hline & 13 \\ & 12\downarrow \\ \hline & 12 \\ & 12 \\ \hline & 0 \end{array}$$

It is shared among 6 boys.
Length of thread each boy will have = 8532 cm ÷ 6
= 1422 cm
= **14 m 22 cm**
Length of thread got by each boy is 14 m 22 cm.

20. Total length of cloth = 13 m 20 cm
1 m = 100 cm
13 m = 13 × 100 cm
= 1300 cm
∴ Total length of cloth = 13 m 20 cm
= 1300 cm + 20 cm
= 1320 cm

$$\begin{array}{r|l} & 165 \\ \hline 8 & 1320 \\ & 8\downarrow \\ \hline & 52 \\ & 48\downarrow \\ \hline & 40 \\ & 40 \\ \hline & 0 \end{array}$$

It is cut into 8 equal pieces.
Length of each piece of cloth = 1320 cm ÷ 8 = 165 cm
= **1 m 65 cm**
Length of one piece of cloth is 1 m 65 cm.

11. Measures of Mass

Exercise 11.2

12. Mass of empty tin = 1 kg 180 g
Mass of chocolates = 6 kg 450 g

Total weight of tin and chocolates =

$$\begin{array}{r} \boxed{1}\boxed{1} \\ 1\text{ kg }1\,8\,0\text{ g} \\ +\ 6\text{ kg }4\,5\,0\text{ g} \\ \hline \mathbf{7\,kg\,6\,3\,0\ g} \end{array}$$

Total weight of tin and chocolates is 7 kg 630 g.

13. Weight of kitten = 1 kg 675 g
Weight of puppy = 2 kg 155 g

Total mass of the two =

$$\begin{array}{r} \boxed{1}\boxed{1} \\ 1\text{ kg }6\,7\,5\text{ g} \\ +\ 2\text{ kg }1\,5\,5\text{ g} \\ \hline \mathbf{3\,kg\,8\,3\,0\ g} \end{array}$$

Total mass of the two animals is 3 kg 830 g.

14. Weight of wheat = 1 kg 450 g
Weight of rice = 2 kg 775 g
Weight of sugar = 1 kg 325 g

$$\begin{array}{r} \boxed{1}\quad \boxed{1}\boxed{1} \\ 1\text{ kg } 4\,5\,0\text{ g} \\ 2\text{ kg } 7\,7\,5\text{ g} \\ +\ 1\text{ kg } 3\,2\,5\text{ g} \\ \hline \mathbf{5\text{kg }5\,5\,0\text{ g}} \end{array}$$

Total weight of these three items =

Total weight of three items is 5 kg 550 g.

15. Amount of vegetables bought by Ali = 5 kg 125 g
Amount of fruits bought by Ali = 6 kg 785 g

$$\begin{array}{r} \boxed{1}\boxed{1} \\ 5\text{ kg } 1\,2\,5\text{ g} \\ +\ 6\text{ kg } 7\,8\,5\text{ g} \\ \hline \mathbf{11\text{kg }9\,1\,0\text{ g}} \end{array}$$

Total weight of the bag she carry =

Total weight of Ali's bag is 11 kg 910 g.

Exercise 11.3

10. Amount of rice Madhu gets on her ration card = 3 kg 375 g
Requirement of her family = 5 kg

$$\begin{array}{r} \boxed{4}\quad \boxed{9}\boxed{9} \\ 5\text{ kg } 0\,0\,0\text{ g} \\ -\,3\text{ kg } 3\,7\,5\text{ g} \\ \hline \mathbf{1\text{kg }6\,2\,5\text{ g}} \end{array}$$

Amount of rice she purchases from market =

Manvi will purchase 1 kg 625 g of rice from market.

11. Amount of wheat in a sack = 45 kg 70 g
Amount of wheat used by Roso = 26 kg 590 g

$$\begin{array}{r} \boxed{3}\boxed{4}\quad \boxed{9} \\ 4\,5\text{ kg } 0\,7\,0\text{ g} \\ -\,2\,6\text{ kg } 5\,9\,0\text{ g} \\ \hline \mathbf{18\text{kg }4\,8\,0\text{ g}} \end{array}$$

Amount of wheat left in a sack =

Amount of wheat left in the sack is 18 kg 480 g.

12. Weight of carton with grapes = 5 kg 120 g
Weight of carton alone = 175 g

$$\begin{array}{r} \boxed{4}\quad \boxed{10}\boxed{1} \\ 5\text{ kg } 1\,2\,0\text{ g} \\ -\ 0\text{ kg } 1\,7\,5\text{ g} \\ \hline \mathbf{4\text{kg }9\,4\,5\text{ g}} \end{array}$$

Weight of grapes alone =

Here we borrowed 1 kg = 10 hundreds of g
∴ Weight of grapes alone is 4 kg 945 g.

