Example 8 : 462 – 115

	Hun.	Tens	Units
		5	12
	4	~~6~~	~~2~~
–	1	1	5
	3	4	7

5 12
4 ~~6~~ ~~2~~
– 1 1 5
3 4 7

Result of Subtraction = 347

Example 9 : 506 – 73

4 10
~~5~~ ~~0~~ 6
– 7 3
4 3 3

Result of Subtraction = 433

Practice 3

1. Subtract :

(1) 3 4 5 – 2 1 7	(2) 5 3 7 – 4 7	(3) 3 4 5 – 2 0 9	(4) 6 7 3 – 5 2 4	(5) 9 1 8 – 6 5 5

2. Subtract :

(1) 5 6 2 – 2 1 4	(2) 3 0 4 – 2 3	(3) 5 4 1 – 2 1 4	(4) 3 7 0 – 2 5	(5) 8 1 0 5 3 9

3. Subtract :

(1) 645 – 27 = ...

(2) 650 – 35 = ...

(3) 462 – 115 = ...

(4) 584 – 229 = ...

(5) 235 – 59 = ...

(6) 412 – 107 = ...

(7) 543 – 263 = ...

(8) 670 – 190 = ...

Example 10 : There are 80 pages in a story book. Hemant read 26 pages in a day. How many pages are still to be read ?

(**Explanation :** To find the number of pages still to be read, we must subtract the number of pages already read from the total number of pages.)

	7 10	
	~~8~~ ~~0~~	Total number of pages
–	2 6	Number of pages read
	5 4	Number of pages still to be read

54 pages are still to be read by Hemant.

Example 11 : There were 242 trees in a forest. 157 trees fell down during a storm. Now how many trees were left in the forest ?

	13	
	1 ~~3~~ 12	
	~~2~~ ~~4~~ ~~2~~	Total number of trees
–	1 5 7	Number of trees fell down
	0 8 5	Number of trees left

85 trees were left in the forest.

Example 12 : Joseph has total 900 rupees. From that, he bought shoes worth rupees 485. Now how much money is left with him ?

	9	
8	~~0~~ 10	
~~9~~	~~0~~ 0	Total amount
– 4	8 5	Money spent on buying shoes.
4	1 5	Remaining amount

₹ 415 is left with Joseph.

Practice 4

1. There are 652 books in a school library. Just before vacation, 218 books are borrowed by the students. How many books still remain in the library ?
2. A shepherd named, Hema has 206 sheep. She gave 177 sheep to her younger brother. How many sheep are left with her ?
3. Shabbirbhai took ₹ 500 with him to the bazzar. He spent ₹ 345. How much money is left with him ?
4. A school had 400 students. 86 students went to another school after passing out in standard VIII. How many students remained in the school ?
5. Govindbhai bought seeds worth ₹ 365. He gave the trader ₹ 500. How much money will the trader return to Govindbhai ?

- **Simplify**

Example 13 : 250 + 362 − 146 = ...

```
    1                10
                   5 0̸  12
  2 5 0            6̸ 1̸ 2̸
+ 3 6 2          − 1 4  6
-------          --------
  6 1 2            4 6  6
```

Example 14 : 384 − 167 + 303 = ...

```
     7 14            1
  3 8̸ 4̸           2 1 7
− 1 6 7         + 3 0 3
-------         -------
  2 1 7           5 2 0
```

Practice 5

Simplify :

(1) 454 + 347 − 594

(2) 326 − 142 + 135

(3) 500 + 399 − 67

(4) 532 − 116 + 485

Practical Examples :

Example 15 : An oil merchant had 450 tins of oil. One day he sold 265 tins of oil. On the next day he bought additional 275 tins of oil. How many total tins of oil does he have now ?

Explanation : We must subtract tins sold from the stock and we add the tins bought to the remaining.)

Therefore, simplify 450 − 265 + 275.

```
   14
  3 4 10
  4 5 0   Tins
- 2 6 5   Tins sold
---------
  1 8 5   Tins remaining
```

```
    1 1
    1 8 5   Tins remaining
+   2 7 5   Tins bought
-----------
    4 6 0   Total tins
```

The merchant has 460 tins now.

Example 16 : 700 persons were invited to a party but 95 persons could not come. Among those who came, 386 were men. How many women came for the party ?

(**Explanation :** 95 persons did not come, so subtracting 95 from 700 will give us the total number of persons present. From this number we must subtract 386 men to obtain the number of women.)

So, we must simplify 700 − 95 − 386.

	9			
	6	$\not{0}$	10	
	$\not{7}$	$\not{0}$	$\not{0}$	Persons invited
–	9	5		Persons absent
	6	0	5	Total persons present

	9			
	5	$\not{0}$	15	
	$\not{6}$	$\not{0}$	$\not{5}$	Total persons present
–	3	8	6	Total men
	2	1	9	Total women

219 women were present.

Practice 6

1. Jayaben bought *tuver dal* worth ₹ 440 and sugar worth ₹ 168 from a grocery shop. She gave ₹ 700 to the shopkeeper. How much money would the shopkeeper return ?
2. 345 people including boys, girls and teachers from a school went on a picnic. If there were 158 boys and 180 girls, find the number of teachers.
3. A trader bought 285 bags of wheat and 236 bags of rice. Out of that he sold 240 bags of both wheat and rice in all. How many bags of grains are left with him ?
4. A farmer went to the city with ₹ 900. He bought seeds worth ₹ 340 and fertilizer worth ₹ 248. How much money is left with him now ?

Exercise

1. **Subtract :**

(1) 70 – 40	(2) 900 – 200	(3) 600 – 100
(4) 800 – 500	(5) 500 – 300	(6) 700 – 100

2. **Subtract :**

(1) 68 – 32	(2) 80 – 55	(3) 486 – 142
(4) 753 – 376	(5) 853 – 271	(6) 632 – 480

3. Simplify :

(1) 325 + 341 – 93 (2) 545 – 348 + 553 (3) 400 – 99 + 108

(4) 621 – 235 + 189 (5) 826 – 209 – 345 (6) 705 – 135 – 499

4. 370 students took mid-day meal on Monday and 296 students took mid-day meal on Tuesday in the school. How many less students took mid-day meal on Tuesday as compared to those who took mid-day meal on Monday ?

5. The *Sarpanch* gifted ₹ 600 and the *Talati* gifted ₹ 151 to school for buying a fan. How much more money will be needed if the cost of the fan is ₹ 950 ?

6. Umang bought a 300 page notebook. He used 129 pages for solving sums of mathematics. How many pages are still left blank in his notebook ?

7. A donor from the village donated rupees ₹ 600 for repairing the water tank in the school. The school teachers deposited ₹ 200 to this fund. If the expenditure to repair the water tank is ₹ 900, how much money is still required ?

8. Manharbhai donated 200 notebooks to the school. Out of these the school distributed 159 notebooks to the students. How many notebooks are still left ?

9. Jalpa had ₹ 200 with her. She bought sugar worth ₹ 64 and *tuver dal* worth ₹ 62. How much money is still left with her ?

10. A student brought 900 chocolates on his/her birthday to school for distribution. Out of those 365 chocolates were distributed to the boys and 380 to the girls. How many chocolates were left ?

11. A donor from the village donated 550 notebooks. Out of those, 225 notebooks were distributed among students of standard I to V and 315 to students of VI to VIII. How many notebooks remained ?

