Mathematics-5

CHAPTER-1

Colourful Beads

1. (i) 60000 + 3000 + 800 + 20 + 0
   (ii) 70000 + 1000 + 0 + 40 + 0
   (iii) 20000 + 9000 + 800 + 70 + 3

2. (i) 45501 = 40,000 + 5,000 + 500 + 00 + 1
   (ii) 91,000 = 90,000 + 1,000 + 000 + 00 + 0
   (iii) 32496 = 30,000 + 2,000 + 400 + 90 + 6
   (iv) 10700 = 10,000 + 0000 + 700 + 00 + 0
   (v) 91377 = 90,000 + 1,000 + 300 + 70 + 7
   (vi) 52086 = 50,000 + 2,000 + 000 + 80 + 6

3. 13350 → 3000, 300

   30100 → 30000

   37333 → 30000, 300, 30, 3

4. (i) Place value of 4 = 4000
   (ii) Place value of 4 = 40000
   (iii) 5 2 4 4 4
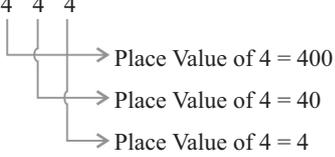
   Place Value of 4 = 400
   Place Value of 4 = 40
   Place Value of 4 = 4
   (iv) 1 7 4 0 4
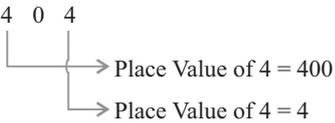
   Place Value of 4 = 400
   Place Value of 4 = 4

5. 6000 + 9 = 6009
   50000 + 2000 + 400 + 70 + 8 = 52478
   2 ten thousand + 5 thousand + 7 hundred + 4 tens + 9 ones = 25749

6. (i) 5008, (ii) 63395, (iii) 10110, (iv) 19821, (v) 90999

7. 63972 = Sixty-three thousand nine hundred seventy-two
   78125 = Seventy-eight thousand one hundred twenty-five
   90001 = Ninety thousand one

8. Eighty two thousand five.

9. 43618   6782   21307

10. (i) 72562 = Seventy two thousand five hundred sixty two
    (ii) 82480 = Eighty two thousand four hundred eighty
    (iii) 80002 = Eighty thousand two
    (iv) 11111 = Eleven thousand one hundred eleven

11. (i) Greatest = 87532, Smallest = 23578
    (ii) Greatest = 96410, Smallest = 10469
    (iii) Greatest = 63300, Smallest = 30036

12. (i) 50,252   (ii) 5,432
    (iii) 75,429   (iv) 25,089

13.

Digits	Largest number	Smallest number
3,6,2,4,1	64321	12346
7,0,3,5,2	75320	20357
4,0,1,0,1	41100	10014
5,2,0,5,2	55220	20255

14. (i) 6 tens, 0 hundred, 4 ones, 1 thousand $\boxed{1064}$ — One thousand sixty four

(ii) 4 thousand, 1 ones, 4 hundred $\boxed{4401}$ — Four thousand four hundred one.

(iii) 3 thousands, 7 hundreds, 3 ones, 2 tens $\boxed{3723}$ — Three thousand seven hundred thirty two

(iv) 4 tens, 3 ones, 5 hundreds, 2 thousands $\boxed{2543}$ — Two thousands five hundred forty three

15. (i) 2000   (ii) 4900   (iii) 6500
    (iv) 9999   (v) 2500   (vi) 1000
    (vii) 1009

❏❏

CHAPTER-2

Playing with Numbers

1. (i) > (ii) < (iii) > (iv) = (v) < (vi) > (vii) > (viii) < (ix) > (x) =

2. (i) 4305, 4035, 6521, 6531, ④⓪⓪⑤, 4500
   (ii) 9999, 10000, 7527, 5772, ⑥⑦②, 6967

3. (i) 6295, 6925, 6952
   (ii) 9500, 15050, 15725
   (iii) 823, 2746, 3999

4. (i) 2341, 4251, ⓪21941⓪
   (ii) 46925, ⓪64785⓪, 64758

5. (i) ₹ 12308
   (ii) Lucent = ₹ 9969
       Nishij = ₹ 9950
       Total = 9969 + 9950 = ₹ 19919
   (iii) Check highest:
        Pratyush = ₹ 12900

(iv) Check lowest:
     Nishij = ₹ 9950
(v) Amounts:
    Nishij: 9950
    Lucent: 9969
    Mayank: 10000
    Ben: 12308
    Pratyush: 12900
    Ascending Order = 9950, 9969, 10000, 12308, 12900

6. Ascending order
   (i) 26688, 26886, 30725, 30840
   (ii) 50739, 53907, 59307, 59703
   (iii) 74344, 74443, 77545, 77745
   (iv) 68239, 68309, 68390, 68923

7. Descending order
   (i) 51425, 32325, 32154, 31525
   (ii) 86316, 86154, 83507, 83052
   (iii) 76543, 76435, 73654, 73564
   (iv) 80004, 8098, 8068, 8004

5. (i) Largest number = 98752
   (ii) Smallest number = 25789
   (iii) Difference of the two numbers = 72963

9. (i) The smallest number = 1000
   (ii) The largest number = 9999

10. (i) Largest number = 99969
    (ii) Smallest number = 10069

11. (i) 10512, 10412, 9536, 1345
    (ii) 7836, 7831, 5420, 5412

12. Largest number = 97520
    Smallest number = 20579
    Difference of the number = 76941

13. (i) 4689, (ii) 1223, (iii) 4489, (iv) 1122.

14. Greatest = 99999
    Smallest = 10000

15. (i) Largest number = 97421
        Smallest number = 12479

(ii) Largest number = 95400

Smallest number = 40059

(iii) Largest number = 85210

Smallest number = 10258

(iv) Largest number = 643322

Smallest number = 223346

16. (i) 10123 < 20123

(ii) 45678 = 45678

(iii) 99876 > 98765

(iv) 30001 > 29999

(v) 87456 < 87465

(vi) 51322 = 51322

(vii) 12000 < 12001

(viii) 45000 > 44999

17.

Number		Indian Number System	International Number System
(i)	100123	1,00,123	100,123
(ii)	8345678	83,45,678	8,345,678
(iii)	99876	99,876	99,876
(iv)	300001	3,00,001	300,001
(v)	874560	8,74,560	874,560
(vi)	5132246	51,32,246	5,132,246
(vii)	12000	12,000	12,000
(viii)	449999	4,49,999	449,999

The numbers in words using the Indian Number System :

(i) One lakh one hundred twenty-three

(ii) Eighty-three lakh forty-five thousand six hundred seventy-eight

(iii) Ninety-nine thousand eight hundred seventy-six

(iv) Three lakh one

(v) Eight lakh seventy-four thousands five hundred sixty

(vi) Fifty-one lakh thirty-two thousand two hundred forty-six

(vii) Twelve thousand

(viii) Four lakh forty-nine thousand nine hundred ninety-nine

The numbers in words using the Internatioal Number System :

(i) One hundred thousand one hundred twenty-three

(ii) Eight million three hundred forty-five thousand six hundred seventy-eight

(iii) Ninety-nine thousand eight hundred seventy-six

(iv) Three hundred thousand one

(v) Eight hundred seventy-four thousand five hundred sixty

(vi) Five million one hundred thirty-two thousand two hundred forty-six

(vii) Twelve thousand

(viii) Four hundred forty-nine thousand nine hundred ninety-nine

❑❑

CHAPTER-3

The World of Addition and Subtraction

1. (i) 3658 (ii) 6736

(iii) 5438 (iv) ५६६८

(v) 9710 (vi) 7759

2. (i) 2709 (ii) 1351

(iii) 3216 (iv) 2379

3. Total trees 7315

3570 + 1280 + 2465 = 7315 trees

4. Price of the cupboard = ₹ 7875

Price of the washing machine = ₹ 8750

Price of the television = ₹ 8460

Th	H	T	O
(2)	(1)		
7	8	7	5

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

They paid ₹ 25085 in total.

5. Wheat crop was sold for ₹ 68756

Mustard crop was sold for ₹ 78580

Gram crop was sold for ₹ 38750

	TTH	**Th**	**H**	**T**	**O**
	(2)	(2)	(1)		
	6	8	7	5	6
+	7	8	5	8	0
+	3	8	7	5	0
1	8	6	0	8	6

So, he sold his crops for ₹ 186086.

6.

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

Total 5178 animals are grazing in the pasture.

7.

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

The total population of both the villages is 22589.

8.

(i)

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

(ii)

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

(iii)

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

(iv)

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

(v)

	9	8	7	4
−	4	3	5	2
	5	5	2	2

(vi)

	4	7	6	2
−	2	4	3	7
	2	3	2	5

(vii)

	8	6	7	0
−	3	7	2	3
	4	9	4	7

(viii)

	7	0	0	0
−	4	0	5	2
	2	9	4	8
		①	①	①

9. Number of boys = 3896

Number of girls = 5768

Total students = 9664

10. Trees planted in first phase = 3750

Trees planted in second phase = 4370

Total trees planted in all the three phase phase = 12800

So, trees planted in third phase

= total trees − (trees planted in first and second phase)

= 12800 − (3750 + 4370)

= 12800 − 8120

= 4680 trees (in third phase)

11. Addition

(i)
```
    २  ४  ६  ५
 +  ३  ५  ३  ०
 ─────────────
    ५  ९  ९  ५
```

(ii)
```
    ६  ८  ४  ३
 +  ४  २  ३  ७
 ─────────────
 ११  ०  ८  ०
```

(iii)
```
    ५  ६  ७  ८
 +  ६  ३  ४  ५
 ─────────────
 १२  ०  २  ३
```

(iv)
```
    ३  ४  ५  ०
 +  ४  ०  ६  ७
 ─────────────
    ७  ५  १  ७
```

Subtraction

(i)
```
    ७  ४  ६  ८
 −  ४  १  २  ३
 ─────────────
    ३  ३  ४  ५
```

(ii)
```
    ३  ०  ७  ५
 −  २  ८  २  ३
 ─────────────
       २  ५  २
```

(iii)
```
    ९  ७  ६  ८
 −  ५  ४  ८  ३
 ─────────────
    ४  २  ८  ५
```

(iv)
```
    ७  ५  ४  ०
 −  ५  ०  ४  ७
 ─────────────
    २  ४  ९  ३
```

12. In the fair,

Total camels	= 1145
Total sheeps	= 2778
Total goats	= 5369
Total horses	= 1425
Total cows	= 8319
Grand total of animals	= 19036

13.

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

14. The cost of a sewing machine = ₹ ३४५०

The cost of a fodder machine = ₹ ६,७००

६,७०० > ३४५०

So, fodder machine is costlier.

```
   Th    H    T    O
        (६) (१०)
    ६    ⁶̸    ⁵̸    ०
 −  ३    ४    ५    ०
 ───────────────────
    ३    २    ५    ०
```

So, the fodder machine is costlier by ₹ ३२५०.

15. He sold buffalo worth = ₹ 75400

The cost of the cow bought = ₹ 32100

The cost of two goats bought = ₹ 16809

Total chpenses made to buy a cow and two goats.

```
    TTh   Th    H    T    O
     3     2    1    0    0
 +   1     6    8    0    9
 ──────────────────────────
     4     8    9    0    9
```

Money left with farmer = Total money with farmer – Total money paid

```
    TTh   Th    H    T    O
     7     5    4    0    0
 −   4     8    9    0    9
 ──────────────────────────
     2     6    4    9    1
```

The farmer has ₹ 26491 left.

16. No. of trees in the field = 4750

No. of fruit trees = 1895

No. of shaded trees = ?

Th	H	T	O
③	⑯	⑭	⑩
	6	4	
4̸	7̸	5̸	0̸
− 1	8	9	5
2	8	5	5

There are 2855 shaded trees in the garden.

17. Greatest number of four digits = 9999
Smallest number of three digits = 100
Difference = 9999 – 100

Th	H	T	O
9	9	9	9
−	1	0	0
9	8	9	9

Difference is 9899.

18. The sum of two numbers = 9874
One number = 6385
Other number = sum of the numbers – one number

		(11)	(14)
	7	6	0
9	8	7	4
− 6	3	8	5
3	4	8	9

Th	H	T	O
		⑯	⑭
	7	6	
9	8̸	7̸	4̸
− 6	3	8	5
3	4	8	9
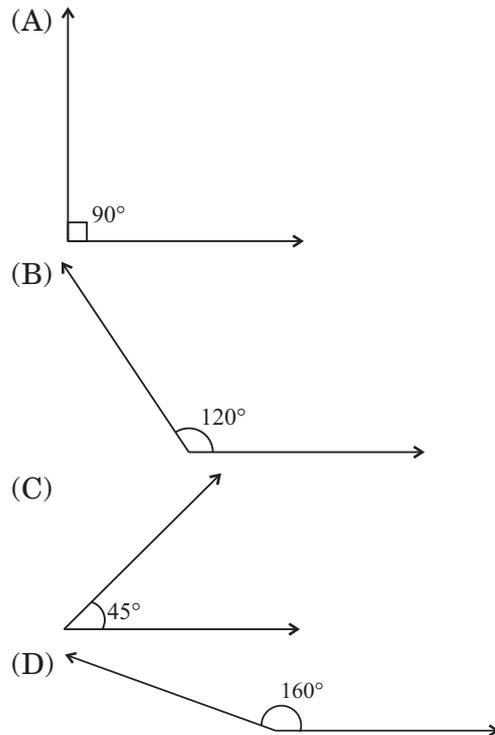
So, Difference = 3489

❑❑

CHAPTER-4

Turn and See

1. 1. less than 90º, 2. more than 90º but less than 180º, 3. 90º.

2. (C)

3. 1. 50°, 2. 120°, 3. 90°, 4. 130°.

4. (D) None of these

5. (D) Degree.

6. (C) 90°.

7. Do yourself.

8. 1. Vertex, 2. Right angle, 3. Protractor.

9. (A)

90°

(B)

120°

(C)

45°

(D)

160°

10. (A) right (B) Acute
(C) Obtuse (D) Obtuse

❑❑

CHAPTER-5

The Travelling of Multiplication

1. (i) 8000 (ii) 22000

2. (A) 1000 (B) 0 (C) 4000

3. (i) (B), (ii) (C), (iii) (D).

4.