13. Total weight of apples = 5 kg
Amount of apples rotten = 250 g

$$\begin{array}{rr} & \boxed{4}\ \ \boxed{9}\boxed{10} \\ \text{Amount of apples left} = & 5\text{ kg }0\,0\,0\text{ g} \\ - & \quad 2\,5\,0\text{ g} \\ \hline & 4\text{ kg }7\,5\,0\text{ g} \end{array}$$

Amount of apples used in the family = 2 kg 4 7 5 g

$$\begin{array}{rr} & \boxed{6}\boxed{4} \\ \text{Net amount of apples left} = & 4\text{ kg }7\,5\,0\text{ g} \\ - & 2\text{ kg }4\,7\,5\text{ g} \\ \hline & \mathbf{2\text{ kg }2\,7\,5\text{ g}} \end{array}$$

Net amount of apples left were 2 kg 275 g.

Exercise 11.4

12. Weight of one carton of mangoes = 5 kg 220 g

$$\begin{array}{rr} & \boxed{1}\ \ \boxed{1} \\ \text{Total weight of 5 carton of mangoes} = & 5\text{ kg }220\text{ g} \\ & \quad \times\ 5 \\ \hline & \mathbf{26\text{ kg}100\text{ g}} \end{array}$$

Total weight of 5 carton of mangoes is 26 kg 100 g.

13. Weight of one sports shoe = 478 g

$$\begin{array}{rr} & \boxed{6}\boxed{6} \\ \text{Weight of 4 pairs (or 8 shoes) of sports shoes} = & 4\,7\,8\text{ g} \\ & \quad \times\ 8 \\ \hline & \mathbf{3824\text{ g}} \end{array}$$

$$= \mathbf{3\text{ kg }824\text{ g}}$$

Total mass of 4 pairs of sports shoes is 3 kg 824 g.

14. Weight of 1 English book = 325 g
Weight of 6 English books = 6 × 325 g = 1950 g
1000 g = 1 kg
= **1 kg 950 g**
Weight of 6 English books is 1 kg 950 g.

15. Weight of one chocolates box = 1 kg 320 g

$$\begin{array}{rr} & \boxed{2}\ \ \boxed{1} \\ \text{Weight of 9 chocolates boxes} = & 1\text{ kg }320\text{ g} \\ & \quad \times\ 9 \\ \hline & \mathbf{11\text{ kg}880\text{ g}} \end{array}$$

Weight of 9 chocolates boxes is 11 kg 880 g.

Exercise 11.5

13. Total amount of toffees = 6 kg 360 g
= 6 × 1000 g + 360 g
= 6000 g + 360 g
= 6360 g

$$\begin{array}{r} 795 \\ 8\overline{)6360} \\ \underline{56}\downarrow \\ 76 \\ \underline{72}\downarrow \\ 40 \\ \underline{40} \\ 0 \end{array}$$

Total number of families in which it is to be divided = 8
Amount of toffees each family will get = 6360 g ÷ 8
= **795 g**
Each family will get 795 g of toffees.

14. Total amount of sugar = 8 kg
Number of person in which it is to be divided = 5
Amount of sugar each person will get = 8 kg ÷ 5
= 8000 g ÷ 5
= 1600 g
= **1 kg 600 g**

$$\begin{array}{r} 1600 \\ 5\overline{)8000} \\ \underline{5}\downarrow \\ 30 \\ \underline{30}\downarrow \\ 00 \end{array}$$

Each person will get 1 kg 600 g of sugar.

15. Weight of 6 glass pots = 7 kg 134 g
∴ Weight of 1 glass pot = 7 kg 134 g ÷ 6
= 7134 g ÷ 6
= 1189 g
= **1 kg 189 g**

$$\begin{array}{r} 1189 \\ 6\overline{)7134} \\ \underline{6}\downarrow \\ 11 \\ \underline{6}\downarrow \\ 53 \\ \underline{48}\downarrow \\ 54 \\ \underline{54} \\ 0 \end{array}$$

Weight of 1 glass pot is 1 kg 189 g.

12. Measures of Capacity

Exercise 12.2

12. Amount of paint used for doors = 6 L 275 mL
Amount of paint used for windows = 3 L 250 mL

$$\begin{array}{rr} & \boxed{1} \\ \text{Total amount of paint used} = & 6\text{ L }275\text{ mL} \\ + & 3\text{ L }250\text{ mL} \\ \hline & \mathbf{9\text{ L }525\text{ mL}} \end{array}$$

Sudha used total of 9 L 525 mL paint.

13. Previously amount of petrol in Rajni's car = 3 L 370 mL
Amount of petrol she filled more = 18 L 750 mL

$$\begin{array}{r} \boxed{1}\ \boxed{1} \\ 3\text{ L }370\text{ mL} \\ +\ 18\text{ L }750\text{ mL} \\ \hline \mathbf{22\text{ L }120\text{ mL}} \end{array}$$

Total amount of petrol now in the car =

Now there is 22 L 120 mL petrol in Rajni's car.