Answers

Practice 1

1. (1) 40 (2) 60 (3) 100 (4) 500 (5) 500 (6) 200
2. (1) 50 (2) 400 (3) 300 (4) 100

Practice 2

1. (1) 333 (2) 363 (3) 134 (4) 402
2. (1) 611 (2) 332 (3) 341 (4) 400

Practice 3

1. (1) 128 (2) 490 (3) 136 (4) 149 (5) 263
2. (1) 348 (2) 281 (3) 327 (4) 345 (5) 271
3. (1) 618 (2) 615 (3) 347 (4) 355
   (5) 176 (6) 305 (7) 280 (8) 480

Practice 4

(1) 434 books (2) 29 sheep (3) 155 rupees
(4) 314 students (5) 135 rupees

Practice 5

(1) 207 (2) 319 (3) 832 (4) 901

Practice 6

(1) 92 rupees (2) 7 teachers (3) 281 bags (4) 312 rupees

Exercise

1. (1) 30 (2) 700 (3) 500 (4) 300 (5) 200 (6) 600
2. (1) 36 (2) 25 (3) 344 (4) 377 (5) 582 (6) 152

3. (1) 573 (2) 750 (3) 409 (4) 575 (5) 272 (6) 71

4. 74 students **5.** 199 rupees

6. 171 pages **7.** 100 rupees **8.** 41 notebooks **9.** 74 rupees

10. 155 chocolates **11.** 10 notebooks

◆

Activity :

1	2	4	8	16

Five number cards are given. Using these number cards make numbers from 1 to 31 as shown in the example.

e.g., 1 + 2 + 4 + 8 = 15

5 Multiplication

Let us recall :

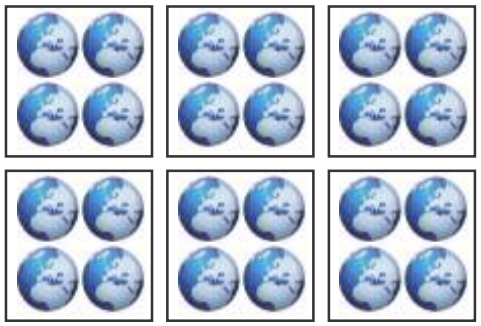
(1) Answer the following on the basis of tables :

1. 

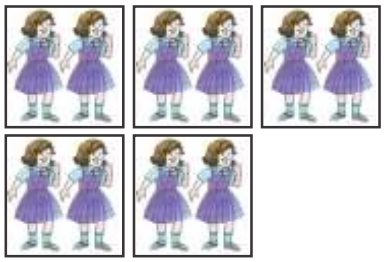
Three threes are .....

2. 

Five twos are .....

3. 

Four sixes are .....

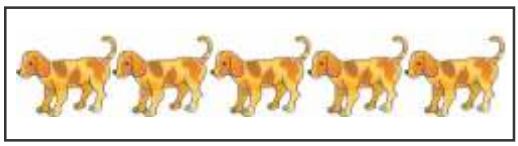
4. 

Two fives are .....

(2) Answer the following on the basis of tables :

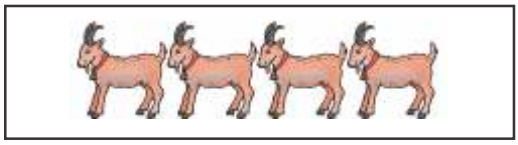
(1) How many legs do five dogs have ?

.....

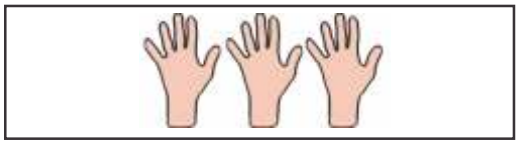


(2) How many legs do three crows have ? .....

(3) How many legs do four goats have ? .....



(4) How many fingers do three hands have ? .....



3. Observe, understand and write :

0, 2, ...4...., ...6...., ..., ..., ..., ..., ..., ..., ...

0, 3, ..., ...9...., ..., ...15...., ..., ..., ..., ...

◆ Multiplication :

• Activity 1 : Observe, understand and do as follows :

(1) 

Four groups of three balls means 3 + 3 + 3 + 3 = 12

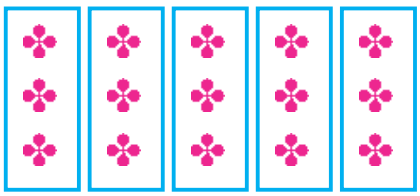
So, 3 × 4 = 12

(2) Write the remaining details as shown above :

Four groups of five stars means ..... + ... + ... + ... = ...

So, ... × 4 = 20

◆ Observe and understand :



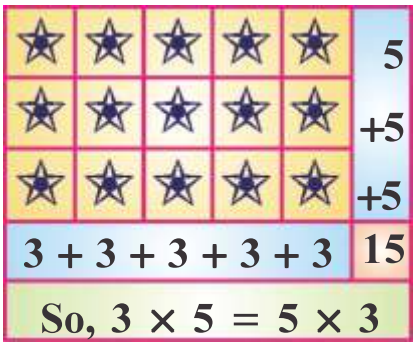
- Here, five groups of three elements.
- Total 3 + 3 + 3 + 3 + 3 = 15

- **Addition of same number repeatedly is known as repetitive addition.**

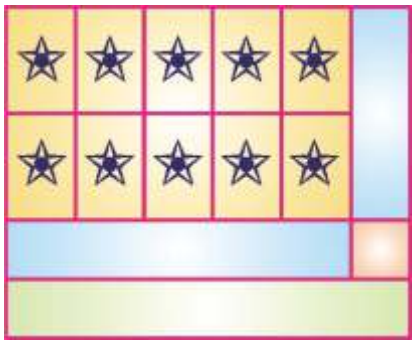
- Here, the repetitive addition of 3 is done five times.

- Repetitive addition can be represented as **multiplication**. This is denoted by 3×5. Here '$\times$' is the symbol of multiplication. Thus, repetitive addition means multiplication.
- In short we say that repetitive addition of 3 five times means five times 3.
- Three times five means five times three.
- $3 \times 5 = 15$ can be read as three fives are fifteen.

(1)



(2) Write as adjacent picture :



(3)  $= 4$ Here, four times $1 = 4$ is at once.

$1 + 1 + 1 + 1 = 4$. So, $1 \times 4 = 4 \times 1$

Now, say $1 \times 1 =$ ..... ; $1 \times 2 =$ ..... ; $1 \times 3 =$ ..... ;

$1 \times 4 =$ ..... ; $1 \times 5 =$ .....

If any number is multiplied by 1, what is the result of multiplication ?

.....

(4) Understand the details of the first box. Complete the details accordingly in the following boxes :

$0 + 0 + 0 = 0$	$0 + 0 + 0 + 0 = 0$	$0 + 0 + 0 + 0 + 0 = 0$
So, $0 \times 3 = 0$	So,	So,
$3 \times 0 = 0$		

- **If any number is multiplied by zero, the result is zero.**
- **Preparation of tables : (Tables of 6, 7, 8 and 9)**

In std. II, you have studied the tables of 2, 3, 4, 5 and 10. Now we prepare a multiplication table of 6.

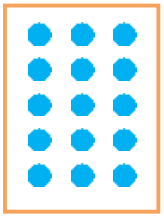
Table of 6	Sum	Multiplication	Read
6	6	6 × 1 = 6	Six ones are six
6 + 6	12	6 × 2 = 12	Six twos are twelve
6 + 6 + 6	18	6 × 3 = 18	Six threes are eighteen
6 + 6 + 6 + 6	24	6 × 4 = 24	Six fours are twenty four
6 + 6 + 6 + 6 + 6	30	6 × 5 = 30	Six fives are thirty
6 + 6 + 6 + 6 + 6 + 6	36	6 × 6 = 36	Six sixes are thirty six
6 + 6 + 6 + 6 + 6 + 6 + 6	42	6 × 7 = 42	Six sevens are forty two
6 + 6 + 6 + 6 + 6 + 6 + 6 + 6	48	6 × 8 = 48	Six eights are forty eight
6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6	54	6 × 9 = 54	Six nines are fifty four
6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6	60	6 × 10 = 60	Six tens are sixty

6	12	18	24	30	36	42	48	54	60

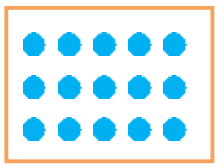
Similarly, prepare the multiplication tables of 7, 8 and 9.