S. N.	Number	× 10	× 200	× 3000	× 4000
1.	5	5 × 10 = 50	5 × 200 = 1000	5 × 3000 = 15000	5 × 4000 = 20000
2.	25	25 × 10 = 250	25 × 200 = 5000	25 × 3000 = 75000	25 × 4000 = 100000
3.	105	105 × 10 = 1050	105 × 200 = 21000	105 × 3000 = 315000	105 × 4000 = 420000
4.	203	203 × 10 = 2030	203 × 200 = 40600	203 × 3000 = 609000	203 × 4000 = 812000
5.	340	340 × 10 = 3400	340 × 200 = 68000	340 × 3000 = 1020000	340 × 4000 = 1360000
6.	661	661 × 10 = 6610	661 × 200 = 132200	661 × 3000 = 1983000	661 × 4000 = 2644000
7.	2105	2105 × 10 = 21050	2105 × 200 = 421000	2105 × 3000 = 6315000	2105 × 4000 = 8420000

5. (i) 125 × 10 = 1250

(ii) 53576 × 0 = 0

(iii) 7500 × 100 = 750000

(iv) 5050 × 300 = 1515000

6.(i)

```
        2 3 0 5
      ×   3 6 9   (300 + 60 + 9)
      ─────────
        2 0 7 4 5   (2305 × 9)
      1 3 8 3 0 0   (2305 × 60)
    + 6 9 1 5 0 0   (2305 × 300)
    ───────────
      8 5 0 5 4 5
```

(ii)

```
        3 2 1 0
      ×   1 2 0   (100 + 20)
      ─────────
        6 4 2 0 0   (3210 × 20)
      3 2 1 0 0 0   (3210 × 100)
    ───────────
      3 8 5 2 0 0
```

(iii)

```
        4 6 5 2
      ×   2 2 5   (200 + 20 + 5)
      ─────────
        2 3 2 6 0   (4652 × 5)
        9 3 0 4 0   (4652 × 20)
    + 9 3 0 4 0 0   (4652 × 200)
    ───────────
     10 4 6 7 0 0
```

(iv)

```
            2 5 1 6
          ×   4 0 8   (400 + 8)
        ───────────
          2 0 1 2 8   (2516 × 8)
      + 1 0 0 6 4 0 0   (2516 × 400)
      ─────────────
      1 0 2 6 5 2 8
```

7. (A)

```
          5 6 3
        ×   4 9
      ─────────
          5 0 6 7
      + 2 2 5 2 ×
      ─────────
        2 7 5 8 7
```

(B)

```
          2 8 9
        ×   6 0
      ─────────
          0 0 0
      + 1 7 3 4 ×
      ─────────
        1 7 3 4 0
```

(C)

```
          7 2 0
        ×   2 3
      ─────────
          2 1 6 0
      + 1 4 4 0 ×
      ─────────
        1 6 5 6 0
```

(D) 437 × 76

         437
    ×   76   (70 + 6)
    ───────
        2622   (437×6)
    + 30590   (437×70)
    ───────
      33212

(E) 581 × 69

         581
    ×   69   (60 + 9)
    ───────
        5229   (581×9)
    + 34860   (581×60)
    ───────
      40089

(F) 981 × 18

         981
    ×   18   (10 + 8)
    ───────
        7848   (981×8)
    + 9810   (981×10)
    ───────
      17658

(G) 7956 × 65

        7956
    ×   65   (60 + 5)
    ───────
      39780   (7956×5)
    + 477360   (7956×60)
    ───────
      517140

(H) 8602 × 325

        8602
    ×   325   (300 + 20 + 5)
    ───────
      43010   (8602×5)
    + 172040   (8602×20)
    + 2580600   (8602×300)
    ───────
      2795650

(I) ৩৪২৫ × ২৩

         ৩৪২৫
    ×   ২৩   (২০ + ৩)
    ───────
      ১০২৭৫   (৩৪২৫ × ৩)
    + ৬৮৫০০   (৩৪২৫ × ২০)
    ───────
      ৭৮৭৭৫

(J) ৭৩৯৪ × ৯৮

         ৭৩৯৪

    ×   ৯৮   (৯০ + ৮)
    ───────
      ৫৯১৫২   (৭৩৯৪ × ৮)
    + ৬৬৫৪৬০   (৭৩৯৪ × ৯০)
    ───────
      ৭২৪৬১২

8.   Person earns in day = ₹ 665

    total earning in 42 days = ₹ 665 × 42

            6 6 5
        ×   4 2
        ───────
          1 3 3 0
        2 6 6 0 ×
        ───────
    ₹ 2 7 9 3 0

9.   No. of flower beds in the garden = 118

    No. of plants in each bed = 655

    Total number of plants in the garden

            1 1 8
        ×   6 5 5   (600 + 50 + 5)
        ───────
            5 9 0   (118 × 5)
            5 9 0 0   (118 × 50)
    + 7 0 8 0 0   (118 × 600)
    ───────
       7 7 2 9 0

    Total flowers are 77290

10. (A) Kapil drinks glasses of

        water per day = 10

        Number of days in January = 31

        Number of glasses of water

        drink in January = 31 × 10

        = 310 glasses

    (B) Number of days in a year = 365

        Number of glasses of water

        in a year = 365 × 10 = 3650 glasses

11. Amount spent per day = ₹ 750

    Amount spend in a year = ?

            7 5 0
        ×   3 6 5   (300 + 60 + 5))
        ───────
        3 7 5 0   (750 × 5)

$$
\begin{array}{r}
4\ 5\ 0\ 0\ 0 \quad (750 \times 60)\\
+\ 2\ 2\ 5\ 0\ 0\ 0 \quad (750 \times 300)\\
\hline
₹\ 2\ 7\ 3\ 7\ 5\ 0\\
\hline
\end{array}
$$

Total money spend = ₹ 273750

12. On filling correct answer in the blank boxes :

(i)

(ii)
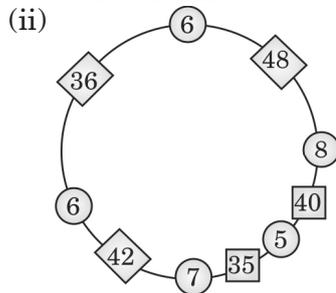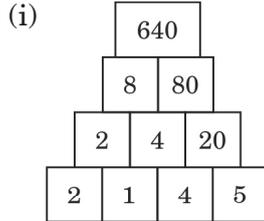
13. ∵ No. of match sticks in one box
= 127

∵ No. of match boxes = 2035

∴ No. of match sticks in 2035 match boxes :

$$
\begin{array}{r}
2\ 0\ 3\ 5\\
\times\ 1\ 2\ 7 \quad (100 + 20 + 7)\\
\hline
1\ 4\ 2\ 4\ 5 \quad (2035 \times 7)\\
4\ 0\ 7\ 0\ 0 \quad (2035 \times 20)\\
+\ 2\ 0\ 3\ 5\ 0\ 0 \quad (2035 \times 100)\\
\hline
2\ 5\ 8\ 4\ 4\ 5\\
\hline
\end{array}
$$

So, number of matchsticks 2035 match boxes = 258445

14. (i) $(0 \times 9) + 1 = 1$

(ii) $(1 \times 9) + 2 = 11$

(iii) $(12 \times 9) + 3 = 111$

(iv) $(123 \times 9) + 4 = 1111$

(v) $(1234 \times 9) + 5 = 11111$

(vi) $(12345 \times 9) + 6 = 111111$

15. ∵ Fare for one passanger
= ₹ 8,350

∴ Total fare for 135 passangers
= ₹ 8350 × 135

$$
\begin{array}{r}
8\ 3\ 5\ 0\\
\times\ 1\ 3\ 5 \quad (100 + 30 + 5)\\
\hline
4\ 1\ 7\ 5\ 0 \quad (8350 \times 5)\\
2\ 5\ 0\ 5\ 0\ 0 \quad (8350 \times 30)\\
+\ 8\ 3\ 5\ 0\ 0\ 0 \quad (8350 \times 100)\\
\hline
1\ 1\ 2\ 7\ 2\ 5\ 0\\
\hline
\end{array}
$$

So, total fare for 135 passangers will be ₹1127250

16. The cost or price of one sewing machine = ₹ 2452

The cost of 184 sewing machines
= ₹ 2452 × 184

$$
\begin{array}{r}
2\ 4\ 5\ 2\\
\times\ 1\ 8\ 4 \quad (100 + 80 + 4)\\
\hline
9\ 8\ 0\ 8 \quad (2452 \times 4)\\
1\ 9\ 6\ 1\ 6\ 0 \quad (2452 \times 80)\\
+\ 2\ 4\ 5\ 2\ 0\ 0 \quad (2452 \times 100)\\
\hline
4\ 5\ 1\ 1\ 6\ 8\\
\hline
\end{array}
$$

So, the spent ₹ 4,51,168 in total.

17. Salary for one month = ₹ 3866

Salary for a year (12 months)

$$
\begin{array}{r}
3\ 8\ 6\ 6\\
\times\ 1\ 2 \quad (10 + 2)\\
\hline
7\ 7\ 3\ 2 \quad (3866 \times 2)\\
3\ 8\ 6\ 6\ 0 \quad (3866 \times 10)\\
\hline
4\ 6\ 3\ 9\ 2\\
\hline
\end{array}
$$

Total salary for a year
= ₹ 46392

18. Number f tourists visited in one day = 763

Number of tourists visited in a year
= 463 × 365 = 168995 tourists

```
          4 6 3
      ×   3 6 5
      ─────────
      2 3 1 5
    2 7 7 8 ×
  1 3 8 9 × ×
  ─────────────
  1 6 8 9 9 5
```

19. No. of fund assembled in a factory

per day   = 5897

No. of fans assembled in 28 days :

```
      5 8 9 7
    ×     2 8   (20 + 8)
    ───────────
    4 7 1 7 6   (5897 × 8)
  1 1 7 9 4 0   (5897 × 20)
  ─────────────
  1 6 5 1 1 6
```

Total fans assembled = 165116.

20. The cost of one metre cloth = ₹ 289

The cost of 6075 metres of cloth

= ₹ 6075 × 289

```
          6 0 7 5
      ×     2 8 9   (200 + 80 + 9)
      ───────────────
      5 4 6 7 5   (6075 × 9)
    4 8 6 0 0 0   (6075 × 80)
+ 1 2 1 5 0 0 0   (6075 × 200)
  ─────────────────
  1 7 5 5 6 7 5
```

The total cost of 6075 metres of cloth

= ₹ 1,755,675

21. No. of pomegranates on each tree

= 112

No. of pomegranates on 2745 trees

= 2745 × 112 = 307540

```
          2 7 4 5
      ×     1 1 2   (100 + 10 + 2)
      ───────────────
      5 4 9 0   (2745 × 2)
    2 7 4 5 0   (2745 × 10)
+ 2 7 4 5 0 0   (2745 × 100)
  ─────────────────
  3 0 7 4 4 0
```

WE LEARNED AND UNDERSTAND-I

1. (i)   3, 210 = Three thousand two hundred ten

(ii) 7, 045 = Seven thousand forty five

(iii) 1, 999 = One thousand nine hundred ninety nine

(iv) 8, 620 = Eight thousand six hundred twenty

(v) 9, 503 = Nine thousand five hundred three

2. (i)   23890 = 20000 + 3000 + 800 + 90 + 0

(ii) 46005 = 40000 + 6000 + 5

(iii) 30142 = 30000 + 100 + 40 + 2

(iv) 70910 = 70000 + 900 + 10 + 0

(v) 15436 = 10000 + 5000 + 400 + 30 + 6

(vi) 88002 = 80000 + 8000 + 2

3. (i) 60000   (ii) 60

(iii) 6000   (iv) 6

(v) 60000   (vi) 60

4. (i) 21354, 24135, 31425, 43125

(ii) 60419, 61940, 64091, 69410

(iii) 70112, 71021 71201, 72110

(iv) 82394, 82934, 89234, 89324

(v) 50340, 50430, 53004, 53400

5. (i) 14325, 14235, 12435, 13425

(ii) 93210, 92130, 91023, 90132

(iii) 76501, 75106, 75061, 70516

(iv) 8904, 8490, 8409, 8049,

(v) 65310, 56301, 56031, 53601

6. (i) The greatest number = 6 5 4 3 1

(ii) The smallest number = 1 3 4 5 6

(iii) Difference of the two no. = 5 1 9 7 5

7. (i) 23145   <   24145

    (ii) 67890   <   68890

    (iii) 99999   >   99998

    (iv) 12345   <   12346

    (v) 45000   =   45000

    (vi) 78412   >   78410

    (vii) 32010   >   31020

    (viii) 65432   =   65432

    (ix) 20000   >   19999

    (x) 87000   <   87001

    (xi) 10010   >   10001

    (xii) 34567   <   34657

8.(i) Rohan had = ₹ 1275.

Cost of book he bought = ₹ 789.

Money left with him

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

Money left with Rohan is ₹ 486.

(ii) No. of boys = 435

No. of girls = 392

Total number of students

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

There are 827 students in the school.

(iii) Ram already had = ₹ 2186

His father gave him = ₹ 1345

Total money Ram has

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

Ram has total 3531 rupees.

(iv) No. of Hindi books = 1 2 4 5

No. of English books =   9 8 7

No. of Science books =   7 6 5

Total number of books = 2 9 9 7

Total number of books in the library

         = 2997

(v) Sonu had = ₹ 2450

He bought goods worth = ₹ 1375

Money left =

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

Sonu is left with ₹ 1075.

(vi) No. of students in the school = 1525

No. of students appeared = 1180

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

No. of students who were absent = 345
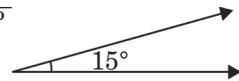
(vii) No. of sacks in the godown = 3250

No. of sacks left in the godown = 1875
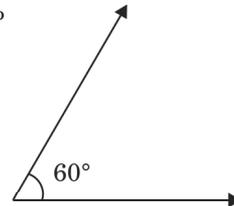
$$\begin{array}{r} ②\ ⑪\ ⑭\ ⑩ \\ \cancel{3}\ \cancel{2}\ \cancel{5}\ \cancel{0} \\ -\ 1\ 8\ 7\ 5 \\ \hline 1\ 3\ 7\ 5 \\ \hline \end{array}$$

9. (i) 15°

(iii) 60°

(iii) 70°

70°

(iv) 120°

120°

10. (i)
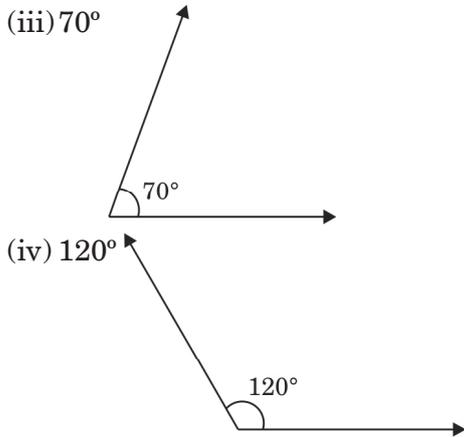
```
        3 4 2 5
      ×   3 1 8      (300 + 10 + 8)
     ─────────────
        2 7 4 0 0    (3425 × 8)
        3 4 2 5 0    (3425 × 10)
   +10 2 7 5 0 0     (318 × 300)
   ──────────────
   1 0 8 9 1 5 0
```

(ii)

```
          1 8 7 6
        ×   4 2 7    (400 + 20 + 7)
      ───────────────
        1 3 1 3 2    (1876 × 7)
        3 7 5 2 0    (1876 × 20)
     +7 5 0 4 0 0    (1876 × 400)
    ───────────────
        8 0 1 0 5 2
```

(iii)

```
          2 9 4 1
        ×   3 5 6    (300 + 50 + 6)
      ───────────────
        1 7 6 4 6    (2941 × 6)
      1 4 7 0 5 0    (2941 × 50)
    + 8 8 2 3 0 0    (2941 × 300)
    ───────────────
    1 0 4 6 9 9 6
```

(iv)

```
          1 6 3 4
        ×   5 0 9    (500 + 0 + 9)
      ───────────────
        1 4 7 0 6    (1634 × 9)
        0 0 0 0 0    (1634 × 0)
    + 8 1 7 0 0 0    (1634 × 500)
    ───────────────
```

```
        8 3 1 7 0 6
```

11. (i) 13378, 13379, 13380

(ii) 9998, 9999, 10000

(iii) 8779, 8780, 8781

(iv) 1188, 1189, 1190

12. The bus covers the distance of

= 185 km.

