



Government of Tamilnadu

STANDARD FIVE

TERM I

VOLUME 2

MATHEMATICS

SCIENCE

SOCIAL SCIENCE

NOT FOR SALE

Untouchability is inhuman and a crime

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MATHEMATICS

STANDARD FIVE

TERM I

1

Shapes



Ravi, Rahul and Rani are excitedly talking about the recently concluded cricket match.

RAVI : Did you watch the cricket match yesterday on T.V.?

RAHUL : Yesterday, my uncle took me to the stadium and I saw the match live.

RANI : How was the crowd at the stadium?

RAHUL : The crowd was enjoying the match.

RAVI : What was the shape of the stadium and the pitch?

RAHUL : The **oval-shaped** stadium was packed with people and the two teams batted and bowled very well on the **rectangular** pitch.

RANI : What is the shape of the cricket stumps?

RAHUL : It is **cylindrical** in shape.

RAVI : What is the shape of the ball?

RAHUL : The ball is **spherical** in shape.



Activity

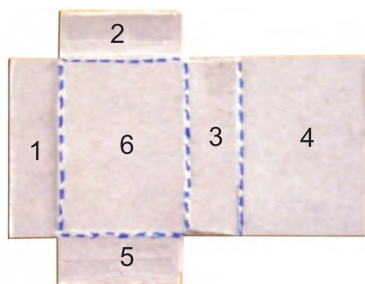


Write the shapes of the things which are around you.

Things	Shapes	Things	Shapes
Pencil		Globe	
Marble		Notebook	
Chalk box		Matchbox	
Dice		Football	

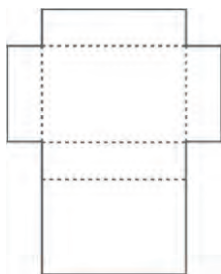
Net of a Cuboid

Have you seen a matchbox?
How many sides does it have?



Open out the folds of a matchbox. Mark the faces with numbers 1, 2, 3, 4, 5 and 6 on the matchbox as shown in the figure and remove the extra flaps and count the number of faces. Yes it has 6 faces. What is the shape of each face? Each face is a rectangle.

If a matchbox is opened out and unfolded, it gives a flat shape. The unfold flat shape is called the net of the matchbox



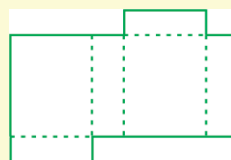
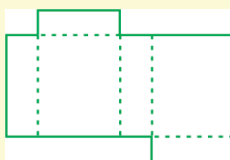
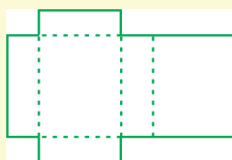
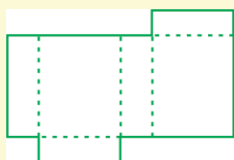
This shape when it is folded it gives us the matchbox.

A net is a two dimensional figure which can be folded to form a three dimensional figure.



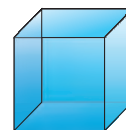
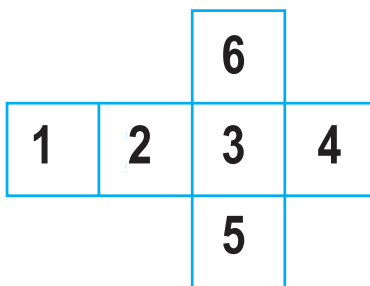
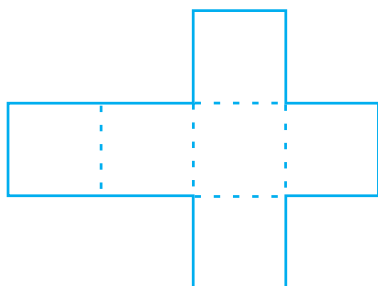
Try these

By folding along the dotted lines of the given shapes, find out which of these can be made into a box. Put a tick (✓) mark for the correct options.



Net of a cube

Six squares of equal size form a cube shaped box, when folded along the dotted lines.



Hence six equal squares form the net of a cube.

Activity



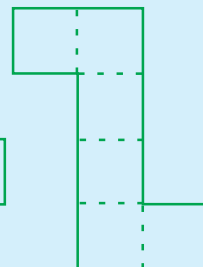
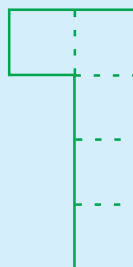
Ramu wants to make a paper cube. He knows that all the faces of a cube are squares. He draws two different shapes as shown below.



Will both of these shapes fold to form a cube?

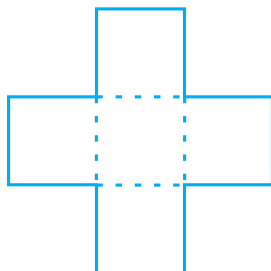
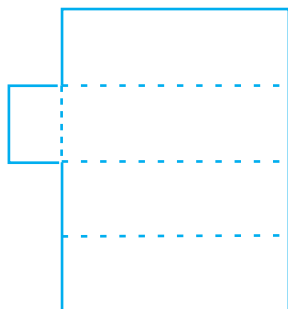


Draw atleast two other shapes which can be folded into a cube.



Net of an open box

Two ways to make open boxes with faces (sides) in the shape of rectangle and square are given to you.

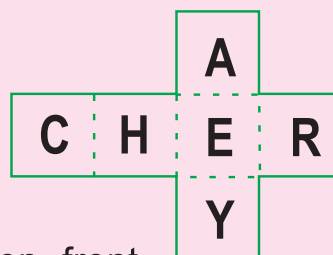


- Find out two more ways of making open boxes using the rectangle / square faces.



The net of a cube is given.