Practice 1

1. Understand the given example and put dots in the following boxes :



5 × 3



3 × 5

3 × 4

4 × 3

6 × 2

2 × 6

2. Fill in the blanks :

(1) Eight tens are .....

(2) Six nines are .....

(3) Nine fours are .....

(4) Seven sixes are .....

(5) Seven fives are .....

(6) Nine sevens are .....

(7) Six threes are .....

(8) Nine eights are .....

3. Write the missing numbers in the empty boxes :

(1)	7	14	21			42	49	56	63	70
(2)	9	18		36		54				
(3)	8	16				48				

4.

Two goats have		ears.	Six chairs have		legs.
Seven cows have		legs.	Eight buffallows have		horns.
Nine rickshaws have		wheels.	Ten elephants have		trunks.

◆ Multiplication of a two or a three digit number with a single digit number (without carry over) :

Example 1 : 23 × 3

Tens	Units
2	3
	3
6	**9**

3 × 2 tens = 6 tens ×

3 × 3 units = 9 units

Calculate yourself :

(1) 23 × 2

(2) 13 × 3

(3) 50 × 4

(4) 11 × 5

Example 2 : 323 × 2

Hund.	Tens	Units
3	2	3
		2
6	**4**	**6**

2 × 3 hundreds = 6 hundreds ×

2 × 3 units = 6 units

2 × 2 tens = 4 tens

Example 3 : 123×2

$$\begin{array}{r} 123 \\ \times\ 2 \\ \hline 246 \end{array}$$

Result of Multiplication : 246

Example 4 : 101×4

$$\begin{array}{r} 101 \\ \times\ 4 \\ \hline 404 \end{array}$$

Result of Multiplication : 404

Example 5 : 400×2

$$\begin{array}{r} 400 \\ \times\ 2 \\ \hline 800 \end{array}$$

Result of Multiplication : 800

Practice 2

1. Multiply the following :

(1) 21 × 2	(2) 32 × 3	(3) 22 × 4	(4) 68 × 1	(5) 43 × 2

2. Multiply the following :

(1) 628 × 1	(2) 312 × 3	(3) 111 × 8	(4) 100 × 4	(5) 471 × 2

3. Multiply the following :

(1) 21×4 (2) 24×2 (3) 13×7 (4) 213×3

(5) 401×2 (6) 100×6 (7) 52×4 (8) 303×3

◆ **Observe and understand : Multiplication of a two digit number by a single digit number (with carry over)**

8 × 8 units = 64 units

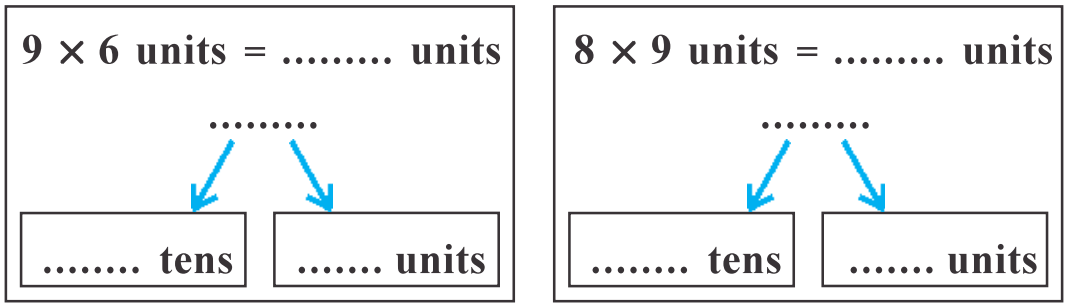
6 4

6 tens | 4 units

6 × 7 units = ... units

.....

..... tens | ..... units



Observe and understand :

Example 6 : Multiply : 49 × 2

(1) By drawing boxes :

Tens	Units
1	
4	9
	2
9	1 8

= 98

Explanation :

- 9 units × 2 = 18 units
  18 units = 1 tens and 8 units
  8 is written below in the unit box.
  Remaining 1 tens is taken as carry over.
- 4 tens × 2 = 8 tens
- 8 tens + 1 tens (carry over) = 9 tens
- So, 9 is written below in tens box.

(2) Without drawing boxes :

$$\begin{array}{r} {\scriptstyle 1\ \ } \\ 49 \\ \times\ 2 \\ \hline 98 \end{array}$$

Multiplication = 98

Practice 3

1. Multiply the following :

(1) 28 × 3	(2) 18 × 6	(3) 37 × 4	(4) 16 × 5	(5) 24 × 8	(6) 39 × 5

Example 7 : Multiply : 46×8

(1) By drawing boxes :

	Tens	Units
	(4)	
×	4	6
		8
	36	(4) 8

Explanation :

- 4 tens 6 units
  × 8
  32 tens 48 units
  = 3 hundreds 2 tens 4 tens 8 units
  = 3 hundreds 6 tens 8 units
  = 368

(2) Without drawing boxes :

$$\begin{array}{r} {\scriptstyle 4\ \ } \\ 46 \\ \times\ 8 \\ \hline 368 \end{array}$$

Multiplication = 368

Practice 4

1. Multiply the following :

(1) 72 × 8	(2) 67 × 4	(3) 46 × 9	(4) 98 × 3	(5) 32 × 9

2. Multiply the following :

(1) 93×3 (2) 65×6 (3) 83×8 (4) 79×7 (5) 68×9

Multiplication of a three digit number by a single digit number (with carry over) :

Example 8 : Multiply : 207×4

(1) By drawing boxes :

	Hundreds	Tens	Units
		(2)	
	2	0	7
×			4
	8	2	(2) 8

Explanation :

- 2 hundreds 0 tens 7 units
  × 4
  8 hundreds 0 tens 28 units
  = 8 hundreds 0 tens 2 tens 8 units
  = 8 hundreds 2 tens 8 units
  = 828

(2) Without drawing boxes :

$$\begin{array}{r} {\scriptstyle 2\ \ \ } \\ 207 \\ \times\ 4 \\ \hline 828 \end{array}$$

Product = 828

Practice 5

1. Multiply the following :

(1) 110×7 (2) 219×4 (3) 317×3 (4) 105×6

(5) 119×4 (6) 138×7 (7) 111×9 (8) 112×7

(9) 162×5 (10) 104×8 (11) 242×3 (12) 189×5

Observe and understand :

Example 9 : Multiply : 141×5

(1) By drawing boxes :

Hundreds	Tens	Units
(2)		
1	4	1
×		5
7	(2)0	5

Explanation :

- 1 hundreds 4 tens 1 units

× 5

5 hundreds 20 tens 5 units

= 5 hundreds 2 hundreds 0 tens 5 units

= 7 hundreds 0 tens 5 units

= 705

(2) Without drawing boxes :

$$\begin{array}{r} {\scriptstyle 2\ \ \ } \\ 141 \\ \times\ 5 \\ \hline 705 \end{array}$$

Product = 705

Example 10 : Multiply : 168×4

(1) By drawing boxes :

Hundreds	Tens	Units
(2)	(3)	
1	6	8
×		4
6	(2)7	(3)2

Explanation :

- 1 hundreds 6 tens 8 units

× 4

4 hundreds 24 tens 32 units

= 4 hundreds 24 tens 3 tens 2 units

= 4 hundreds 27 tens 2 units

= 4 hundreds 2 hundreds 7 tens 2 units

= 672

(2) Without drawing boxes :

$$\begin{array}{r} {\scriptstyle 2\,3} \\ 168 \\ \times\ 4 \\ \hline 672 \end{array}$$

Product = 672

Practice 6

1. Multiply the following :

(1) 242 × 3 (2) 141 × 7 (3) 351 × 2 (4) 161 × 6

(5) 469 × 2 (6) 102 × 9 (7) 153 × 5 (8) 233 × 4

2. Multiply the following :

(1) 274 × 3	(2) 177 × 5	(3) 378 × 2	(4) 234 × 4	(5) 159 × 6

3. Multiply the following :

(1) 189 × 3 (2) 105 × 9 (3) 205 × 4 (4) 318 × 2

- **Oral solution of a practical puzzle in one step :**
- **Puzzle-solution**

(1) Observe the pictures and answer the questions :

Questions :

(1) How many cards are there ? .....