It will cover distance in 30 days = 185 × 30 km

```
          1 8 5
        ×   3 0      (30 + 0)
      ───────────
          0 0 0      (185 × 0)
    +   5 5 5 0      (185 × 30)
    ───────────
        5 5 5 0
```

= 5550 km

13. He reads pages in one day = 18

He will read pages in 45 days

= 18 × 45

```
          1 8
        ×   4 5      (40 + 5)
      ───────────
          9 0        (18 × 5)
    +   7 2 0        (18 × 40)
    ───────────
        8 1 0
```

So, he will read 810 pages in 45 days.

14. Water used for irrigation in 1 day

= 625 litres

water required for 60 days

= 625 × 60 litres

= 37500 litres

```
          6 2 5
        ×   6 0      (60 + 0)
      ───────────
          0 0 0      (625 × 0)
      3 7 5 0 0      (625 × 60)
    ───────────
      3 7 5 0 0
```

15. Money Devraj went to market with

$$= ₹ 2,000$$

Cost of textbooks =		7 3 5	
Cost of exercise books =	+ 3 1 5	
Total cost =	1 0 5 0	
Money left with him =	2 0 0 0	
	− 1 0 5 0	
	9 5 0	

So, ₹ 950 were left with Devraj.

❑❑

CHAPTER-6

A Trip to the City of Lakes

1. (B) 4

2. (A) +

3. (C)

4. (C)

5. (A)

```
5) 120 (24        Verification
  −10            120 = 24 × 5 + 0
   20               = 120 + 0
  −20               = 120 verified
    0
```

(B)
```
6) 120 (20        Verification
  −12            120 = 20 × 6 + 0
    0               = 120 + 0
   −0               = 120 verified
    0
```

6. (C)

7. (A)
```
45) 9675 (215
   −90
    67
   −45
    225
   −225
      0
```

(B)

```
25) 5625 (225
   −50
    62
   −50
    25
  −125
     0
```

8. (A)

9. (D)

10. (A) 495 ÷ 11
```
11) 495 (45
   −44
    55
   −55
    00
```

Verification of answer :

$$495 = 11 × 45 + 0$$
$$495 = 495; \text{ correct}$$

(B) 1092 ÷ 14
```
14) 1092 (78
   −98
    112
   −112
     00
```

Verification of answer :

$$1092 = 14 × 78 + 0$$
$$1092 = 1092; \text{ correct}$$

(C) 1280 ÷ 16
```
16) 1280 (80
   −128
     00
     00
      0
```

Verification of answer :

$$1280 = 16 × 80 + 0$$
$$1280 = 1280; \text{ correct}$$

(D) 725 ÷ 13

$$13 \overline{)725} (55$$
$$\underline{-65}$$
$$75$$
$$\underline{-65}$$
$$\underline{10}$$

Verification of answer :

$$725 = 13 \times 55 + 10$$
$$725 = 725; \text{correct}$$

(E) $800 \div 15$

$$15 \overline{)800} (53$$
$$\underline{-75}$$
$$50$$
$$\underline{-45}$$
$$\underline{5}$$

Verification of answer :

$$800 = 15 \times 53 + 5$$
$$800 = 800; \text{correct}$$

(F) $1820 \div 19$

$$19 \overline{)1820} (95$$
$$\underline{-171}$$
$$110$$
$$\underline{-95}$$
$$\underline{15}$$

Verification of answer :

$$1820 = 19 \times 95 + 15$$
$$1820 = 1820; \text{correct}$$

11. (A) ☒, (b) ☑

12. (A) $250 \div 50 = 5$ buses

$$50 \overline{)250} (5$$
$$\underline{-250}$$
$$\underline{0}$$

(B) $8 \times 50 = 400$ passengers

(C) Number of passengers in 3 buses

$$= 50 \times 3 = 150$$

Number of passengers seat in the jeep

$$= 10$$

Similarly, number of jeep for 150 childred

$$= 150 \div 10 = 15.$$

13. ∴ Cost of 18 book = ₹ 828

The price of one book :

∴ $828 \div 18 = 46$

So, each book costs ₹ 46

$$18 \overline{)828} (46$$
$$\underline{-72}$$
$$108$$
$$\underline{-108}$$
$$\underline{0}$$

14. Total fare for 30 students = ₹ 1800

fare for each student = ₹ $1800 \div 30$

$$= ₹ 60$$

$$30 \overline{)1800} (60$$
$$\underline{-180}$$
$$00$$
$$\underline{-0}$$
$$\underline{0}$$

15. 1 dozen = 12 mangoes

Number of dozens = $636 \div 12$

$$= 53 \text{ dozens}$$

$$12 \overline{)636} (53$$
$$\underline{-60}$$
$$36$$
$$\underline{-36}$$
$$\underline{0}$$

So, Rinku has 53 dozens of mangoes.

16. Raksha has 2052 pearls.

Number of pearls = $2052 \div 19$

$$= 108$$

So, each necklace will have 108 pearls

$$19 \overline{)2052} (108$$
$$\underline{-19}$$
$$152$$
$$\underline{-152}$$
$$\underline{0}$$

17.

Total chocolates = 576

Chocolates per box = 24

Number of boxes = 576 ÷ 24

= 24 boxes

```
24) 576 (24
    –48
    ───
     96
    –96
    ───
      0
    ───
```

18.

Total saplings = 660

Saplings per row = 15

Number of rows = 660 ÷ 15

= 44 rows

```
15) 660 (44
    –60
    ───
     60
    –60
    ───
      0
    ───
```

19. Team-A : 150 bananas are equally distributed among 6 players.

So, the number of bananas each player gets

= 150 ÷ 6

= 25 bananas

Division :

```
6) 150 (25
   –12
   ───
    30
   –30
   ───
     0
   ───
```

Team-B : 192 bananas are equally distributed among 6 players.

So, the number of bananas each player gets

= 192 ÷ 6

= 32 bananas

Division :

```
6) 192 (32
   –18
   ───
    12
   –12
   ───
     0
   ───
```

Team-B's players get more bananas.

Number of bananas more

= 32 – 25

= 7 bananas

20. Total oragnes = 126

Total childrn = 9

No. of oranges, which each children get

= 126 ÷ 9 = 14 oranges

```
9) 126 (14
   –9
   ───
    36
   –36
   ───
     0
   ───
```

21. Fare for 6 passengers in an ordinary bus

= ₹ 150

∴ fare for 1 passenger

= 150 ÷ 6 = ₹ 25

```
6) 150 (25
   –12
   ───
    30
   –30
   ───
     0
   ───
```

∴ Fare for 6 passengers in a deluxe bus

= ₹ 192

∴ Fare for 1 passenger

= 192 ÷ 6

= ₹ 32

```
6) 192 (32
   –18
   ───
    12
   –12
   ───
     0
   ───
```

The fare of the deluxe bus is higher.
Each passenger pays (32 − 25)

= ₹ 7 more

22. Number of total lines = 9120

Numbr of notebooks = 6

Number of lines in each notebook

= 9120 ÷ 6 = 1520 lines

```
6) 9120 (1520
   −6
   ‾‾‾
    31
   −30
   ‾‾‾
    12
   −12
   ‾‾‾
     0
    −0
   ‾‾‾
     0
```

23. ∵ Cost of 15 bicycles

= ₹ 24,405

∴ Cost of 1 bicycle

= 24405 ÷ 15

= ₹ 1627

```
15) 24405 (1627
    −15
    ‾‾‾‾
     94
    −90
    ‾‾‾‾
     40
    −30
    ‾‾‾‾
    105
   −105
   ‾‾‾‾
     0
```

24. Capacity of auto of carring bags = 98

Number of bags in total = 3050

Number of autos required = 3050 ÷ 98

= 32 autos

```
98) 3050 (31
   −294
   ‾‾‾‾
    110
    −98
   ‾‾‾‾
    12 (Remainder)
```

25. One number × other number

= 4131

∴ 27 × other number

= 4131

[∵ one number = 27]

⇒ = 4131 ÷ 27

= 153

```
27) 4131 (153
    −27
    ‾‾‾‾
    143
   −135
   ‾‾‾‾
     81
    −81
    ‾‾‾‾
     0
```

So, other number = 153

26. Cost of 5 bundles of sugarcane = ₹ 900

Cost of 1 bundle = ₹ 900 ÷ 5 = ₹ 180

```
5) 900 (180
  −5
  ‾‾‾
   40
  −40
  ‾‾‾
   00
  −0
  ‾‾‾
   0
```

27. Number of bulbs = 216

Number of buls in one room = 4

Number of room required = 216 + 4

= 54 rooms

```
4) 216 (54
  −20
  ‾‾‾
   16
  −16
  ‾‾‾
   0
```

28. ∵ Annual (12 months) salary

= ₹ 65520

Salary for one month

= 65520 ÷ 12

= ₹ 5460

$$12\overline{)65520}(5460$$
$$\underline{-60}$$
$$55$$
$$\underline{-48}$$
$$72$$
$$\underline{-72}$$
$$00$$
$$\underline{-0}$$
$$0$$

Therefore, the monthly salary of the person = ₹ 5460

29. Total number of students
= 1250

Total number of laddoos
= 6250

Number of laddoos received by each student = 6250 ÷ 1250
= 5 laddoos

$$1250\overline{)6250}(5$$
$$\underline{-6250}$$
$$0$$

30. 124 passengers paid a fare
= ₹ 77500

1 passenger paid the fare
= 77500 ÷ 124
= ₹ 625

$$124\overline{)77500}(625$$
$$\underline{-744}$$
$$310$$
$$\underline{-248}$$
$$620$$
$$\underline{-620}$$
$$0$$

CHAPTER-7

The Magic of Mathematics

1.

	Number	Deviation

A	103	103 – 100 = +3
B	91	91 – 100 = – 9
C	114	114 – 100 = + 14
D	83	83 – 100 = 17

2. (A) Deviation 12 = 12 – 10 = +2
(B) Deviation 18 = 18 – 10 = +8
(C) Deviation 6 = 6 – 10 = –4
(D) Deviation 9 = 9 – 10 = –1

3.

	Number	Complementary
A	3	7
B	8	2
C	9	1
D	6	4

4. (A) Required number = $\dot{8}9$ = 99
(B) Required number = $\dot{1}25$ = 225
(C) Required number = $\dot{0}76$ = 176
(D) Required number = $7\dot{0}3$ = 713

5. (A)

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

(B)

$$\begin{array}{ccc} 3 & 4 & 4 \\ + \ 6 & 3 & 2 \\ \hline 9 & 7 & 6 \end{array}$$

6.

	Number	Ekadhikena
A	87	87 + 1 = 88
B	38	38 + 1 = 39
C	37	37 + 1 = 38
D	92	92 + 1 = 93

7. (A) Ekanunena of 8 = $\dot{8}$ = 8 – 1 = 7
(B) Ekanunena of 12 = $1\dot{2}$ = 12–1 = 11
(C) Ekanunena of 17 = $1\dot{7}$ = 17– 1 = 16
(D) Ekanunena of 37 = $3\dot{7}$ = 37–1 = 36

8. (A) Deviation of 109 = 109 – 100
= +9

(B) Deviation of 115 = 115 – 100

                             = +15

(C) Deviation of 112 = 112 – 100

                             = +12

(D) Deviation of 98 = 98 – 100 = –2

9.

	Number	Complementary
A	5	5
B	7	3
C	4	6
D	2	8

10.