14. Amount of milk Renu bought from one dairy = 5 L 550 mL

Amount of milk Renu bought from another dairy = 8 L 250 mL

$$\begin{array}{r} \boxed{1} \\ 5\text{ L }550\text{ mL} \\ +\ 8\text{ L }250\text{ mL} \\ \hline \mathbf{13\text{ L }800\text{ mL}} \end{array}$$

Total amount of milk she bought =

Renu bought 13 L 800 mL of milk from both dairies.

15. Oil in first tin = 13 L 350 mL

Amount of oil in another tin more than first tin = 1 L 750 mL

$$\begin{array}{r} \boxed{1}\ \boxed{1} \\ 13\text{ L }350\text{ mL} \\ +\ 1\text{ L }750\text{ mL} \\ \hline \mathbf{15\text{ L }100\text{ mL}} \end{array}$$

Total amount of oil in the second tin =

There is 15 L 100 mL oil in another tin.

Exercise 12.3

12. Total capacity of bucket = 16 L

Amount of water poured in it = 12 L 450 mL

$$\begin{array}{r} \boxed{5}\ \boxed{9} \\ 16\text{ L }000\text{ mL} \\ -\ 12\text{ L }450\text{ mL} \\ \hline \mathbf{3\text{ L }550\text{ mL}} \end{array}$$

More amount of water required to fill the bucket =

3 L 550 mL more water is required to fill the bucket.

13. Total amount of paint Raja bought = 10 L

Amount of paint used for doors = 4 L 250 mL

$$\begin{array}{r} \boxed{9}\ \boxed{9} \\ 10\text{ L }000\text{ mL} \\ -\ 4\text{ L }250\text{ mL} \\ \hline 5\text{ L }750\text{ mL} \end{array}$$

Left paint =

Now paint used for windows = 2 L 350 mL

$$\begin{array}{r} 5\text{ L }750\text{ mL} \\ -\ 2\text{ L }350\text{ mL} \\ \hline \mathbf{3\text{ L }400\text{ mL}} \end{array}$$

Net amount of paint left =

3 L 400 mL of paint was left with Raja.

14. Amount of milk in a vessel = 4 L 250 mL
Amount of milk used to prepare tea = 1 L 375 mL

$$\begin{array}{rr} & \boxed{3}\ \boxed{1}\boxed{4} \\ \text{Amount of milk left} = & 4\ \text{L}\ 2\ 5\ 0\ \text{mL} \\ - & 1\ \text{L}\ 3\ 7\ 5\ \text{mL} \\ \hline & \mathbf{2\ L\ 8\ 7\ 5\ mL} \end{array}$$

Thus, 2 L 875 mL of milk was left in the vessel.

15. Total petrol in a big container = 100 L
Amount of petrol sold in a day = 65 L 750 mL

$$\begin{array}{rr} & \boxed{99}\ \ \boxed{9} \\ \text{Petrol left after selling} = & 100\ \text{L}\ 000\ \text{mL} \\ - & 65\ \text{L}\ 750\ \text{mL} \\ \hline & 34\ \text{L}\ 250\ \text{mL} \end{array}$$

$$\text{Petrol spilled} = 500\ \text{mL}$$

$$\begin{array}{rr} & \boxed{3} \\ \text{Net amount of petrol left} = & 34\ \text{L}\ 250\ \text{mL} \\ - & 500\ \text{mL} \\ \hline & \mathbf{33L\ 750\ mL} \end{array}$$

33 L 750 mL of petrol was left in the container.

Exercise 12.4

10. Amount of diesel consumed by truck in one hour = 4 L 220 mL
Amount of diesel consumed by truck in 12 hours

$$= (4\ \text{L}\ 220\ \text{mL}) \times 12$$

$$= 4\ \text{L}\ 220\ \text{mL}$$

$$\begin{array}{r} \times 12 \\ \hline 8\quad 440 \\ 42\quad 20\times \\ \hline \mathbf{50L640\ mL} \end{array}$$

Truck will consume 50 L 640 mL of diesel in 12 hours.

11. Amount of oil that one container can hold = 5 L 375 mL
Amount of oil that 4 containers can hold = (5 L 375 mL) × 4

$$\begin{array}{r} \boxed{1}\ \boxed{3}\boxed{2} \\ = 5\ \text{L}\ 3\ 7\ 5\ \text{mL} \\ \times\ 4 \\ \hline \mathbf{21\ L\ 500mL} \end{array}$$

4 such containers can hold 21 L 500 mL oil in them.