(2) How many dots are there on each card ? .....

(3) How many times are 4 dots taken ? .....

(4) What will you do to find the total number of dots on five cards ?

.....

(5) What is the total number of dots on five cards ? .....

Practice 7

1. Give answers by oral calculation :

(1) The price of a ball is 5 rupees. What is the price of 3 such balls ?

.....

(2) There are 10 pencils in a box. How many pencils are there in 8 such boxes ? .....

(3) 7 chocolates are to be distributed to each child. How many chocolates are required to distribute to five children ? .....

(4) How many wheels do nine rickshaws have ? .....

- **Practical puzzles :**

Observe the different items and their prices. Calculate your answer on the basis of it.

				
130 rupees	25 rupees	28 rupees	4 rupees	32 rupees

Questions :

(1) How much money is required to purchase five bats ? .....

(2) How much money is paid by Jayesh to purchase 8 balls ?

.....

(3) What is the total cost of 6 compass boxes ? .....

(4) How much money has to be paid to purchase 24 kites ? .....

(5) How much money has to be paid to purchase 4 books ? .....

◆ **Observe and understand :**

Example 11 : The price of a school-bag is ₹ 135. Iqbalbhai purchases 3 such bags. Then how much money has he to pay ?

Explanation : The price of a school-bag is ₹ 135; to find the total cost of 3 bags, ₹ 135 has to be paid three times, so multiply 135 by 3.

$$\begin{array}{r} {\scriptstyle 1\ 1} \\ 135 \\ \times\ \ 3 \\ \hline 405 \end{array}$$

Iqbalbhai has to pay ₹ 405.

Practice 8

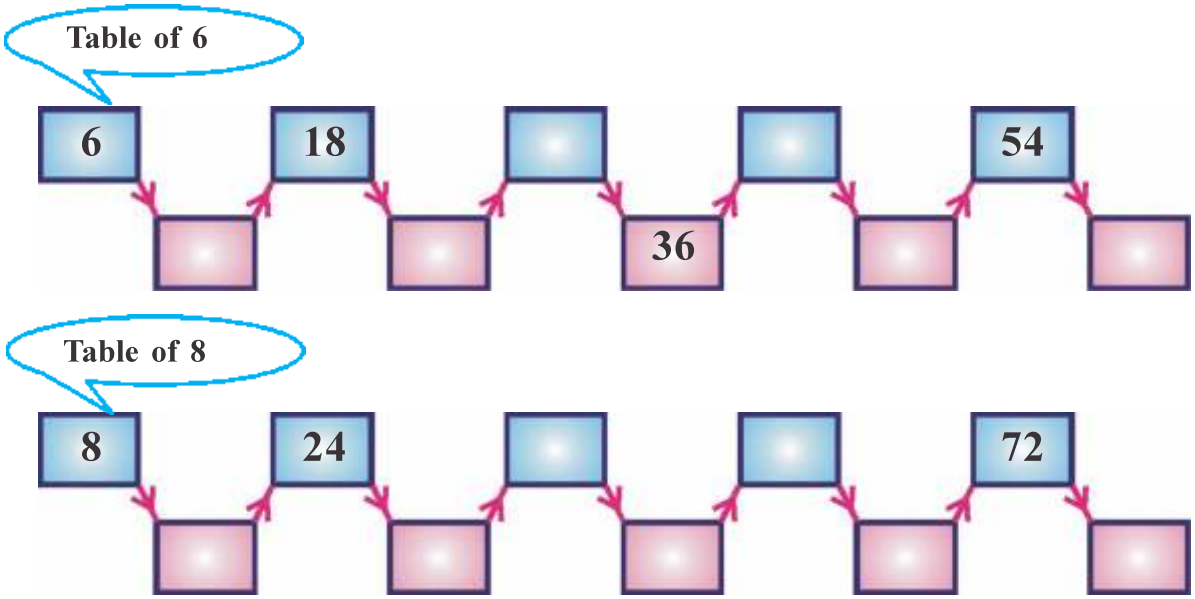
1. 48 students can sit in each class of a school for the examination. How many students can sit for the examination in 6 such classes ?
2. There are 25 mangoes in a box. How many mangoes can there be in 7 such boxes ?
3. There are 49 trees in a row of a garden. How many trees are there in 5 such rows ?
4. There are 144 soaps in a box. A merchant purchases six boxes. How many soaps are purchased by him ?
5. There are six balls in a bag. A merchant purchases 58 such bags. How many balls did he purchase in all ?

Exercise

1. Observe the table, understand and write the number of legs of a cow in the empty boxes :

Number of cows	1	2	3	4	5	6	7
Number of legs	4		12				28

2. Observe, understand and write a number in the empty box :



3. Multiply the following :

(1) 42 × 3	(2) 67 × 6	(3) 83 × 7	(4) 95 × 5	(5) 99 × 4

4. Multiply the following :

(1) 142 × 7	(2) 234 × 3	(3) 183 × 4	(4) 107 × 9	(5) 206 × 4

5. Students of a school are going to a picnic in 7 buses. In each bus, 62 students occupy seats; how many students are going to the picnic in all ?
6. Joseph purchased 109 books at the cost of ₹ 8 each. How much money did Joseph pay to the shop-keeper ?
7. There are 156 students in a school. Each student gave ₹ 5 for soldier fund. What is the total amount collected in the fund ?
8. There are 325 students in a school. Each student gave ₹ 3 for the fund on teacher's day. What is the total amount of fund collected ?
9. Rameshbhai purchased 40 compass boxes at the cost of ₹ 9 each. How much money is paid by Rameshbhai for these compass boxes ?
10. The price of a book is ₹ 6. School purchases 75 books. How much money is paid by the school for these books ?

Practice 1

2. (1) 80 (2) 54 (3) 36 (4) 42
   (5) 35 (6) 63 (7) 18 (8) 72

Practice 2

1. (1) 42 (2) 96 (3) 88 (4) 68 (5) 86
2. (1) 628 (2) 936 (3) 888 (4) 400 (5) 942
3. (1) 84 (2) 48 (3) 91 (4) 639 (5) 802 (6) 600 (7) 208 (8) 909

Practice 3

1. (1) 84 (2) 108 (3) 148 (4) 80 (5) 192 (6) 195

Practice 4

1. (1) 576 (2) 268 (3) 414 (4) 294 (5) 288

2. (1) 279 (2) 390 (3) 664 (4) 553 (5) 612

Practice 5

1. (1) 770 (2) 876 (3) 951 (4) 630 (5) 476 (6) 966

(7) 999 (8) 784 (9) 810 (10) 832 (11) 726 (12) 945

Practice 6

1. (1) 726 (2) 987 (3) 702 (4) 966 (5) 938 (6) 918 (7) 765 (8) 932

2. (1) 822 (2) 885 (3) 756 (4) 936 (5) 954

3. (1) 567 (2) 945 (3) 820 (4) 636

Practice 7

(1) 15 (2) 80 (3) 35 (4) 27

Practice 8

(1) 288 (2) 175 (3) 245 (4) 864 (5) 348

Exercise

3. (1) 126 (2) 402 (3) 581 (4) 475 (5) 396

4. (1) 994 (2) 702 (3) 732 (4) 963 (5) 824

5. 434 **6.** 872 **7.** 780 **8.** 975 **9.** 360 **10.** 450

Revision : 2

1. Fill in the gaps in the following table :

Number	Hundreds	Tens	Units	Write the number in words
666	6	6	6	Six hundred sixty six
450	.....	.....	.....	.....
.....	8	6	7	.....
.....	.....	.....	.....	Five hundred fifty four
.....	.....	.....	.....	Two hundred eight

2. Write the numbers 812, 615, 213, 905, 423 and 775 in the ascending and the descending order :

In ascending order	....., ..., ..., ..., ..., ...
In descending order	....., ..., ..., ..., ..., ...