	Number	Deviation
A	10	10 – 10 = 0
B	19	19 – 10 = 9
C	7	7 – 10 = – 3
D	13	13 – 10 = +3

11. (A) Required number = $7\dot{4}8$ = 738

    (B) Required number = $\dot{6}8$ = 58

    (C) Required number = $74\dot{3}2$ = 7422

    (D) Required number = $\dot{8}43$ = 743

12. On adding :

(A)

```
   7  2  4
+  2  6̇  8
   9  9  2
```

(B)

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

(C)

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

(D)

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

13. (A)   72 × 99

         = 72 – 1 / Complement of 72

         = 71 / 28

         = 7128

    (B)   768 × 9

         = 768 × (10 – 1)

         = 7680 – 768

         = 6912

14. (A)

```
   9̣  5
-  3  6
   5  9
```

(B)

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

(C)

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

(D)

```
   4  3̣  2̣  5
-  1  2  3  6
   3  0  8  9
```

15. (A)   11 × 99

         = 1$\dot{1}$ / 99 –1$\dot{1}$

         = 11 – 1 / 99 – 10

         = 10 / 89

         = 1089

    (B)   57 × 99

         = 5$\dot{7}$ / 99 – 5$\dot{7}$

         = 57 – 1 / 99 – 56

         = 56 / 43

         = 5643

    (C)   325 × 999

         = 32$\dot{5}$ / 999 – 32$\dot{5}$

         = 325 – 1 / 999 – 324

         = 324 / 675

         = 324675

    (D)   ૨૩ × ૯૯

         = ૨$\dot{૩}$ / ૯૯ – ૨$\dot{૩}$

         = ૨૩ – ૧ / ૯૯ – ૨૨

         = ૨૨ / ૭૭

         = ૨૨૭૭

    (E)   ૩૪૨ × ૯૯૯

         = ૩૪$\dot{૨}$ / ૯૯૯ – ૩૪$\dot{૨}$

         = ૩૪૨ – ૧ / ૯૯૯ – ૩૪૧

         = ૩૪૧ / ૬૫૮

         = ૩૪૧૬૫૮

    (F)   ૫૮ × ૯૯

         = ૫$\dot{૮}$ / ૯૯ – ૫$\dot{૮}$

         = ૫૮ – ૧ / ૯૯ – ૫૭

         = ૫૭ / ૪૨

         = ૫૭૪૨

16. (A) 117 × 103

Number	Deviation
117	+17
103	+3

= 117 + (3) / +17 × (+3)

= 120 / +51

= 12051

(B) 104 × 92

Number	Deviation
104	+4
92	−8

= 104 + (−8) / +4 × (−8)

= 104 − 8 / −32

= 96 / −32

= 96 − 1 / 100 − 32

= 95 / 68

= 9568

(C) 102 × 109

Number	Deviation
102	+2
109	+9

= 102 + (+9) / +2 × (+9)

= 102 + 9 / +18

= 111 / 18

= 11118

(D) 95 × 105

Number	Deviation
95	−5
105	+5

= 95 + (+5) / −5 × (+5)

= 95 + 5 / −25

= 100 / −25

= 100 − 1 / 100 − 25

= 99 / 75 = 9975

(D) ১০৭ × ১০৯

Number	Deviation
১০৭	+ ৭
১০৯	+ ৯

= ১০৭ + (+৯) / +৭ × (+৯)

= ১০৭ + ৯ / +৬৩

= ১১৬ / +৬৩ = ১১৬৬৩

(F) ১০৪ × ৯৭

Number	Deviation
১০৪	+ ৪
৯৭	− ৩

= ১০৪ + (−৩) / +৪ × (−৩)

= ১০৪ − ৩ / −১২

= ১০১ / −১২

= ১০১ − ১ / ১০০ − ১২

= ১০০ / ৮৮

= ১০০৮৮

❏❏

CHAPTER-8

Hot Paratha (Hot Griddle Bread)

1. (A) $\dfrac{5}{9} = \dfrac{\square}{9} \Rightarrow \square = \dfrac{5 \times 81}{9}$

$\Rightarrow \square = 5 \times 9 = 45$

(B) $\dfrac{1}{2} = \dfrac{\square}{4} \Rightarrow \square = \dfrac{1 \times 4}{2} \Rightarrow \square = 1 \times 2 = 2$

2. (A) >, (B) >, (C) <, (D) =, (E) <, (F) =.

3. (A) $\dfrac{5}{10} = \dfrac{5}{12} \Rightarrow \dfrac{5}{10} > \dfrac{5}{12}$ ($\because 5 \times 12 > 5 \times 10$)

(B) $\dfrac{4}{8} = \dfrac{5}{10} \Rightarrow \dfrac{4}{8} > \dfrac{4}{12}$ ($\because 4 \times 10 > 4 \times 8$)

4. (A) Three by six, (B) Three by four, (C) One by four, (D) One by two

5. $\dfrac{3}{5} = \dfrac{3 \times 2}{5 \times 2} = \dfrac{3 \times 3}{5 \times 3} = \dfrac{3 \times 4}{5 \times 4}$

So $\dfrac{3}{5} = \dfrac{6}{10} = \dfrac{9}{15} = \dfrac{12}{20}$

6. Number of remaining bananas

$$= 12 - \frac{1}{2} \times 12$$

$$= 12 - 6 = 6$$

(∵ 1 dozen = 12 items)

7. Total number of balls = 30

   White balls = 12

   Blue balls = 30 – 12 = 18

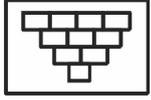   Required Fraction

   $$= \frac{\text{Blue balls}}{\text{Total balls}} = \frac{18}{30} = \frac{3}{5}$$

8. Do yourself

9. Toffees left with Gopal $= 8 - 8 \times \dfrac{3}{4}$

   $$= 8 - 6 = 2.$$

   Hence, remaining toffees are two.

10. Broken part of glass $= \dfrac{3}{8}$.

11. $\dfrac{12}{24}$ *i.e.* Read half part.

    Now, $\dfrac{18}{24} = \dfrac{3}{4}$ *i.e.* Read three fourth part

❏❏

CHAPTER-9
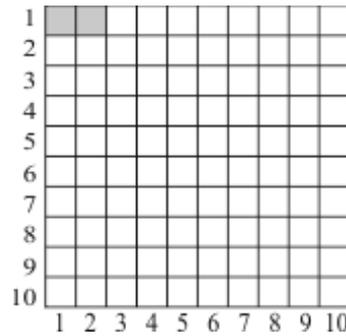
A Silver Brick

1. **(A)** 5.7 $\boxed{>}$ 5.07   **(B).** 3.45 $\boxed{<}$ 3.54

   (C) 8.09 $\boxed{<}$ 8.9   **(D)** 0.87 $\boxed{=}$ 0.87

2. (A) 0.6, (B) 1.05, (C) 2.087, (D) 0.04

3. (A) Four point two three six,

   (B) Twenty nine point eight six,

   (C) Zero point two eight,

   (D) Two hundred thirty four point zero zero seven.

4. (A) $\dfrac{4}{100} = 0.04$ (B) $\dfrac{9}{10} = 0.9$

   (C) $\dfrac{43}{100} = 0.43$ (D) $\dfrac{99}{100} = 0.99$

5. (A) $\dfrac{1}{10}$, (B) 1, (C) $\dfrac{1}{100}$, (D) 10

6. (A) $\dfrac{37}{100}$, (B) $\dfrac{23}{1000}$, (C) $\dfrac{178}{100}$, (D) $\dfrac{28}{100}$

7. Let a square sheet is following:
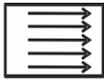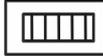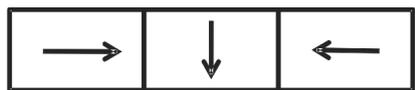
   Required Fraction
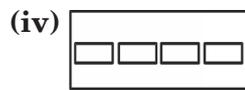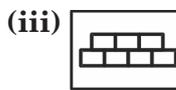
   $$= \frac{2}{100} = 0.02$$

❏❏
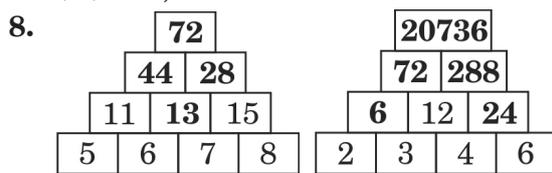
CHAPTER-10

I Also Know

1. (i)   (ii)

   (iii)   (iv)

2. (i) (D), (ii) (D), (iii) (A).

3. (i)   (ii)

   (iii)   (iv)

4. 1. (B), 2. (C), 3. (C).

5. (i)

(ii)

(iii)

(iv)

6. (i)   **(ii)**

(iii)   **(iv)**

(v)   **(vi)**

7. (i) 13, 15, 17, 19

(ii) 25, 29, 33, 37

(iii) 29, 35, 41, 47, 53, 59

(iv) 605, 625, 645, 665, 685, 705

(v) 50524, 60525, 70526, 80527, 90528, 100529

(vi) 31, 25, 19, 13

(vii) 699, 692, 685, 678

(viii) 50, 5

(ix) 10, 1

8.

9. (i) 45, 53, 61

(ii) 32, 64, 128,

(iii) 243, 729, 2187,

(iv) 120, 100, 80,

(v) 9750, 9650, 9550,

(vi) 44000, 55000, 66000,

(vii) 56, 68, 81,

(vii) 1005, 1155, 1315.

10.

Name of the fruit	Tally marks	No. of Children
Banana	| |	2
Mango	| | | |	4
Guava	ⅢⅠ	5
Pomegranate	| | | |	4
Sapodilla	ⅢⅡ	7
Orange	ⅢⅠ	6

11. (i) 43, 50, 57

Rule : By adding 7 to first number. We get the next number.

(ii) 16, 32, 64

Rule : By multiplying 2 to first number. We get the next number.

(iii) 12, 15, 18

Rule : We get next number as the next multiples of 3.

(iv) 17, 13, 9

Rule : By subtracting 4 from the first number. We get the next number.

(v) 16, 8, 2

Rule : By dividing first number by 2. We get the next number.

12.

Colour	Tally marks	Frequency
Red	ⅢⅠ	5
Yellow	| | | |	4
Green	| | |	3
Blue	ⅢⅠ	6
Black	|	1
White	| |	2

WE LEARNED AND UNDERSTAND-II

1. (i)

```
          2  4  5  3
       ×        6  2  4
       ────────────────
          9  8  1  2
       4  9  0  6  ×
    1  4  7  1  8  ×  ×
    ────────────────────
    1  5  3  0  6  7  2
```

(ii)

```
          3  8  9  1
       ×        2  3  7
       ────────────────
       2  7  2  3  7
    1  1  6  7  3  ×
    7  7  8  2  ×  ×
    ────────────────────
    9  2  2  1  6  7
```

(iii)

```
          1  7  6  5
       ×        4  1  8
       ────────────────
       1  4  1  2  0
    1  7  6  5  ×
    7  0  6  0  ×  ×
    ────────────────────
    7  3  7  7  7  0
```

(iv)

```
          3  1  2  7
       ×        2  9  5
       ────────────────
       1  5  6  3  5
    2  8  1  4  3  ×
    6  2  5  4  ×  ×
    ────────────────────
    9  2  2  4  6  5
```

(v)

```
          1  3  0  1
       ×        7  5  1
       ────────────────
       1  3  0  1
       6  5  0  5  ×
    9  1  0  7  ×  ×
    ────────────────────
    9  7  7  0  5  1
```

(vi)

```
          6  2  1  3
       ×        9  8  1
```

```
          6  2  1  3
       4  9  7  0  4  ×
    5  5  9  1  7  ×  ×
    ────────────────────
    6  0  9  4  9  5  3
```

2. (i) $18\overline{)1440}(80$

```
        −144
        ─────
        0000
         − 0
        ─────
           0
```

Verification of answer,
Dividend = Divisor × Quotient
                    + Remainder
$\Rightarrow \qquad 1440 = 18 \times 80 + 0$
$\qquad\qquad\quad = 1440 + 0$
$\qquad\qquad\quad = 1440$

(ii) $24\overline{)2352}(98$

```
       −216
       ─────
        192
       −192
       ─────
          0
```

Verification of answer,
Dividend = Divisor × Quotient
                    + Remainder
$\Rightarrow \qquad 2352 = 24 \times 98 + 0$
$\qquad\qquad\quad = 2352 + 0$
$\qquad\qquad\quad = 2352$

(iii) $20\overline{)1680}(84$

```
       −160
       ─────
         80
        −80
       ─────
          0
```

Verification of answer,
Dividend = Divisor × Quotient
                    + Remainder
$\Rightarrow \qquad 1680 = 20 \times 84 + 0$
$\qquad\qquad\quad = 1680 + 0$
$\qquad\qquad\quad = 1680$

(iv) $12\overline{)972}(81$

$\quad$ -96

$\quad$ $\overline{12}$

$\quad$ $\underline{-12}$

$\quad$ $\overline{0}$

Verification of answer,

Dividend = Divisor × Quotient

$\qquad\qquad\qquad$ + Remainder

$\Rightarrow \qquad 972 = 12 \times 81 + 0$

$\qquad\qquad = 972 + 0$

$\qquad\qquad = 972$

(v) $9\overline{)315}(35$

$\quad$ -27

$\quad$ $\overline{45}$

$\quad$ $\underline{-45}$

$\quad$ $\overline{0}$

Verification of answer,

Dividend = Divisor × Quotient

$\qquad\qquad\qquad$ + Remainder

$\Rightarrow \qquad 315 = 9 \times 35 + 0$

$\qquad\qquad = 315 + 0$

$\qquad\qquad = 315$

(vi) $26\overline{)1872}(72$

$\quad$ -182

$\quad$ $\overline{0052}$

$\quad$ $\underline{-52}$

$\quad$ $\overline{0}$

Verification of answer,

Dividend = Divisor × Quotient

$\qquad\qquad\qquad$ + Remainder

$\Rightarrow \qquad 1872 = 26 \times 72 + 0$

$\qquad\qquad 1872 = 1872$

(vii) $25\overline{)1600}(64$

$\quad$ -150

$\quad$ $\overline{100}$

$\quad$ $\underline{-100}$

$\quad$ $\overline{000}$

Verification of answer,

Dividend = Divisor × Quotient

$\qquad\qquad\qquad$ + Remainder

$\Rightarrow \qquad 1600 = 25 \times 64 + 0$

$\Rightarrow \qquad 1600 = 1600$

(viii) $19\overline{)1045}(55$

$\quad$ -95

$\quad$ $\overline{95}$

$\quad$ $\underline{-95}$

$\quad$ $\overline{\times\times}$

$\Rightarrow \qquad 1045 = 19 \times 55 + 0$

$\qquad\qquad = 1045 + 0$

$\qquad\qquad 1045 = 1045$

(ix) $17\overline{)2465}(145$

$\quad$ -17

$\quad$ $\overline{76}$

$\quad$ $\underline{-68}$

$\quad$ $\overline{085}$

$\quad$ $\underline{-85}$

$\quad$ $\overline{0}$

Verification of answer,

Dividend = Divisor × Quotient

$\qquad\qquad\qquad$ + Remainder

$\Rightarrow \qquad 2465 = 145 \times 17 + 0$

$\qquad\qquad = 2465 + 0$

$\Rightarrow \qquad 2465 = 2465$

3. (i) Cost of 15 copies Radhika bought

$\qquad = ₹ 1230$

Cost of 1 copy = 1230 ÷ 15

$\qquad\qquad = ₹ 82$

$15\overline{)1230}(82$

$\quad$ -120

$\quad$ $\overline{30}$

$\quad$ $\underline{-30}$

$\quad$ $\overline{00}$

(ii) $\qquad$ 1 dozen = 12 objects

No. of oranges = 984

No. of oranges in dozens

$$= 984 \div 12$$

$$= 82 \text{ dozens}$$

$$12\overline{)984}(82$$
$$\underline{-96}$$
$$24$$
$$\underline{-24}$$
$$00$$

(iii) No. of minutes student studied during 20 days = 1460 minutes

He studied every day

$$= 1460 \div 20$$

$$= 73 \text{ minutes}$$

$$20\overline{)1460}(73$$
$$\underline{-140}$$
$$60$$
$$\underline{-60}$$
$$00$$

(iv) No. of steps walked during 12 days

$$= 9360$$

No. of steps walked in 1 day

$$= 9360 \div 12$$

$$= 780 \text{ steps}$$

$$12\overline{)9360}(780$$
$$\underline{-84}$$
$$96$$
$$\underline{-96}$$
$$00$$
$$0$$