12. In one hour stove consumed petrol = 265 mL
In 8 hours stove will consume petrol = (265 mL) × 8

$$\begin{array}{r} \boxed{2}\ \boxed{5}\boxed{4} \\ = 0\text{ L }2\,6\,5\text{ mL} \\ \times\ 8 \\ \hline \mathbf{2\text{ L }1\,2\,0\text{ mL}} \end{array}$$

Total of 2 L 120 mL of petrol will be consumed in 8 hours.

Exercise 12.5

10. Total amount of oil = 5 L
= 5 × 1000 mL
= 5000 mL

$$\begin{array}{r} 1250 \\ 4\overline{)5000} \\ 4\downarrow \\ \hline 10 \\ 8\downarrow \\ \hline 20 \\ 20\downarrow \\ \hline 00 \end{array}$$

Amount of oil which Alka put in her car
= one quarter of 5 L
= $\frac{1}{4}$th of 5000 mL
= (5000 mL) ÷ 4
= 1250 mL
= **1 L 250 mL**

Alka put 1 L 250 mL of oil in her car.

11. Total amount of medicine = 13 L 464 mL
= 13 × 1000 mL + 464 mL
= 13000 mL + 464 mL
= 13464 mL

$$\begin{array}{r} 1496 \\ 9\overline{)13464} \\ 9\downarrow \\ \hline 44 \\ 36\downarrow \\ \hline 86 \\ 81\downarrow \\ \hline 54 \\ 54 \\ \hline 0 \end{array}$$

Number of bottles in which it is to be packed = 9
Amount of medicine in each bottle = (13464 mL) ÷ 9
= 1496 mL
= **1 L 496 mL**

In each bottle there will be 1 L 496 mL of medicine.

12. Total amount of milk = 5 L 300 mL
= 5 × 1000 mL + 300 mL
= 5000 mL + 300 mL
= 5300 mL

$$\begin{array}{r} 1325 \\ 4\overline{)5300} \\ 4\downarrow \\ \hline 13 \\ 12\downarrow \\ \hline 10 \\ 8\downarrow \\ \hline 20 \\ 20 \\ \hline 0 \end{array}$$

Number of persons it is to be divided = 4
Each person will get = 5300 mL ÷ 4
= 1325 mL
= **1 L 325 mL**

Each person will get 1 L 325 mL of milk.

13. Total amount of Cola in one bottle = 3 L
= 3 × 1000 mL
= 3000 mL

$$\begin{array}{r} 375 \\ 8\overline{)3000} \\ \underline{24}\downarrow \\ 60 \\ \underline{56}\downarrow \\ 40 \\ \underline{40} \\ 0 \end{array}$$

Number of children in which it is shared = 8
Each child will get = (3000 mL) ÷ 8
= **375 mL**
Each child will get 375 mL of Cola.

Let's Recall

2. 1 L = 1000 mL
Number of packets of 250 mL from 1 liter of milk = 1000 ÷ 250
= **4**
Thus, number of packets is 4.

7. 1 L = 1000 mL
2 L = 2 × 1000 mL
2 L = 2000 mL
Number of packets of 500 mL from 2 litre of milk = 2000 ÷ 500
= **4**
Thus, the number of packets is 4.

Unit-VII : Geometry and Patterns

13. Lines and Plane Figures

Exercise 13.6

1. Shape of Shikhar's field is rectangle of sides
= 300 m long and 100 m wide
To run right round its edge he covers its perimeter.
∴ Perimeter or rectangular field
= 300 m + 300 m + 100 m + 100 m
= **800 m**
Shikhar will run 800 m.

2. Dimensions of playing field = 200 m, 180 m, 170 m and 210 m
A teacher walks round its edges will walk along its perimeter.
Perimeter of field = 200 m + 180 m + 170 m + 210 m
= **760 m**
In one round teacher will walk 760 m.

3. Each side of hexagon flower-bed = 8 cm
For fencing we need to calculate its perimeter.

$\therefore$ Perimeter of hexagon flower-bed

$= 8\,m + 8\,m + 8\,m + 8\,m + 8\,m + 8\,m$

$=$ **48 m**

48 m long fencing will be required for flower-bed.

4. Three sides of a triangle = 6 cm, 8 cm and 10 cm

Perimeter of a triangle = sum of all three sides

$= 6\,cm + 8\,cm + 10\,cm$

$=$ **24 cm**

Perimeter of a triangle is 24 cm.

5. Each side of square = 5 m

Mona takes round of it along the walls *i.e.,* she covers the perimeter of square shaped classroom.

Perimeter of square = sum of all four sides

$= 5\,m + 5\,m + 5\,m + 5\,m =$ **20 m**

She walks total of 20 m.

6. Dimensions of carpet = 160 cm and 90 cm

Perimeter of carpet which is of rectangular shape

$= 160\,cm + 160\,cm + 90\,cm + 90\,cm$

$=$ **500 cm**

Perimeter of carpet is 500 cm.