3. Calculate the following examples :

(1) 2 8 2 + 5 7 8	(2) 3 6 5 + 1 0 3 + 2 4	(3) 9 4 8 − 2 1 4	(4) 8 0 0 − 6 0 0

(5) 4 5 6 − 3 1 8	(6) 7 0 0 + 1 0 5 + 1 6 4	(7) 2 4 0 − 1 8	(8) 7 0 8 − 2 8 0

4. Simplify :

(1) 310 – 250 + 623 (2) 225 – 115 + 345 (3) 635 – 480 + 68

(4) 540 – 435 + 115 (5) 314 + 208 – 236 (6) 789 – 293 – 139

5. Write the answers by oral calculation :

(1) What is left out by subtracting 200 from 400 ? .....

(2) What is the result, if 10 is multiplied by 5 ? .....

(3) What is left out by subtracting 200 from the sum of 300 and 400 ? .....

(4) What is the result, if 20 is multiplied by 6 ? .....

(5) What is the result of subtracting 100 from the sum of 100 and 300 ? .....

6. Multiply the following :

(1) 232 × 3 (2) 208 × 2 (3) 219 × 4 (4) 151 × 5

(5) 262 × 3 (6) 153 × 4 (7) 114 × 8 (8) 103 × 9

7. There are total 450 plants of guava and custard-apple in an orchard. Out of these, 218 plants are of guava. Find the number of plants of custard-apple.

8. There are 617 students and teachers in a school. Out of these, boys are 360 in numbers and teachers are 19 in numbers. What is the number of girls ?

9. There are 17 children standing in a row in a play ground. How many students will there be in 6 such rows ?

10. There are 159 students in a school. The guardian of each students contributed ₹ 5 for the celebration of a National Festival. What is the total amount of the fund ?

11. 25 students sit in a row in the prayer meeting of a school. How many students will sit in 8 such rows ?

2. **Ascending order :** 213, 423, 615, 775, 812, 905

Descending order : 905, 812, 775, 615, 423, 213

3. (1) 860 (2) 492 (3) 734 (4) 200

(5) 138 (6) 969 (7) 222 (8) 428

4. (1) 683 (2) 455 (3) 223 (4) 220 (5) 286 (6) 357

5. (1) 200 (2) 50 (3) 500 (4) 120 (5) 300

6. (1) 696 (2) 416 (3) 876 (4) 755

(5) 786 (6) 612 (7) 912 (8) 927

7. 232 **8.** 238 **9.** 102

10. 795 **11.** 200

MATHEMATICS

Standard 3

(Second Semester)

6 Time

Let us recall :

- Sunday, _____, _____, Wednesday, _____, _____, Saturday

Fill in the blanks as per the details above :

(1) The third day of the week is _____ .

(2) The fifth day of the week is _____ .

(3) The second day of the week is _____ .

(4) The last day of the week is _____ .

(5) There are _____ days in a week.

Which day falls ?

(1) After Sunday; _____ . (2) Before Sunday; _____ .

(3) After Wednesday; _____ . (4) Before Wednesday; _____ .

(5) Two days after Monday; _____ .

(6) Two days after Thursday; _____ .

(7) Seven days after Monday; _____ .

What do you say ?

(1) What day is it today ? _____ .

(2) What day was it yesterday ? _____ .

(3) What day will it be tomorrow ? _____ .

(4) What day will it be the day after tomorrow ? _____ .

Favourite Months :

One day Aayush, Daksh and Mina were discussing about their favourite months.

My favourite months are May and June when we eat mangoes.

Mina

Daksh

My favourite months are October and November when we fire crackers.

I like January the most because we enjoy flying kites.

Aayush

- Which is your favourite month ? _____
- Why ? _____

Calendar Showing the English Months :

January 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29			

March 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

May 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

June 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

July 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

August 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

September 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

October 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

November 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

December 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Name of Festival	Name of Month

- **Write the names of missing months :**

January, February, _____, _____, May, _____, July, _____, September, _____, _____, December.

- **Answer the following questions according to the calendar.**

(1) Which is the first month of a year ? _____

(2) Which month comes after April ? _____

(3) Which month comes before August ? _____

(4) Which is the third month after June ? _____

(5) Which month comes before three months from December ? _____

(6) Which is the last month of the year ? _____

Four months have thirty days.
Seven have thirty-one days.
February is the smallest month.
Sometime it jumps.

Game :

- Make a fist with your left hand and start from the knuckle (bump) of your litle finger. The bump is Jan. (31), the dip is Feb. (28), the next bump is March (31), dip is April (30), bump - May (31), dip - June (30), bump - July (31). Continue on your right fist - the first knuckle, bump - Aug. (31), dip - Sept. (30), bump - Oct. (31), dip - Nov. (30) and finally bump - Dec. (31).
- There are 28 or 29 days in the month of February.
- Every four years (leap year) February has 29 days.

Observe and Understand :

Name of month	No. of days
January	31
February	28 or 29
March	31
April	30
May	31
June	30
July	31
August	31
September	30
October	31
November	30
December	31

Answer the following questions based on the calendar of the current year :

- How many months are there in a year ? _____
- Make a list of the months having 30 days. _____

_____

- Make a list of the months having 31 days. _____

_____

- How many days are there in the month of February ? _____
- In which of the months does Thursday occur five times ? _____

_____

- Write the name of the months having 5 Sundays. _____

_____

Find out the following dates from the calendar :

26th January

15th August

25th December

2nd October

- The names of the festivals celebrated during a year are given below. Complete the table observing the calendar.

Names of the festivals	Date	Month	Day
Diwali			
Rakshabandhan			
Gandhi Jayanti			
Christmas			
Independence day			
Uttarayan			
Holi			
Id-e-Milad			
Republic day			
Gurunanak Jayanti			
Mahavir Jayanti			
Pateti			

Prepare the calendar of the month of current year in which your birthday occurs.

Fill in your favourite colour in the box of your birthday.

Month : ..... Year : .....

Sunday	Monday	Tuesday	Wednes-day	Thurs-day	Friday	Satur-day

Answer the following questions observing the calendar above :

- Which day occurs on the 4th of month ? _____
- On which day does the month end ? _____
- Which day occurs on the 20th of the month ? _____
- On which other dates of the month does the above day occur ?