(v) No. of packets $= 875 \div 25$

$$= 35 \text{ packets}$$

$$25\overline{)875}(35$$
$$\underline{-75}$$
$$125$$
$$\underline{-125}$$
$$000$$
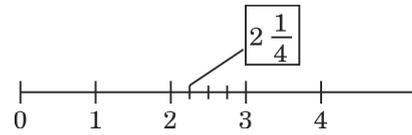
(vi) 174

(vii) 439

(viii) 662

(ix) 791

4. (a)

$2\frac{1}{4}$

(b)

$1\frac{1}{2}$

(c)

$2\frac{3}{4}$

(d)

$\frac{7}{2}$

(e)

$\frac{2}{3}$

(f)

$\frac{8}{4}$
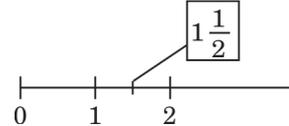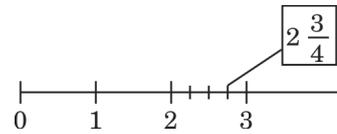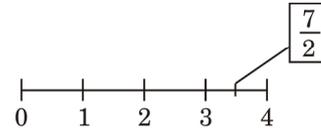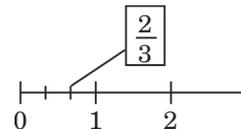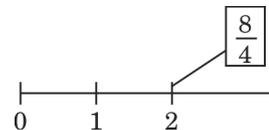
5. No. of mangoes Seema had = 20

No. of mangoes she gave to her friends

$$= 20 \times \frac{1}{5}$$

$$= 4 \text{ mangoes}$$

6. 1 dozen = 12 objects

2 dozen = 12 × 2 = 24 objects

(here apples)

No. of apples spoiled

$$= \frac{1}{3} \times 24 = 8 \text{ apples}$$

7. No. of biscuits given to her brother

$$= \; = 36 \times \frac{1}{6}$$

$$= 6 \text{ biscuits}$$

8. No. of oranges left

$$= 24 - \frac{1}{2} \times 24$$

$$= 24 - 12$$

$$= 12 \text{ oranges}$$

9. (i) >, <; (ii) <, =; (iii) =, <;

(iv) $\frac{2}{8} > \frac{0}{4}, \frac{1}{4} < \frac{2}{3}$; (v) $\frac{7}{8} > \frac{1}{8} \Big| \frac{3}{8} - \frac{3}{8}$;

(vi) $\frac{3}{12} < \frac{3}{4} \Big| \frac{2}{6} > \frac{3}{12}$.

10. (i) $0.5 = \frac{5}{10} = \frac{1}{2}$

(ii) $0.75 = \frac{75}{100} = \frac{3}{4}$

(iii) $1.2 = \frac{12}{10} = \frac{6}{5}$

(iv) $0.10 = \frac{10}{100} = \frac{1}{10}$

11. (i) 4 kg + 250 g = 4.25 kg

(ii) 1 m + 75 cm = 1.75 m

12. (i) 4.25 < 4.5   (ii) 6.75 > 6.7

(iii) 3.3 < 3.35   (iv) 7.85 > 7.58

(v) 9.09 < 9.90   (vi) 0.50 > 0.05

(vii) 2.45 < 2.54   (viii) 8.8 = 8.80

(ix) 57.5 > 5.75

13. (i) (C) 48   (ii) (A) 64
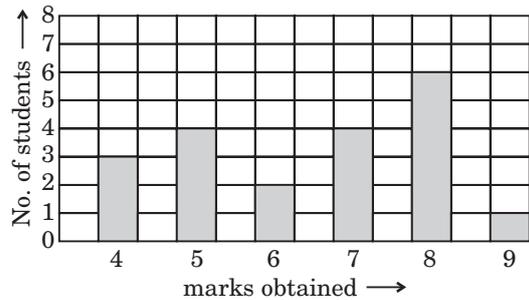
(iii) (B) 405   (iv) (C) 600

14.

Marks obtained	Tally marks	Frequency
4	|||	3
5	||||	4
6	||	2
7	||||	4

8	ⅣⅡ	6
9	|	1
Total		20

Pictograph

CHAPTER-11

Let's Learn to Measure and Weigh

1. (i)   1000 millilitres
   (ii)   3.5 kilograms
   (iii) 2 litres and 500 millilitres
   (iv) 1000 grams

2. (i) 300, (ii) 2, (iii) 2 kg, (iv) 1800

3. weight of 1st packets = 1 kg 250 g
   <u>weight of 2nd packets = 2 kg 750 g</u>
          total weight = 4 kg 000 g
                    = 4 kg

4. Quantity of sugar = 500 gm
   Quantity of tea leaves = 250 gm
   Quantity of total goods = 750 gm

5. Quantity of harvested sugarcane in Kishan's field = 550 kg
   Quantity of harvested sugarcane in Sanjay's field = 750 kg
   Sanjay's field more harvested sugarcane than Kishan's field
   = 750 kg – 550 kg = 200 kg

6. Quantity of sugar   = 1 kg
                    = 1000 gm

Quantity of tea leaves = 250 gm

Quantity of Besan = 500 gm

Quantity of Maida = 750 gm

Total weight of goods = 2500 gm

7. Quantity of tomato = 1 kg

= 1000 gm

Quantity of chili = 750 gm

Quantity of potatoes = 2 kg 600 gm

= 2600 gm

Total weight of bag = 4350 gm

8. Milk poured into container

= 3 litre 400 millilitre

Again, milk poured into container

= 1 litre 600 millilitre

Total quantity of milk

= 5 litres 000 millilitre

9. Tota quality of onion = 1 kg 500 g

Quality of onion used = 750 g

Quantity left = 750 g

0   1500

1 kg 500 g

– 750 g

0 kg 750 g

10. Weight of rice in bag = 5 kg

= 5000 gm

Weight of sugar in bag = 2500 kg

Rice weighs more than sugar

= 5000 – 2500

= 2500 gm

11. Quantity of oil in first cane

= 4 litres 200 mililitres

= 4200 ml

Quantity of oil in other cane

= 1 litre 750 mililitres

= 1750

∴ Quantity of total oil

= 4200 + 1750

= 5950 ml

12. Quantity of sold peanut oil

= 14 litres 300 mililitres

= 14300 mililitres

Quantity of sold mustard oil

= 9 litres 750 mililitres

= 9750 mililitres

∴ Total quantity of sold oil

= 14300 + 9750

= 24050 mililitres

13. Quantity of water in tank = 18 litre

Quantity used = 5 litre 750 millilitr

Quantity of water in tank

= 12 litres 250 millilitres

⑰   ⑩⓪⓪

1̶8̶ litre   0̶0̶0̶ millilitre

– 5 litre   750 millilitre

= 12 litres 250 millilitres

14. Number of days = 6

Quantity of grass eaten by cow

= 18 kg 200 g

Quantity of grass eaten by cow

per day = 18 kg 200 g ÷ 6

= 3 kilograms 033 grams

15. (i) Weight of cow = 320 kg 400 gm

= 320400 gm

Weight of Buffalo

= 425 kg 700 gm

= 425700 gm

∴ Total weight = 320400 + 425700

= 746100 gm

(ii) Weight of buffalo

= 425700 gm

Weight of cow

= 320400 gm

∴ Difference between weight of buffalo and cow

= 425700 – 320400

= 105300 gm

Hence, Buffalo is 105300 gm heavier than cow.

(iii) Quantity of grass eaten by cow in 7 days

$$= 15 \text{ kg } 250 \text{ gm}$$
$$= 15250 \text{ gm}$$

Quantity of grass eaten by cow in 1 day

$$= \frac{15250}{7}$$

∴ Quantity of grass eaten by cow in 42 days

$$= \frac{15250}{7} \times 42$$
$$= 91500 \text{ gm}$$
$$= 91 \text{ kg } 500 \text{ gm}$$

16. Quantity of petrol filled by Rakesh

$$= 28 \text{ l } 450 \text{ ml}$$
$$= 28450 \text{ ml}$$

Remaining quantity of petrol

$$= 12 \text{ l } 230 \text{ ml}$$
$$= 12230 \text{ ml}$$

∴ Quantity of petrol consumed

$$= 28450 - 12230$$
$$= 16220 \text{ ml}$$
$$= 16 \text{ l } 220 \text{ ml}$$

CHAPTER-12

The Clock from Delhi

1. The cost of 1 kg wheat = ₹ 35.75

So, the cost of 2 kg wheat = ₹ 35.75×2

$$= ₹ 71.5$$

The cost of 1 kg rice = ₹ 48.50

So, the cost of 3 kg rice = ₹ 48.50 × 3

$$= ₹ 145.50$$

The total maount of money she spent

= ₹ 71.5 + ₹ 145.50

= ₹ 217.00

Therefore, the total amount of money she spent = ₹ 217.00

2.

	₹	P
The cost of 1 kg of sugar =	40	25
The cost of 1 kg of rice =	72	50
Total cost of items =	112	75

3. One bus ticket costs = ₹ 17.25

Then, 6 bus ticket costs = ₹ 17.25 × 6

$$= ₹ 103.50$$

So, the total ticket cost is = ₹ 103.50

4. ∵ The price of one person's ticket

$$= ₹ 10.50$$

∴ The price of 7 person's ticket

$$= ₹ 10.50 × 7$$
$$= ₹ 73.50$$

5. The cost of a book = ₹ 128.75

The cost of a stationary = ₹ 237.50

He had a total amount of money

= ₹ 128.75 + ₹ 237.50 = ₹ 366.25

He had a total amount of money left

= ₹ 500 − ₹ 366.25 = ₹ 133.75

6.

	₹	P
The price of one packet of milk	32	25
The price of one packet of butter milk	12	75
Total price of a milk packet and the price of a butter milk packet	45	00

7. The cost of one water bottle = ₹ 28.40

Then, the cost of 9 water bottle

= ₹ 28.40 × 9

= ₹ 255.60

8. The cost of a pen = = ₹ 45

Number of pens in = ₹ 360

= ₹ 360 ÷ 45 = 8

9. The cost of a sweet box = ₹ 76.25

Thus, the cost of 4 sweet box

= ₹ 76.25 × 4 = ₹ 305

There is no profit and no loss.

10. ∵ The fare of 5 persons = ₹ 377.50

∴   The fare of 1 person = ₹ 77.50 ÷ 5
                                      = ₹ 375.50

11. A child saves money every day = ₹ 15.50

He save in 12 days = ₹ 15.50 × 12
= ₹ 186

12. Time taken to reach Udaipur from Jaipur = 10 hours 10 minutes.

13. The cost of the gold per gram = ₹ 483.75

Then the cost of 3 grams gold
= ₹ 483.75 × 3
= ₹ 1451.25

14. A train leaves time on Monday
= 10:15 AM

Time taken for the journey
= 10:15 PM – 7:05 AM
= 8 hours 50 minutes

15. Subtract time

hr.	min
5	45
– 2	50
2	55

2 hr 55 min

16.   Time Add

hr	Min
6	40
+ 4	35
11	15

11 hrs. 15 min.

17. (i)

hr	Min	
2	25	(60 + 25 = 85 min)
– 1	55	(85 – 55 = 30 min)
0	30	

30 min.

(ii)

hr	Min	
8	35	(35 + 25 = 60 min)
+ 13	25	
22	00	

22 hours

❑❑

CHAPTER-13

Length and Distance

1.(i) To convert cm into m

$$(\because 1 \text{ cm} = \frac{1}{100}\text{m})$$

125 ÷ 100 = 1.25 m

(ii) To convert km into m ($\because$1km=1000 m)

3 × 1000 = 3000 m

(iii) To convert inches into feet

60 ÷ 12 = 5 feet $(\because 1 \text{ cm} = \frac{1}{12} \text{ feet})$

(ii) To convert m into cm ($\because$ 1 m = 100 cm)

1.5 × 100 = 150 cm

2.(i) $\because$ $1 \text{ cm} = \dfrac{1}{100} \text{ m}$

$\therefore$ $300 \text{ cm} = \dfrac{1}{100} \times 300$

= 3 m

(ii) $\because$ $1 \text{ m} = \dfrac{1}{1000} \text{ km}$

$\therefore$ $6000 \text{ m} = \dfrac{1}{1000} \times 6000$

= 6 km

(iii) $\because$ $1 \text{ inch} = \dfrac{1}{12} \text{ feet}$

$\therefore$ $48 \text{ inches} = \dfrac{1}{12} \times 48$

= 4 feet

(iv) $\because$ $1 \text{ cm} = \dfrac{1}{100} \text{ m}$

$\therefore \qquad 750 \text{ cm} = \dfrac{1}{100} \times 750$

$\qquad\qquad\qquad = 7.5 \text{ m}$

3.(i) Riya walks every day = 2.4 km

It means she walks = (2.4 × 1000)m

$\qquad\qquad\qquad = 2400 \text{ m}$

(ii) The length of a table = 6 feet 3 inches
It's mean the length of table
= (6 × 12 + 3) inches
= (72 + 3) inches
= 75 inches

(iii)The length of the football field
= 120 yards
We know that 1 yard = 3 feet
= 120 × 3 feet = 360 feet
So, the length of the football field
= 360 feet

(iv)The breadth of the playground
= 250 m

$\therefore 1 \text{ m} = \dfrac{1}{1000} \text{ km}$

So, the width of the playground

$= \dfrac{250}{1000} \text{ km} = 0.25 \text{ km}$

4.(i) $\qquad 1 \text{ km} = 1000 \text{ m}$
$\qquad\qquad 5 \text{ km} = 5 \times 1000$
$\qquad\qquad\qquad = 5000 \text{ m}$

(ii) $\because \qquad 1 \text{ m} = \dfrac{1}{1000} \text{ km}$

$\therefore \quad 2500 \text{ m} = \dfrac{1}{1000} \times 2500$

$\qquad\qquad\qquad = 2.5 \text{ km}$

(iii) $\because \qquad 1 \text{ feet} = 12 \text{ inches}$
$\therefore \qquad 7 \text{ feet} = 12 \times 7$
$\qquad\qquad\qquad = 84 \text{ inches}$

(iv) $\qquad \because \qquad 1 \text{ inch} \qquad = \dfrac{1}{12} \text{ feet}$

$\therefore \quad 72 \text{ inches} = \dfrac{}{12} \times 72$

$\qquad\qquad\qquad = 6 \text{ feet}$

(v) $\because \qquad 1 \text{ yard} = 3 \text{ feet}$
$\therefore \qquad 4 \text{ yards} = 3 \times 4 \text{ feet}$
$\qquad\qquad\qquad = 12 \text{ feet}$

(vi) $\because \qquad 1 \text{ feet} = \dfrac{1}{3} \text{ yard}$

$\therefore \qquad 15 \text{ feet} = \dfrac{1}{3} \times 15$

$\qquad\qquad\qquad = 5 \text{ yard}$

(vii) $\because \qquad 1 \text{ km} = 1000 \text{ m}$
$\therefore \qquad 9 \text{ km} = 1000 \times 9 \text{ m}$
$\qquad\qquad\qquad = 9000 \text{ m}$

(viii) $\because \qquad 1 \text{ m} = \dfrac{1}{1000} \text{ km}$

$\therefore \quad 3500 \text{ m} = \dfrac{1}{1000} \times 3500$

$\qquad\qquad\qquad = 3.5 \text{ km}$

(ix) $\because \qquad 1 \text{ feet} = 12 \text{ inches}$
$\therefore \qquad 11 \text{ feet} = 12 \times 11 \text{ inches}$
$\qquad\qquad\qquad = 132 \text{ inch}$

(x) $\because \qquad 1 \text{ inch} = \dfrac{1}{12} \text{ feet}$

$\therefore \quad 48 \text{ inches} = \dfrac{1}{12} \times 48$

$\qquad\qquad\qquad = 4 \text{ feet}$

5. (i) 180 cm (ii) 3 kilometers
(iii)4 feet wide (iv) 100 yards

6.(i) $\because \qquad 1 \text{ km} = 1000 \text{ m}$
$\therefore \qquad 4 \text{ km} = 1000 \times 4$
$\qquad\qquad\qquad = 4000 \text{ m}$
So, the distance of school = 4000 m

(ii) $\because$ 1 feet= 12 inches
$\therefore \qquad 5 \text{ feet} = 12 \times 5$
$\qquad\qquad\qquad = 60 \text{ inches}$
So, the height of Sunita = 60 inches

(iii) $\because$ 1 inch= $\dfrac{1}{12}$ feet

$\therefore$ 96 inches = $\dfrac{1}{12}$ × 96

= 8 feet

So, the length of board = 8 feet

(iv) $\because$ 1 yard= 3 feet

$\therefore$ 15 yards = 3 × 15

= 45 feet

So, the width of playing field = 45 feet

(v) $\because$ 1 feet = $\dfrac{1}{3}$ yard

$\therefore$ 18 feet = $\dfrac{1}{3}$ × 18

= 6 yards

So, the width of room = 6 yards

(vi) $\because$ 1 m = $\dfrac{1}{1000}$ km

$\therefore$ 2500 m = $\dfrac{1}{1000}$ × 2500

= 2.5 km

So, the distance from Amit's house to the market = 2.5 km

7.(i) length 250 cm and 2.5 m

we know that 1 m = 100 cm

Then 2.5 m = 2.5 × 100 cm

= 250 cm

So both are equal.

(ii) 5 feet and 60 inches

we know that 1 ince = $\dfrac{1}{12}$ feet

Then, 60 inches = $\dfrac{1}{12}$ feet

= 5 feet

So, both are equal.

(iii) 3 yards or 6 feet

we know that 1 yard = 3 feet

then, 3 yards = 3 × 3 feet

= 9 feet

So, 3 yards is wider than 6 feet.

(iv) Given : 1000 grams and 1 kg.

1 kg = 1000 grams

so, both are equal.

(v) given: 0.75 kilometers and 800 meters

1 km = 1000 m

Then, 0.75 × 1000 = 750 m

So 800 meters is longer than 0.75 kilometers

8.(i) distance between cities, train routes

(ii) Pencil, book cover

(iii) Notebook

(iv) Measuring cloth for curtains.

❏❏

CHAPTER-14

Let's Look at the Map

1. Distance covered by Meena = 2.5 km

Total distance covered by

Meena in 6 days = 2.5 × 6 km

= 15 km

2. Distance covered by Kamal while going to the fair

= 12 km

Distance covered by Kamal while going to the fair

= 15 km

Difference of distance

= (15 – 12) km

= 3 km

Hence, while returning home, he covered 3 km more distance.

3. The length of a room = 7 m

The width of a room = 5 m

(a) Area of the room = length × width

= 7 m × 5 m

= 35 m²

Perimeter of the room

= 2 (length + width)

= 2 (7 m + 5 m)

= 2 × 12 m

= 24 m

(b) The cost of decoratio

= 12 per meter

total amount of money spent

= (24 ×12)

= 288

4. Length of chunari

= 9 m

Length of chunari given to customers

= 4 m

Length of remaing chunari

= (9 − 4) m = 5 m

5. Rahul goes to the market via a 4 km route and returns home via a soute that is 5 km longer, so the return route is :

4 km + 5 km = 9 km

Total distance travelled = 4 km (to market) + 9 km (return)

= 13 km

6. Length of field = 85 m

Width of field = 60 m

Total length of ridge around the field

= 2 × (length + width)

= 2 × (85 + 60)

= 2 × 145

= 290 m

7. The side of a square garden = 10 m

Te area of the garden = side × side

= (10 × 10)m^2

= 100 m^2

The perimeter of the garden = 4 × side

= 4 × 10 m

= 40 m

8. Measurement of side of square room

= 5 m

Perimeter of room

= 4 × side

= 4 × 5

= 20 m

Area of square room

= side × side

= 5 × 5

= 25 m^2

9. The length of a farmer's field = 150 m

The width of a farmers field = 100 m

(a) The area of the field = 150 × 100

= 15000 m^2

The perimeter of the field

= 2(150 + 100)m

= 2 × 250 m = 500 m

(b) The ost of fencing = ₹ 20 per meter

So, the total cost = 500 × 20

= ₹ 10000

10. Length of the wall of the square room

= 6 m

Length of four walls

= 4 × 6

= 24 m

Cost of decorating 1 m wall

= ₹ 8

Cost of decorating 24 m wall

= 24 × 8

= ₹ 192

11. The side of the square = 20 meters

The width of the path around squre field = 4 m

Thus, the side of the squre

= (20+4+4)m = 28 m

(a) The are of the field = 28 × 28 m

= 784 m^2

(b), the side of the square field

= 20 m

Area of the square field

= 20 m × 20 m = 400 m^2

Area covered by the path

= 784 m^2 − 400 m^2 = 384 m^2

12. Distance covered in the first
    = 300 meters
Distance covered while returning
    = 200 m
Total distance covered
    = 300 + 200
    = 500 m
Fare for 100 m of travelling
    = ₹ 10
So, fare for 500 m of travelling
$$= \frac{500}{10} \text{₹ } 50$$

13. Ramlal covers distance in going to shop everyday
    = 2 km
Distance covered in returning home
    = 2 km
Total distance covered in 1 day
    = (2 + 2) km
    = 4 km
Total distance covered in 1 week
(7 days)= 7 × 4

    = 28 km

14. Distance covered by running = 1.2 km
Distance covered by coaling = 800 m
Total distance tr5avelled by Ravi
= 1.2 × 1000 m + 800 m
= 1200 + 800 m
= 200 m
We know that 1 m = $\dfrac{1}{1000}$ km
$$= \frac{2000}{1000} \text{ km}$$
    = 2 km

15. Length of the garden = 200 m
    Width of the garden = 150 m
Perimeter of the garden
= 2 × (length + Width)
= 2 × (200 + 150) m
    = 2 × 350
    = 700 m
Area of garden = 200 × 150
    = 30000 m²

16.
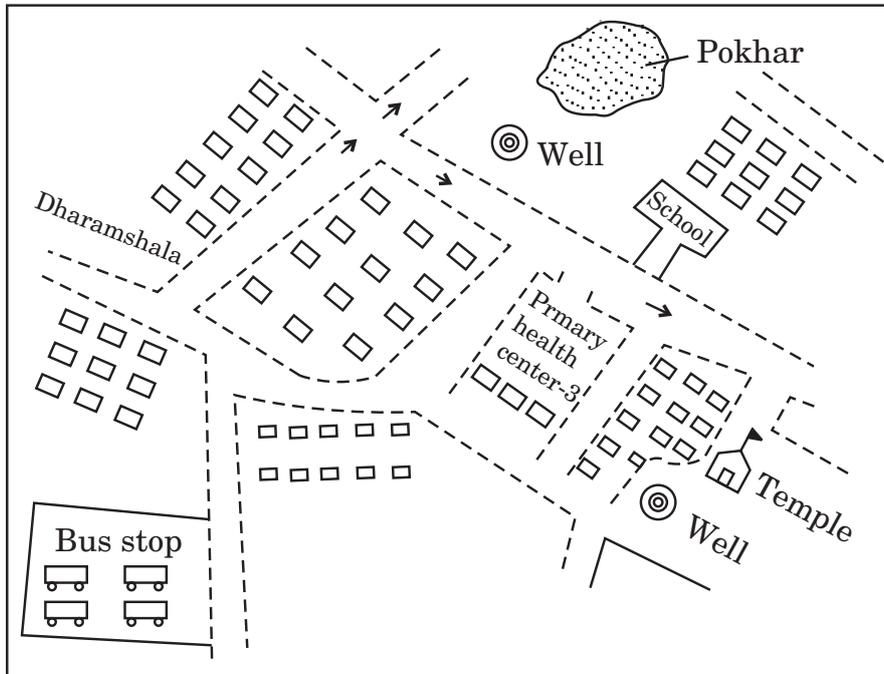
WE LEARNED AND UNDERSTAND-III

1. Amount of water in bottle

$$= \frac{1}{2} \text{ litre}$$

Amount of water in two bottles

$$= \left(\frac{1}{2} + \frac{1}{2}\right) \text{ litre}$$

$$= 1 \text{ litre}$$

Since, 1 litre water is filled in

$$= 2 \text{ bottles}$$

therefore 25 litre water is filled in

$$= 2 \times 25 \text{ bottles}$$

$$= 50 \text{ bottles}$$

Hence, water will have to be poured 50 times.

2. Amount of medicine drink by Rama in 1 day

$$= 10 + 10 + 10$$

$$= 30 \text{ ml}$$

If bottle contains 200 ml of medicine. So, 200 ml of medicine will last

$$= 200 \div 30 \text{ days}$$

Hence, bottle will last 6 days and it will last for two times for 7th day.

3. Shopkeeper has measures

$$= \frac{1}{2} \text{ litre and } \frac{1}{4} \text{ litre}$$

1.25 litre milk

$$= \left(\frac{1}{2}\text{litre} + \frac{1}{2}\text{litre}\right) + \frac{1}{4}\text{litre}$$

$$= \frac{1}{2} \text{ litres 2 times} + \frac{1}{4} \text{ litre}$$

Therefore, the shopkeeper will give milk twice from half a litre and once from a quarter litre.

4. Total oil purchased by Rita

l	ml
8	300
+ 6	800
15	100

Hence, she purchased 15 l 100 ml oil in two days.

5. One can contain oil = 5 litres
   Therefore, oil will be contained in 9 cans

$$= 9 \times 5 \text{ litres}$$

$$= 45 \text{ litres}$$

Hence, 45 litres of oil is required to fill 9 cans completely.

6. Total quantity % milk = 10 litres

$$(\because 1 \, l = 1000 \text{ ml})$$

$$\therefore \quad 10 \, l = 10 \times 1000 \text{ ml}$$

$$\text{Total milk} = 10000 \text{ ml}$$

Number of packets

$$= 10000 \div 500$$

$$= 20 \text{ packets}$$

7. Capacity of 1 bottle

$$= 2 \text{ litres}$$

No. of bottles required to fill the tub with the capacity of 38 litres

$$= 38 \div 2$$

$$= 19 \text{ times}$$

8.

kg	g
5	000
− 4	600
0	400

Hence, 400 grams of flour was found less.

9. Quantity of potatoes grown in one field

$$= 750 \text{ kg}$$

Quantity of potatoes grown in another field

    = 950 kg

The quantity of second field which is more than the first field

= 950 kg – 750 kg

    = 200 kg

10. •   Hair oil = Millilitre
  •   Petrol in a car = litre
  •   Eye drop = millilitre
  •   Water for cow's milk = litre

11. Time taken to collect 150 kg tomatoes

    = 1 hour

Time taken to collect 1 kg tomatoes

  $= \dfrac{1}{150}$ hour

Time taken to collect 1200 kg tomatoes

$= 1200 \times \dfrac{1}{150}$ hours

    = 8 hours

12. School starts at

= 9 : 55 am in the morning

Time to leave

= 3 : 25 pm in the noon

    or (12 + 3) hours and 25 min

= 15 hours 25 min

    or 14 hours (60 + 25) min

14 : 85

Ramesh spends time in the school

= 14 : 85 – 9 : 55

Hours	Minutes
14	85
− 9	55
5	30

He spends 5 hours 30 minutes in the school.

13. Arrival time of the train

    = 14:40

Departure time of the train

    = 15:00

It stays on Platform for 15:00 − 14:40

⑭	㊿60
1Ø̸	Ø̸Ø̸
− 14	40
00	20

It stays on station for 20 minutes.

14.

	Hours	Minutes
	1	45
+	2	20
	3	65

1 hour= 60 minutes

65 minutes= 1 hour + 5 minutes

3 hours + 1 hour + 5 minutes

= 4 hours 5 minutes.

15. Price of 1 kg lady finger = ₹ 90

Price of 1.5 kg lady finger

= 1.5 × 90 = ₹ 135

So, she paid ₹ 135

16. Man walks in 1 min = 120 steps

Man walks in 1 hour (60 minutes)

    = 120 × 60

   = 7200 steps
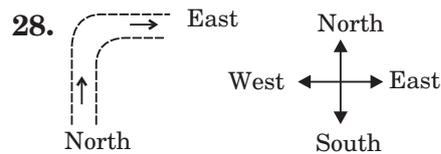
17. We have to convert 3 m 75 cm into cm

[1 m = 100 cm]

3 m 75 cm= 3 × 100 + 375 cm

    = 375 cm

18. We have to convert 2 feet 6 inch into inch 2 feet 6 inch

= 2 feet + 6 inch   [1 feet = 12 inch]

= 2 × 12 inch × 6 inch

= 24 inch + 6 inch

  = 30 inch.

19.   1 m = 100 cm

So   6.5 m = 6.5 × 100 cm

     = 650.0 cm

= 650 cm

20. 1 km = 1000 m

So, 2.25 km = 2.25 × 1000

= 2250 m.

21. The length of a scale = 30 cm

Total length of 5 such scales

= 30 × 5 cm

= 150 cm

[1 cm = 10 mm]

= 150 × 10 mm

So, total length of 5 scales

= 1500 mm.

22. Length of the wood = 7 cm

[1 cm = 10 mm]

= 7 × 10 mm

= 70 mm

On cutting the wood of 70 mm into 10 equal parts

= 70 ÷ 10 = 7 mm

So, the length of each part

= 7 mm

23. The length of kitchen on map

= 4 cm

Scale = 1 cm = 1 m

Actual length = 4 × 1 m = 4 m

24. Through the window in the living room, the visitors coming from outside can be traced from the window in the bedroom and the living room can also be monitored.