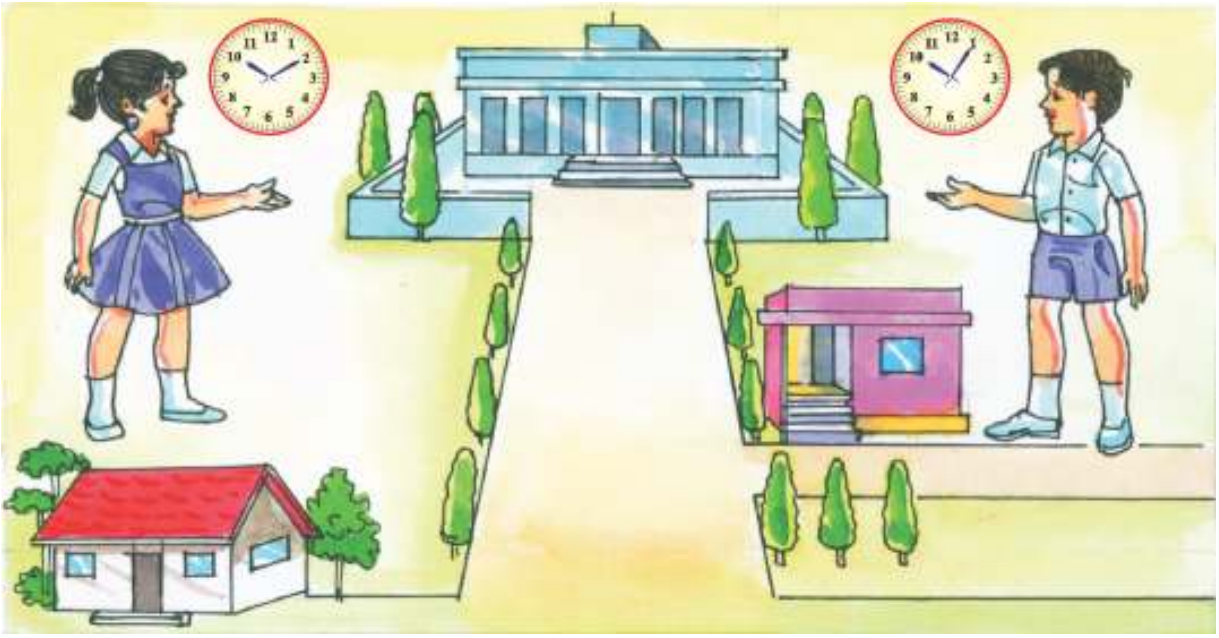
_____

- How many Thursdays are there in this month ? _____
- Which days occur five times in this month ? _____

_____

Who reaches the school earlier ?

Rohan and Roma start for the school from their homes at 10 O'clock. They walk at the same speed. They discuss as follows :



Rohan : It takes me five minutes to walk to the school.

Roma : It takes me two minutes to walk to the school. I reach the school earlier than you.

Rohan : It is not possible. Your home is farther from the school. I reach earlier than you.

Roma : Wait. I tell you the time looking at the clock. I start for the school at 10 O'clock. When I reach the school the minute-hand points at 2. So I reach the school in two minutes.

Rohan : You are incorrect. You reach the school at 10 minutes past 10. (10:10)

Roma : How ?

Rohan : The minute-hand at 2 means it is 10 minutes. There are 10 divisions (spaces) between 12 and 2. So 10 divisions mean 10 minutes. You see the small divisions (spaces) between the numbers, they show minutes.

Roma : Now I understood. I start for the school at 10 O'clock and reach at 10 minutes past 10 (10:10) because the minute-hand points at 10th division.

The hour-hand is smaller than the minute-hand in the clock.

- When the minute-hand is at 12, then the position of the hour-hand (number) shows the time.

The minute-hand is at 12 and the hour-hand is at 2. So, it is called 2 O'clock.

The minute-hand is at 12 and the hour-hand is at 5. So, it is called 5 O'clock.

The minute-hand is at 12 and the hour-hand is at 10. So, it is called 10 O'clock.

The minute-hand is at 2 and the hour-hand is between 10 and 11. So, it is called 10 minutes past 10.

The minute-hand is at 9 and the hour-hand is between 7 and 8. So, it is called 45 minutes past 7.

The minute-hand is at 3 and the hour-hand is between 11 and 12. So, it is called 15 minutes past 11.

Write the time as shown by the clock :

..... O'clock

..... O'clock

..... O'clock

..... O'clock

Put ◯ on correct time :

	Sapana	Vacha	Yash
	10:12	12:10	10:00
	6:12	12:30	6:00
	6:15	3:30	6:03
	10:15	10:45	9:45

Draw the hands of the clock to show the time given below :

8:00

2:25

4:30

10:00

Game :

Rahim and Smit are playing a game.

Smit

May I tell you the time by your watch ?

Yes, take this watch and tell the time.

Rahim

It is one minute past seven.

There are five divisions.

No, it is wrong. See, how many divisions are there between 12 and 1.

It means it is five minutes. First division after 12 shows 1 minute. Second division shows 2 minutes. In this way, the minute-hand is at 1 which shows five divisions, so it is five minutes. It is called five minutes after seven and can be written as 7:05. Do you understand now ?

Yes. Now I understood.

Thirty minutes

Now, let us try this on toy-clock. How many minutes will it be if the minute-hand is on digit 6 ?

Very good. The time can be known quickly in another way also.

There are 5 divisions from one number to the next number. So it is five minutes.
So, if minute-hand is on 1, then 5 minutes.
If minute-hand is on 2, then 10 minutes.
If minute-hand is on 3, then 15 minutes.

Now, I understood everything.

Observe and understand :

Place of minute-hand	Minutes
On 1	1 × 5 = 5 minutes
On 2	2 × 5 = 10 minutes
On 3	3 × 5 = 15 minutes
On 4	4 × 5 = 20 minutes
On 5	5 × 5 = 25 minutes
On 6	6 × 5 = 30 minutes
On 7	7 × 5 = 35 minutes
On 8	8 × 5 = 40 minutes
On 9	9 × 5 = 45 minutes
On 10	10 × 5 = 50 minutes
On 11	11 × 5 = 55 minutes
On 12	12 × 5 = 60 minutes

In general discussion, time is explained as follows :

Time	Written as	Spoken as
15 minutes after 5	5:15	Five and fifteen / Quarter past five
30 minutes after 1	1:30	One and thirty/Half past one
30 minutes after 2	2:30	Two and thirty/Half past two
3 hours 30 minutes	3:30	Three-thirty / Half past three
35 minutes after 6	6:35	Six-thirty five
8 hours 45 minutes	8:45	Eight - Forty five / Quarter to Nine / Fifteen minutes to nine
7 hours 15 minutes	7:15	Seven-fifteen / Quarter past seven
20 minutes after 9	9:20	Nine-twenty
12 hours 45 minutes	12:45	Quarter to one / Fifteen minutes to one

- Draw ◯ (encircle) on the correct time :

	2:05	2:03	2:15
	12:00	12:05	11:55
	4:40	4:04	4:20
	7:00	12:07	12:35
	9:40	7:45	8:45

- Draw the hands of the clock to show the time given below :

4:00

6:50

8:00

2:20

5:25

10:00

- **Show the time :**

Time when you go to bed.	Time when you wake-up.	Time when you take meal.	Time when you do home-work
			

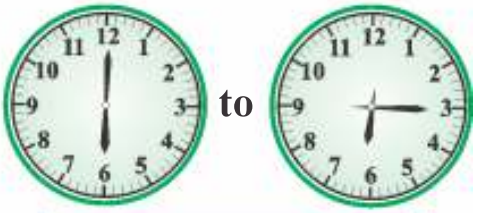
- **Show the time in the following clocks :**

20 minutes past 5	40 minutes past 8
	
55 minutes past 10	**35 minutes past 3**
	

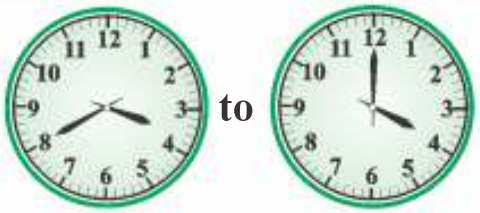
- **Find out and write :**
- How long will the minute-hand take to reach to the time shown by second clock from the time shown by the first clock ?