25. Distance between two places

= 3 cm

Given, 1 cm = 2 km

So, actual distance between two places

= 3 × 2 km

= 6 km

26. Area of temple

= 2 × Area of animal shed

= 2 × 6 square cm

= 12 square cm

27.

The map of a school

28.
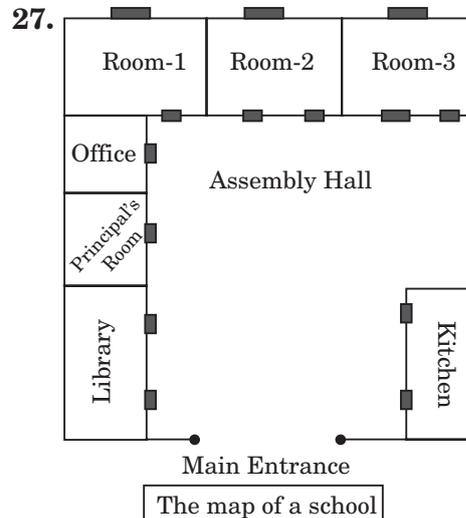
We will go in East direction.

29. Following precautions should be taken while drawing a map :

(i) The size and direction of the rooms, bathroom and kitchen should be correct.

(ii) There should be space for balcony and parking.

(iii) Windows and doors should be shown of all rooms properly.

(iv) Main Entrance should be clearly visible.

(v) Scale should be used to make map more realistic.

30. Only two doors of the main building will be ways to go out.

31. We know, 1 km = 1000 m

(i) 5 km = 5 × 1000 m = 5000 m

(ii) 10 km = 10 × 1000 m = 10000 m

(iii) 7.5 km = 7.5 × 1000 m = 7500 m

(iv) 10.7 km = 10.7 × 1000 m = 10700 m

32. We know,

1 hour = 60 min.

(i) 2 hours = 2 × 60 min. 120 min.

(ii) 7 hours = 7 × 60 min = 420 min.

(iii) 3 hours 45 min

$\qquad$ = 3 hours + 45 min.

$\qquad$ = 3 × 60 min. + 45 min.

$\qquad$ = 180 min. + 45 min.

$\qquad$ = 225 min.

(iv) 1 hour 15 min.

$\qquad$ = 1 hour + 15 min.

$\qquad$ = 1 × 60 min. + 15 min.

$\qquad$ = 60 min. + 15 min.

$\qquad$ = 75 min.

33. We know that,

$\qquad$ 1000 g = 1 kg

(i) 1250 g = 1000 g + 250 g

$\qquad$ = 1 kg + 250 g

$\qquad$ = 1 kg + $\dfrac{250}{1000}$ kg

$\qquad$ = (1 + 0.250) kg

$\qquad$ = 1.250 kg

(ii) 7100 g

= 7000 g + 100 g

$\qquad$ = $\dfrac{7000}{1000}$ kg + $\dfrac{100}{1000}$ kg

$\qquad$ = 7 kg + 0.100 kg

$\qquad$ = 7.100 kg

(iii) 2275 g

= 2000 g + 275 g

$\qquad$ = $\dfrac{2000}{1000}$ kg + $\dfrac{275}{1000}$ kg

$\qquad$ = 2 kg + 0.275 kg

$\qquad$ = 2.275 kg

(iv) 10020 g = 10000 g + 20 g

$\qquad$ = $\dfrac{10000}{1000}$ kg + $\dfrac{20}{1000}$ kg

$\qquad$ = 10 kg + 0.020 kg

$\qquad$ = 10.020 kg

34. We know that,

$\qquad$ 1 rupee = 100 paise

(i) 3 rupees 25 paise

$\qquad$ = 3 rupees + 25 paise

$\qquad$ = 3 × 100 paise + 25 paise

$\qquad$ = 300 paise + 25 paise

$\qquad$ = 325 paise

(ii) 5 rupees 75 paise

$\qquad$ = 5 rupee + 75 paise

$\qquad$ = 500 paise + 75 paise

$\qquad$ = 575 paise

(iii) 10 rupees 50 paise

$\qquad$ = 10 rupees + 50 paise

$\qquad$ = 10 × 100 paise + 50 paise

$\qquad$ = 1000 paise + 50 paise

$\qquad$ = 1050 paise

(iv) 20 rupees 30 paise

$\qquad$ = 20 rupees + 30 paise

$\qquad$ = 20 × 100 paise + 30 paise

$\qquad$ = 2000 paise + 30 paise

$\qquad$ = 2030 paise

35. We know that,

$\qquad$ 1000 m = 1 km

(i) 3800 m = $\dfrac{3800}{1000}$ km

$\qquad$ = 3.8 km

(ii) 4650 m = $\dfrac{4650}{1000}$ km

$\qquad$ = 4.65 km

(iii) 8050 m = $\dfrac{8050}{1000}$ km

$\qquad$ = 8.05 km

(iv) 2500 m = $\dfrac{2500}{1000}$ km

$\qquad$ = 2.5 km

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CHAPTER-15

Neena's Birthday

1. The length of a rectangular greenboard
   = 120 cm
   The width of a rectangular greenboard
   = 80 cm
   The area of the rectangular greenboard
   = length × width
   = 120 × 80
   = 9600 cm²
   The perimeter of the rectangular greenboard
   = 2 (length + width)
   = (120 + 80) cm
   = 2 × 200 cm
   = 400 cm

2. (i) Area of rectangle
   = Length × Width
   and Perimeter = 2 × (Length + Width)
   (ii) Area of square
   = Side × Side
   and Perimeter = 4 × Side

3. The side of a square garden = 15 m
   Them, the perimeter of te garden
   = 4 × 15 m = 60 m
   And, the area of the garden
   = 15 m × 15 m = 225 m²
   So, the fencing requried to cover all four sides is 60 cm and the area of the garden is 225 m².

4. Length of the rectangle
   = 40 cm
   and Width = 60 cm
   Area = Length × Width
   = 40 × 60
   = 2400 square cm
   Perimeter = 2 × (Length + Width)
   = 2 × (40 + 60)
   = 2 × 100 = 200 m

5. The side of square tile = 20 cm
   We have to make a big square with 4 such tiles so the side of the big square will be 40 cm.
   Thus, the area of the big square
   = 40 cm × 40 cm
   = 1600 cm.

6. Length of the field = 50 metres
   and Width = 40 metres
   Length of the fencing wall around the field
   = Perimeter of field
   = 2 × (Length + Width)
   = 2 × (50 + 40)
   = 2 × 90 = 180 metres

7. The perimeter of a rectangle = 100 cm
   the length of its rectangle = 30 cm
   Perimeter of the rectangle
   = 2 (length + width)
   100 = 2 (30 + width)
   $\dfrac{100}{2}$ = 30 + width
   50 = 30 + width
   width = 50 − 30 = 20 cm
   The area of the rectangle
   = length × width
   = 30 × 20
   = 600 cm

8. Perimeter of the remaining shape
   = 8 + 8 + 4 + 6 + 4 + 2
   = 32 cm
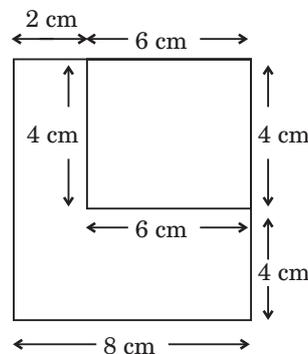
9. The length of the floor of

a classroom = 10 cm

The width of the floor of

a classroom = 6 cm

Area of the floor of a classroom

= 10 × 6

= 60 m²

Given : the area of the square tile

= 1 m × 1 m

= 1 m²

Number of tiles requrd

= 60 ÷ 1

= 60 tiles

10. In figure (i)

Area of the shaded part

$= \frac{1}{2}$ × Area of rectangle

$= \frac{1}{2}$ × length × width

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

$= \frac{1}{2} \times 6 = 3$ square cm

In figure (ii)

Area of the shaded part

= Area of square

= side × side

= 25 × 25

= 625 square metres

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CHAPTER-16

Rama's Kitchen
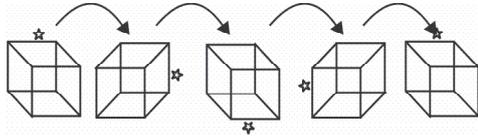
1. X, O, H, I, S

2.
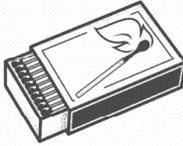
	Object	3D-Shape
(a)		Match box
(b)		Plastic Container
(c)		Football
(d)		Jocker's cap
(e)		Dice

3. 0, 8

4. **2D-Shape :** A sheet of paper has length and width, so due to the presence of length and width, it is called a 2-D shape.

3D-Shape : A box made of paper also has depth, so due to the presence of length, width and height, it is called a 3D-shape.

5. (i) 8 8 8 8 8   (ii) 1 0 1 0 1

(iii) 1 1 1 1 1

(iv) 8 0 8 0 8   Remain same

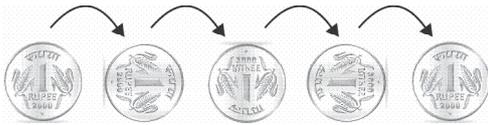**6.** ● When the wooden block is rotated :

By rotating it through four right angles, it returns to its original position.

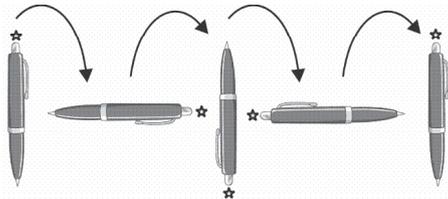● When the button is rotated :
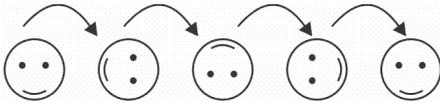
By rotating it through four right angles (360°), it returns to its original position.

● When the coin is rotated :

By rotating it through four right angles (360°), it returns to its original position.
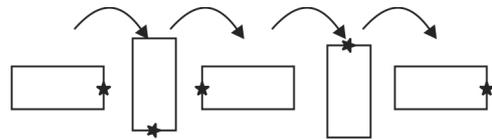
● When the pen is rotated :

By rotating it through four right angles (360°), it returns to its original position.

7. No. Shapes   1/3 a turn   1/6 a turn

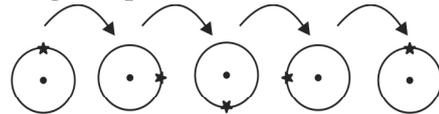| S. No.	Shapes	1/3 a turn	1/6 a turn
1			

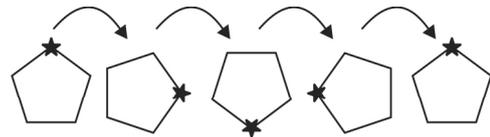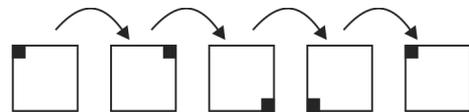| 2			
3			

8. (i)

By rotating it through four right angles (360°), it returns to its original position.

(ii)

By rotating it through four right angles (360°), it returns to its original position.

(iiii)

By rotating it through four right angles (360°), it returns to its original position.

(iv)

By rotating it through four right angles (360°), it returns to its original position.

(v)

By rotating it through four right angles (360°), it returns to its original position.

9.

S. No.	Picture of the object	Faces/Surfaces	Edges	Vertices/ Corners
1.		6	12	8
2.		3	2	0
3.		1	0	0
4.		6	12	8
5.		2	1	1

10. (a)

11. (i) Jar, (ii) Egg, (iii) Cone, (iv) Drum, (v) Box, (vi) Coin, (vii) Button, (viii) Cylinder.

12. (i) Box, (ii) Glass, (iii) Pipe, (iv) Plate, (v) Wheel, (vi) Drum, (vii) Chakla (rolling board).

13. (1) b, (2) a (3) d, (4) c

14. (i) Edges = 2, Corners = 3

(ii) Edges = 0, Corners = 0

(iii) Edges = 6, Corners = 6

(iv) Edges = 4, Corners = 4

❏❏

CHAPTER-17

Sports Competition

1. (i) 2, 4, 6, 8, 10, 12

(ii) 4, 8, 12, <u>16</u>, <u>20</u>, <u>24</u>

(iii) 16, 32, 48, 64, <u>80</u>, 96, <u>112</u>

2. (A) 25 = 1, 5, 25

(B) 36 = 1, 2, 3, 4, 6, 9, 12, 18, 36

(C) 45 = 1, 3, 5, 15, 45

(D) 22 = 1, 2, 11, 22

3. Multiple of 8 that lies between 60 and 70 is 64.

4. (A) 8 = 8, 16, 24, 32, 40, 48, 56, 64, 72,

12 = 12, 24, 36, 48, 60, 72, 84

First three common multiples = 24, 48, 72

(B) 6 = 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72

9 = 9, 18, 27, 36, 45, 54, 63, 72

First three common multiples = 18, 36, 54

(C) 10 = 10, 20, 30, 40, 50, 60, 70, 80, 90

15 = 15, 30, 45, 60, 75, 90, 105, 120

First three common multiples = 30, 60, 90

(D) 12, 24, 36, 48, 60, 72, 84, 96, 108, 120

18 = 18, 36, 54, 72, 90, 108, 126

First three common multiples 36, 72, 108

5. Two digit multiple of 7 that has a 3 on it's unit place = 63.

6. (A) 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55

(B) 56, 64, 72, 80, 88, 96

7. Multiple of 6 = 24, 42

8. Multiples of 6 = 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96

Multiples of 8 = 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96

Common multiples of 6 and 8 = 24, 48, 72 and 96.

9. Multiples of 2 = 8, 24, 18, 168, 500

Multiples of 3 = 24, 15, 21, 18, 33, 39, 168

Multiples = 5 = 15, 500

10. Time taken by Piyush = 5 minutes

Time take by Amit = 6 minutes

LCM of both 5 minutes and 6 minutes :

Multiples of 5

= 5, 10, 15, 20, 25, 30, ..., 60, ..., 90

Multiple of 6 = 6, 12, 18, 24, 30 ....., 60, ..., 90

Common multiples of 5 and 6 = 30, 60, 90

LCM of 5 and 6 = 30

11. All the factors 12 and 20 :

1, 2, 3, 4, 6, 12 = factor of 12

1, 2, 4, 5, 10 20 = factor of 20

12. Factors of 15 = 1, 3, 5

Factors of 16 = 1, 2, 4, 8, 16

Factors of 18 = 1, 2, 3, 6, 9, 18

Hence, in the third vessel, laddus can be distributed in most number of ways.