(1)  to

..... minutes

(2)  to

..... minutes

(3)  to

..... minutes

(4)  to

..... minutes

- **Addition of Hours and Minutes :**

(1) 3 hours and 5 hours

	3	hours
+	5	hours
	8	hours

(2) 20 minutes and 15 minutes

	20	minutes
+	15	minutes
	35	minutes

(3) 3 hours 10 minutes and 2 hours 25 minutes

	hours	minutes
	3	10
+	2	25
	5	35

5 hours 35 minutes

(4) 30 minutes after 7 hours and 15 minutes after 4 hours

	hours	minutes
	7	30
+	4	15
	11	45

45 minutes after 11 hours

Practice 1

1. Add the following :

(1)

hours	minutes
4	15
+ 8	20

(2)

hours	minutes
7	30
+ 9	25

(3)

hours	minutes
11	20
+ 5	05

(4)

hours	minutes
9	40
+ 6	15

(5)

hours	minutes
12	30
+ 9	20

(6)

hours	minutes
1	50
+ 11	05

2. Add the following :

(1) 5 hours and 10 hours

(2) 13 hours and 6 hours

(3) 7 hours and 14 hours

(4) 8 hours and 16 hours

(5) 10 minutes and 30 minutes

(6) 25 minutes and 20 minutes

(7) 15 minutes and 45 minutes

(8) 35 minutes and 10 minutes

Exercise

1. Fill in the following blanks :

(1) _____ hand is smaller in a clock.

(2) _____ hand is bigger in a clock.

(3) There are _____ days in a week.

(4) The month of _____ comes after March.

(5) There are _____ months in a year.

2. Write the time shown by the clocks in the boxes given below :

(1) 	(2) 	(3) 
(4) 	(5) 	(6) 

3. Add the following :

(1) 11 hours and 13 hours	(2) 12 hours and 16 hours

(3) 8 hours and 18 hours	(4) 17 hours and 14 hours
(5) 10 hours and 16 hours	(6) 13 hours and 17 hours

4. Add the following :

(1) 20 minutes and 38 minutes	(2) 23 minutes and 13 minutes
(3) 11 minutes and 48 minutes	(4) 30 minutes and 28 minutes

(5) 35 minutes and 15 minutes	(6) 14 minutes and 36 minutes

5. Add the following :

(1)

hours	minutes
8	25
+ 5	30

(2)

hours	minutes
18	10
+ 9	40

(3)

hours	minutes
12	15
+ 7	25

(4)

hours	minutes
13	05
+ 12	30

(5)

hours	minutes
15	15
+ 6	15

(6)

hours	minutes
22	35
+ 8	20

Practice 1

1. (1) 12 hours 35 minutes (2) 16 hours 55 minutes
(3) 16 hours 25 minutes (4) 15 hours 55 minutes
(5) 21 hours 50 minutes (6) 12 hours 55 minutes

2. (1) 15 hours (2) 19 hours (3) 21 hours (4) 24 hours
(5) 40 minutes (6) 45 minutes (7) 60 minutes (8) 45 minutes

Exercise

1. (1) Hour (2) Minute (3) Seven (4) April (5) 12

2. (1) 1:30 (2) 3:35 (3) 2:15 (4) 5:35 (5) 7:10 (6) 6:05

3. (1) 24 hours (2) 28 hours (3) 26 hours
(4) 31 hours (5) 26 hours (6) 30 hours

4. (1) 58 minutes (2) 36 minutes (3) 59 minutes
(4) 58 minutes (5) 50 minutes (6) 50 minutes

5. (1) 13 hours 55 minutes (2) 27 hours 50 minutes
(3) 19 hours 40 minutes (4) 25 hours 35 minutes
(5) 21 hours 30 minutes (6) 30 hours 55 minutes

7 Shapes

Let us recall :

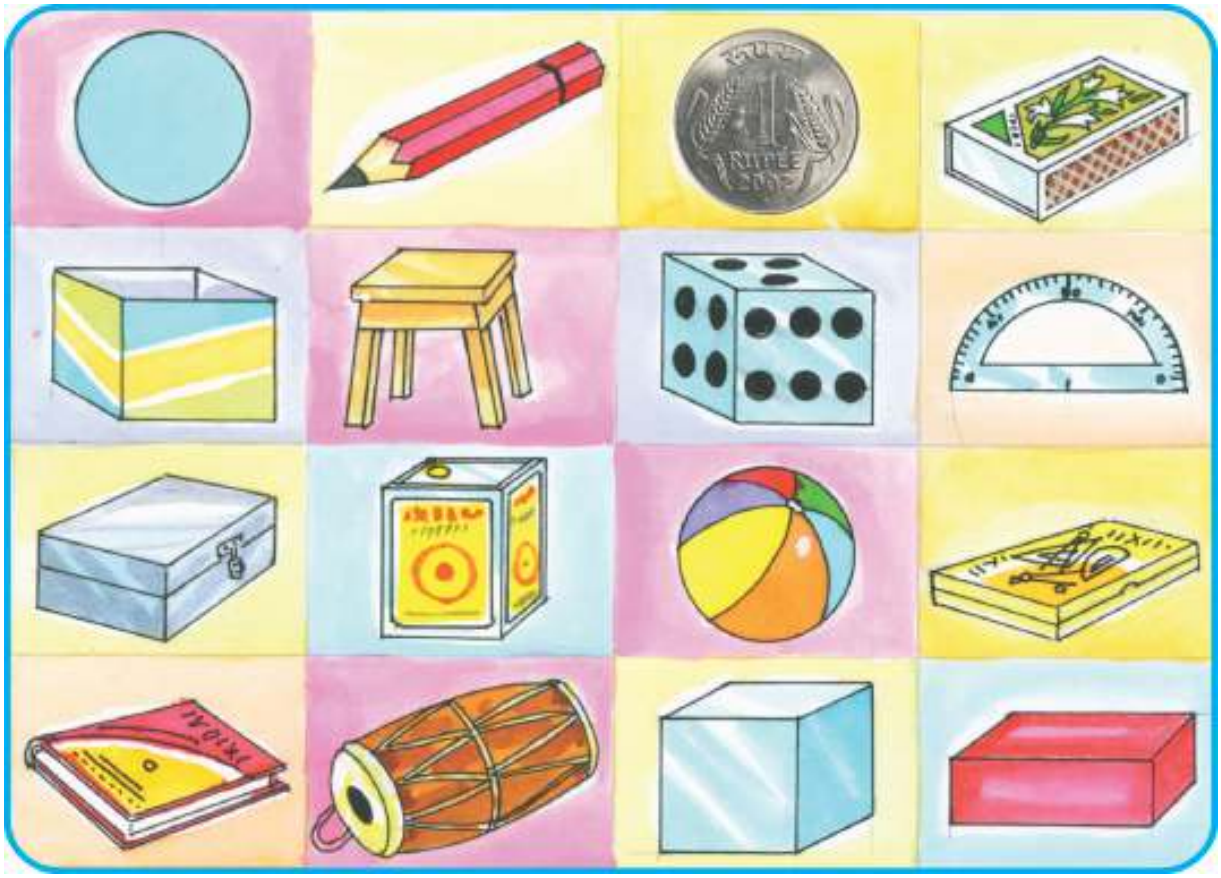
- Make a list of various things usually seen in your class-room and at home :

_____

_____

_____

- **Observe the following pictures and think about their surfaces :**



- **Answer the following questions on the base of the list made, pictures and things observed :**

(1) Write the names of things having plane surface.

_____

(2) Write the names of things having curved surface.

_____

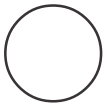
(3) Write the names of things having both plane and curved surface.