13. Multiples of 3 = 3, 6, 9, 12, 15, 18, 21

Multiples of 5 = 5, 10, 15, 20, 25, 30

Multiples of 15 = 15, 30, 45, 60, 75

Least common multiple of 3, 5 and 15 is 15.

14. 10 = 10, 20, 30, 40, 50, 60, 70, 80

15 = 15, 30, 45, 60, 75, 90, 105, 120

20 = 20, 40, 60, 80, 100, 120, 140, 160

The least common multiple of 10, 15 and 20 will be 60.

15. 60 = 60, 120, 180, 240, 300, 360, 420, 480, 540, 600

120 = 120, 240, 360, 480, 600

Common multiples of 60 and 120 which are less than 600 are 120, 240, 360, 480.

16. Multiples of 20 = 20, 40, 60, 80, 100,

120, ...
Multiples of 40 = 40, 80, 120, 160, ...
Multiples of 60 = 60, 120, 180, 240, 300, ...
Least and common multiple of 20, 40 and 60 = 120

CHAPTER-18

Ink Dripped

1. (A)

```
    8  1  5  4
 -  4  6  4  9
 ─────────────
    3  5  0  5
```

(B)

```
4) 486 (121
   -4
   ───
   08
   -8
   ───
   06
   -4
   ───
    2
```

(C)

```
        7  8  5  9
     ×        3  5
 ─────────────────
     3  9  2  9  5
  2  3  5  7  7  ×
 ─────────────────
  2  7  5  0  6  5
```

(D)

```
     7  3  5  4
  +  6  0  4  9
 ──────────────
  1  3  4  0  3
```

2. $\Rightarrow$ $25 - 10 + 21 \div 6 \times 8$

$= 25 - 10 + \overset{7}{\cancel{21}} \times \dfrac{1}{\underset{2}{\cancel{6}}} \times \overset{4}{\cancel{8}}$

$= 25 - 10 + 28$

$= 15 + 28$

$= 43$

3. (A)

(B)

(C)

(D)

4. (A)

```
  5   2   1  [4]
+    [4]  5   9   2
───────────────────
  9   8  [0]  6
```

(B)

```
  9  [2]  5   6
+ [1]  8  [3]  7
─────────────────
[1]  1   0   9  [3]
```

(C)

```
     2   1   4   0
  ×          5   2
  ─────────────────
  4  [2]  8  [0]
```

$+1 \quad 0 \quad \boxed{7} \quad 0 \quad \boxed{0} \quad \times$

───────────────

$1 \quad \boxed{1} \quad \boxed{1} \quad \boxed{2} \quad 8 \quad 0$

───────────────

(D) $12\overline{)144}(1\boxed{2}$

    1 2

   $\boxed{0}\,\boxed{2}4$

   $-2\,4$

   $\boxed{0}\,0$

5. (i)

61	+	15	=	76
−	■	−	■	−
38	+	4	=	42
=	■	=	■	=
23	+	11	=	34

(ii)

8	+	28	=	36
÷	■	+	■	−
2	+	1	=	3
=	■	=	■	=
4	+	29	=	33

(iii)

20	+	49	=	69
+	■	−	■	+
21	−	18	=	3
=	■	=	■	=
41	+	31	=	72

(iv)

49	−	5	=	44
−	■	+	■	−
24	+	7	=	31
=	■	=	■	=
25	−	12	=	13

6.

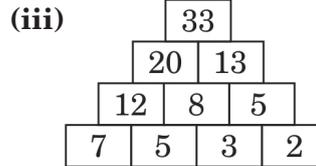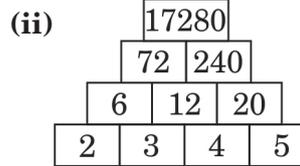| 40	×	23	=	920
			×	
			12	
			=	
736	×	15	=	11040

7. $+5 - 4 + 8 - 9 + 6 - 3 + 5 - 1 - 7 + 2 +$
$15 - 3 + 2 - 6 - 5 = ?$
$= 43 - 38 = 5$
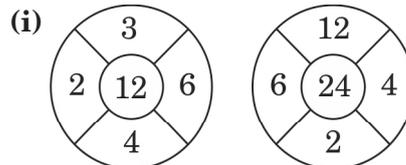
8.

458	+	0	=	458
385	÷	7	=	55
8923	−	562	=	8361
652	×	45	=	22340

9.

(i)

216
6 | 36
2 | 3 | 12
2 | 1 | 3 | 4

(ii)

17280
72 | 240
6 | 12 | 20
2 | 3 | 4 | 5

(iii)

33
20 | 13
12 | 8 | 5
7 | 5 | 3 | 2

10.

(i)

(ii)
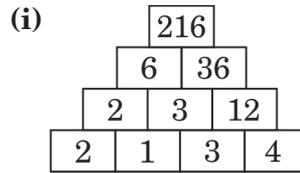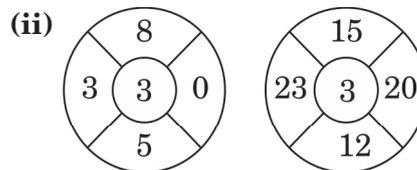
WE LEARNED AND UNDERSTAND-IV

1. Length of the rectangle = 6 cm
   Width = 4 cm
   Therefore, perimeter of the rectangle
   = 2 × (Length + Width)
   = 2 × (6 + 4)
   = 2 × 10 = 20 cm

2. Let length and width of room are 5 m and 4 m respectively.
   Then, perimeter = 2(5 + 4) = 2(9) = 18 m and area = 5 × 4 = 20 square m

3. Given, length = 18 m
   Let, width = 6 m
   Then length of tape required = 2(18 + 6) = 2(24) = 48 m

4. Let length and width of a rectangular plot are 7 m and 3 m respectively.
   Then area of plot
   = 7 × 3 = 21 square m

5. Area of 1 rug = 6 × 3 = 18 square m
   Total area of 4 rugs
   = 18 × 4 = 72 square m

6. Perimeter of plot 1
   = 2 × (24 + 15) = 78 m
   Perimeter of plot 2
   = 2 × (30 + 20) =100 m
   Total area of both = 178 m

7. Length of fencing = Perimeter of field
   = 2×(Length + Breadth)
   = 2 × (27 + 18) = 2 × 45 = 90 m

8. (a), (c), (d)

9. (a), (c), (d)

10. Perimeter = 2 × (Length + Width)
    For fitting, a safety margin or allowance is considered during construction/design.

11. Boundary length = Perimeter
    Perimeter = The total length around the boundary of a shape.

12. (b), (d)

13. Total steps = 3 × Total meters = 3 × 96 = 288 steps

14. (b), (c)

15. Let one wheel complete one full rotation in one metre.
    Suppose, Length of field = 96 m
    Width of field = 54 m
    Total number of rotations to complete one round =
    = Perimeter of field (in metre) × Number of rotations in one metre
    = 2 (96 + 54) × 1 = 2 × 150 = 300 rotations

16. Football and wheel of toy trolley

17. 30 m = 3000 cm
    Total jumps = 3000 \ 2 = 1500 jumps

18. Multiples of 3 = 3, 6, 9, 12, 15, 18
    Multiples of 4 = 4, 8, 12, 16, 20
    Least common multiple of 3 and 4 = 12

19. Distance in one cycle = 24 m (Note: 24 metres, not 24 rounds)
    Distance in 2 times this distance
    = 2 × 24
    = 48 m
    Number of rounds = 48 ÷ 24 = 2 rounds

20. Multiples of 3: 3, 6, 9, 12, 15, …
    Multiples of 5: 5, 10, 15, 20, …
    Here, 15 is the smallest number divisible by both 3 and 5.

21.

Number	Multiples	Common Multiple
12, 20	12 = 12, 24, 36, 48, 60	60
	20 = 20, 40, 60	
17, 24	17 × 24 = 408	408
8, 24	8 = 8, 16, 24, 32	24
	24 = 24, 48	
6, 12	6 = 6, 12, 18, 24	12
	12 = 12, 24, 36	

22. If it stops at 60 km, it will also stop at: 60, 66, 72, 78, 84, 90, 96, 102, 108, … Thus, multiples of 6 after 60 are: 66, 72, 78, 84, 90, …

23. Total number of ropes = $\dfrac{20 \text{ feet}}{2 \text{ feet}}$ = 10 ropes

24. Check if the number is divisible by both 2 and 9.
For any number, if it is divisible by 2 and 9, then it will be divisible by 18 also.

25. (i) 64950 = 60000 + 4000 + 900 + 50 + 0

(ii) 37004 = 30000 + 7000 + 0 + 0 + 4

(iii) 50891 = 50000 + 0 + 800 + 90 + 1

(iv) 12430 = 10000 + 2000 + 400 + 30 + 0

26. (i) In 40967, the place value of 4 = 40000

(ii) In 74129, the place value of 4 = 4000

(iii) In 13454, the place value of 4 at the hundreds place = 400 and the place value of 4 at the ones place = 4

(iv) In 94082, the place value of 4 = 4000

(v) In 58440, the place vlaue of 4 at the hundreds place = 400 and the place value of 4 at the tens place = 40

(vi) In 42613, the place value of 4 = 40000

27. (i) 51326, 52316, 53261, 56321,

(ii) 70214, 71402, 72410, 74120,

(iii) 80593, 83059, 85930, 89503

(iv) 90124, 90241, 90412, 91042,

28. (i) 54321, 52413, 45231, 43512

(ii) 82031, 81023, 80312, 80213

(iii) 96540, 96405, 95640, 94650

(iv) 7632, 7623, 7362, 7236

29. (i) 45210 < 45310

(ii) 88888 = 88888

(iii) 73020 > 72030

(iv) 87654 > 87645

(v) 32145 < 32154

(vi) 14523 < 15423

(vii) 99990 > 99900

(viii) 90001 < 90010

(ix) 21000 > 20100

30.

490	÷	7	=	70
				+
				230
				=
20	×	15	=	300

* SOME MORE PROBLEMS WITH SOLUTION FOR PRACTICE

Q. 1. The side of a square is 5 cm. What will be its perimeter and area?

Ans. Perimeter of the square

$$= 4 \times \text{side}$$
$$= 4 \times 5 = 20 \text{ cm}$$

Area of the square

$$= \text{side}^2 = 5^2$$
$$= 25 \text{ square cm}$$

Q. 2. Kashvi used 18 cm of tape to decorate a card and still needs 6 cm more. How many centimeters of tape will be used in total?

Ans. Total length of tape use

$$= 18 + 6 = 24 \text{ cm}$$

Q. 3. The length of a picture is 7 cm and the width is 3 cm. What will be its area in square centimeters?

Ans. Length = 7 cm

Width = 3 cm

Area of the rectangular picture

$$= \text{Length} \times \text{Width}$$
$$= 7 \times 3$$
$$= 21 \text{ square cm}$$

Q. 4. A square has 4 sides, and all are equal. If each side is 6 cm, what will be the area of the square?

Ans. Area of the square

$$= \text{side}^2 = (6)^2$$
$$= 36 \text{ square cm}$$

Q. 5. Two rectangles have the same area. One has an area of 24 square cm. Will their perimeters also be the same? Answer in yes or no and give the reason.

Ans. No

Reason : If the area of a rectangle is 24, then the possible pairs of side lengths should be : (1, 24), (2, 12), (3, 8), (4, 6)

For these, the perimeter will be different.

Length	Width	Perimeter	Area
1	24	50	24
2	12	28	24
3	8	22	24
4	6	20	24

Q. 6. If the length of a piece of cloth is 10 cm and the width is 4 cm, how many centimeters of thread are needed to sew a border around it?

Ans. Length of thread to sew the border

$$= \text{Perimeter of the cloth}$$
$$= 2 \times (10 + 4)$$
$$= 2 \times 14 = 28 \text{ cm}$$

Q. 7. The area of a square garden is 49 square meters. What will be the length of one side of the garden?

Ans. Area if the square garden

$$= \text{side} \times \text{side} = 49 \text{ square meter}$$
$$\text{side} = \sqrt{49} = 7 \text{ meters}$$

Q. 8. Which of the following objects is cylindrical in shape?

(a) Plate   (b) Glass

(c) Dish   (d) paper

Ans. (b) Glass

Q. 9. What are the three main measurements of a cuboid?

Ans. The main measurements of a cuboid are :

(1) Length

(2) Width

(3) Height

Q. 10. How many dimensions does a flat sheet of paper have? What additional is added when it is made into a box?

Ans. A flat sheet of paper has two dimensions – length and width.

---

* These problems are additional for practice purpose.

When made into a box, the height dimension is added.

Q. 11. Which of the following shapes will not return to its original position after just one rotation?

(a) Square

(b) Equilateral triangle

(c) Circle

(d) pentagon

Ans. (d) Pentagon

Q. 12. If an object returns to its original position after 3 rotations, how many sides does it have?

Ans. It has three sides.

Q. 13. Which of the following is a 3D shape?

(a) Leaf   (b) Door

(c) Football   (d) paper

Ans. (c) Football

Q. 14. A square has four equal sides. How many times will it return to its original position when rotated?

Ans. Once

Q. 15. From your school bag, find any two 3D objects and write their names.

Ans. Sharpener, Pencil, Rubber

Q. 16. A mouse completed the race by jumping 2 meters each time. If the path was 30 meters long, how many jumps did it take?

Ans. 15 jumps

Q. 17. What are the common multiples of 3 and 4 between 1 and 60? Write.

Ans. 12, 24, 36, 48 are common multiples.

Q. 18. In how many different ways can 24 laddoos be evently divided? How many groups will be formed each time?

Ans. Factors of 24 : 1, 2, 3, 4, 6, 8, 12, 24

So, 8 ways are possible. And 7 groups will be formed.

Q. 19. What is the smallest multiple of 15 that is also a multiple of both 5 and 3?

Ans. 15, 30, 45, 60, 75, 90, 105, 120, 135, 150

In the given numbers, the smallest multiple of both 5 and 3 is 15.

Q. 20. Which of the following numbers are multiples of 2?

8, 17, 24, 39, 44

Ans. Multiples of 2 are 8, 24 and 44.

Q. 21. A child jumps 6 meters at a time. Where will the child land while covering 60 meters? (Write the multiples of 6)

Ans. Multiples of 6

= 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Q. 22. If one tile is 4 feet long and 1 foot wide, how many tiles are needed to cover 20 square feet of floor?

Ans. $\dfrac{\text{Area of floor}}{\text{Area of 1 tile}} = \dfrac{20}{4 \times 1}$

$= 5$ tiles

Q. 23. All the factors of a number are those numbers that divide it exactly. Write the factors of 18.

Ans. Factors of 18 = 1, 2, 3, 6, 9, 18

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