_____

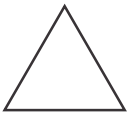
- **Now, perform an activity with your friend :**

(1) Write the names of things having  shape.

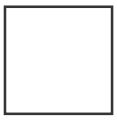
_____

(2) Write the names of things having  shape.

_____

(3) Write the names of things having  shape seen by you.

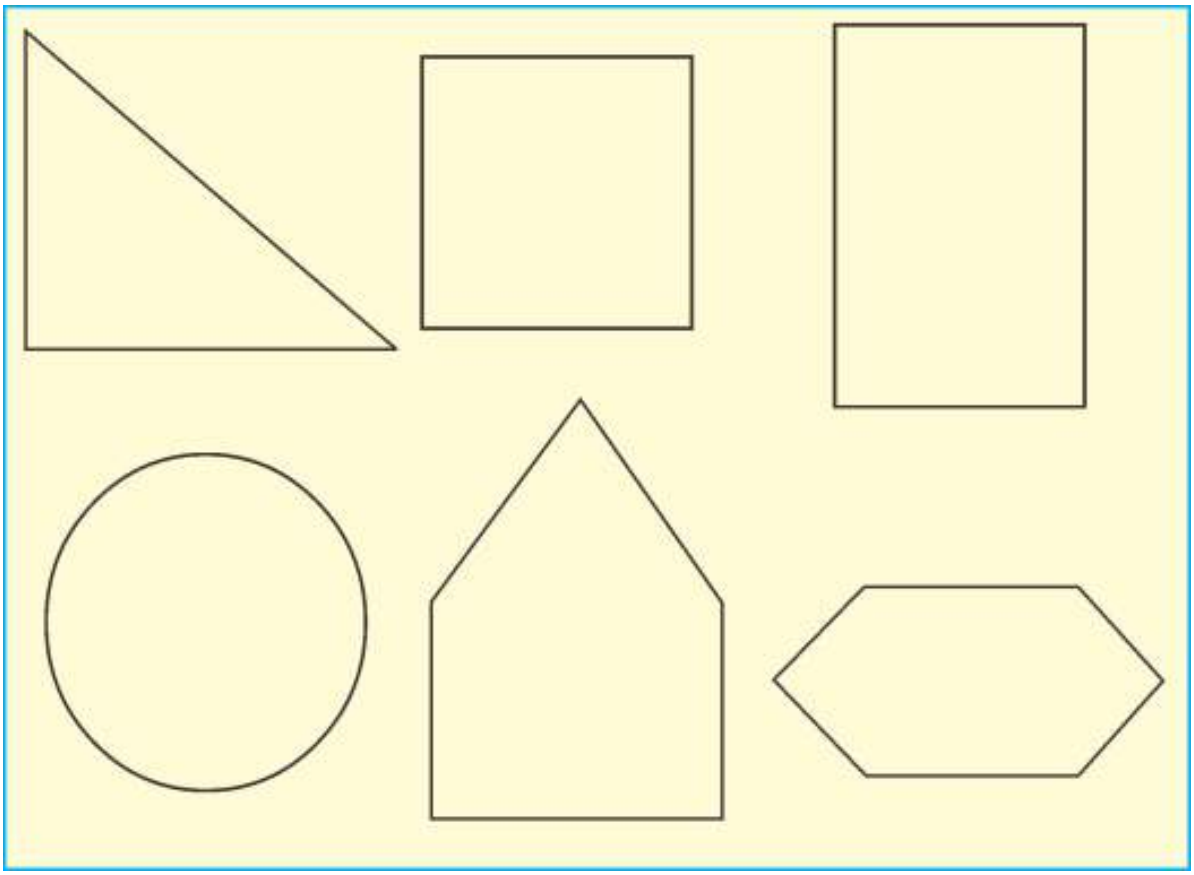
_____

(4) Have you found any thing of  shape ? If yes, write their names.

_____

☞ **By observing the above pictures and things, now you know that "Everything has a certain shape".**

- **Look at the following shapes and do as directed on the page No. 101 :**



(1) Fill in your favourite colour in the shape formed by joining three lines.

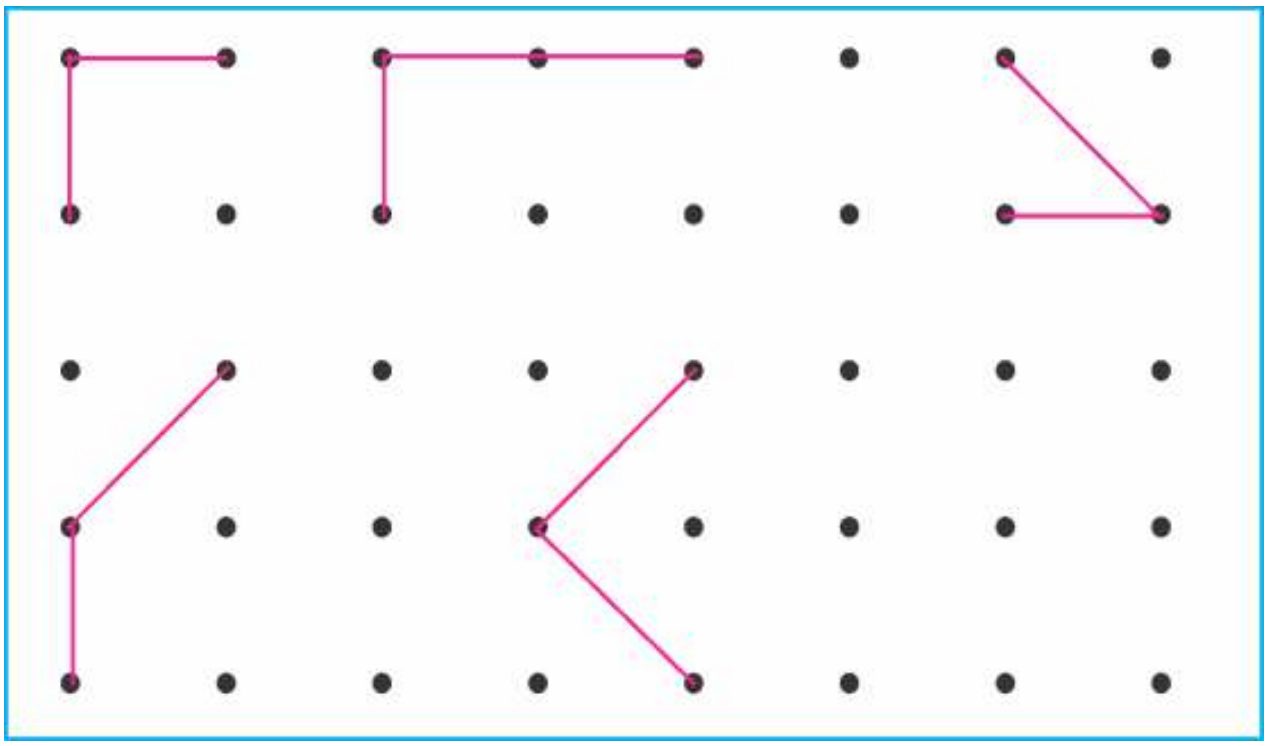
(2) Fill in your friend's favourite colour in the shape formed by joining four lines.

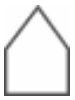
(3) Fill in green colour in the shape formed by joining five lines.

(4) Put your thumb impression in the shape formed by joining six lines.

(5) Fill in yellow colour in the shape of a rupee-coin.

☞ **By using the following lines, form the shapes, as shown on the page no. 100 :**



We observe  ,  ,  ,  ,  and  shaped things in our surroundings.

☞ **Draw the cartoon in the bigger square by joining the dots with lines as shown. Fill in your favourite colours :**