If this net is folded to make a cube in such a way that the alphabet R is at bottom, then which letters of the alphabet will be on the top, front and right sides of the cube.

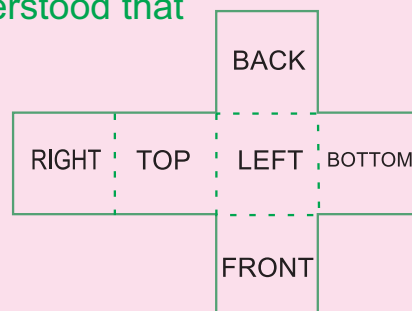


From the picture of the cube it is understood that

Top side should be **H**

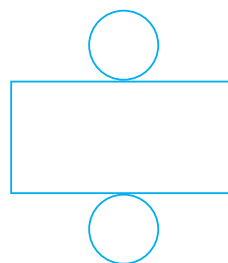
Front side should be **Y**

Right side should be **E**



Net of a cylinder

Consider a rectangle and two circles of equal size.



Join the two edges of a rectangle breadthwise in such a way that the length of the rectangle forms the boundary of one circle at the upper end and the other circle at the bottom. The figure thus formed is a cylinder.



Activity



Take a string and measure the upper circle.

Take another string and measure the bottom circle.

Both are exactly the same and equal to the length of the rectangle.

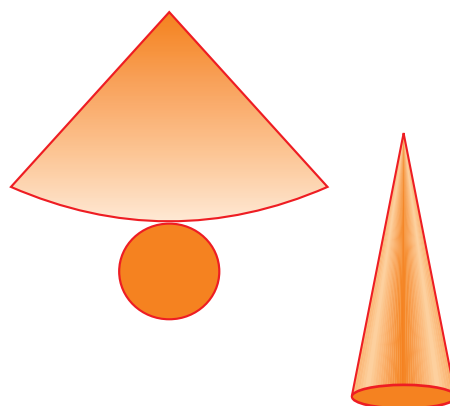


The length of the rectangle forms the boundary of the circle. Both of them are equal in length.

Net of a cone

Look at the figure.

Join both the sides of the portion of a circle in such way that the arc of the circle falls on the boundary of the circle attached at the bottom.



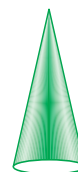
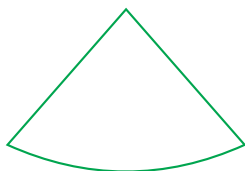
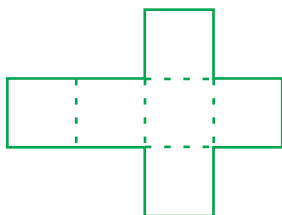
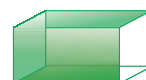
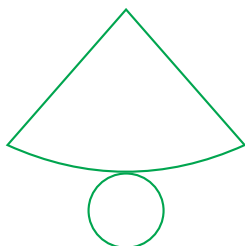
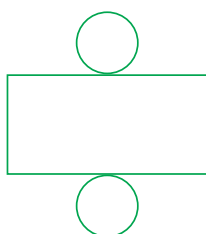
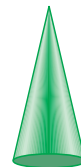
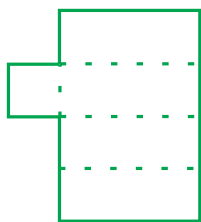
The figure thus formed is a cone.

The length of the arc forms the boundary of the circle. Both of them are equal in length.

Activity

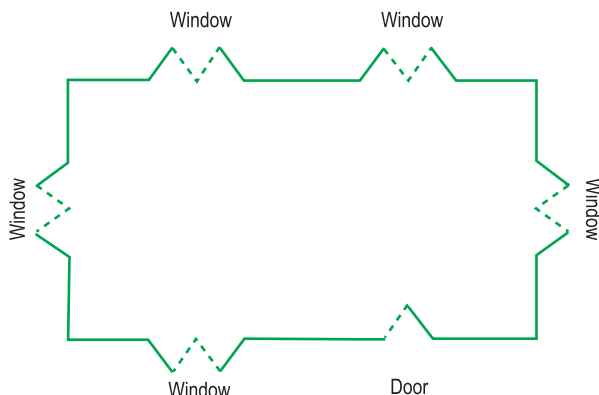


Draw an arrow mark to match the net with the shape which you will get when folded.

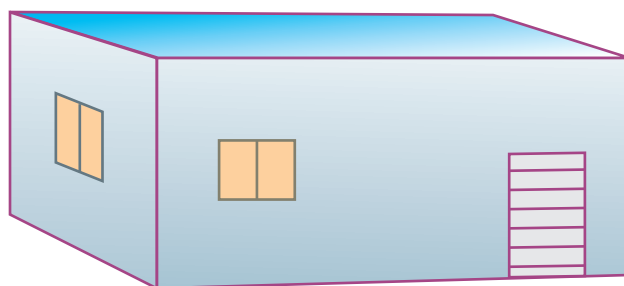


Floor maps

To make a house, a floor map is necessary. Here is a floor map of a house.



This house has got one window and one door in the front, two windows at the back, one window on the left and other on the right side of the house. The view of the house drawn using the above floor map is shown below.

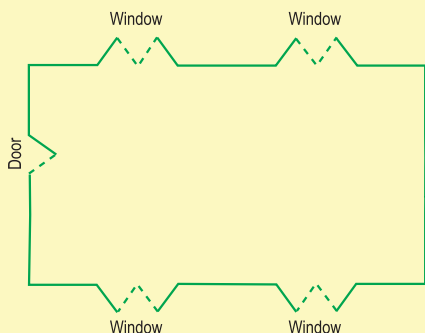


Deep Drawing

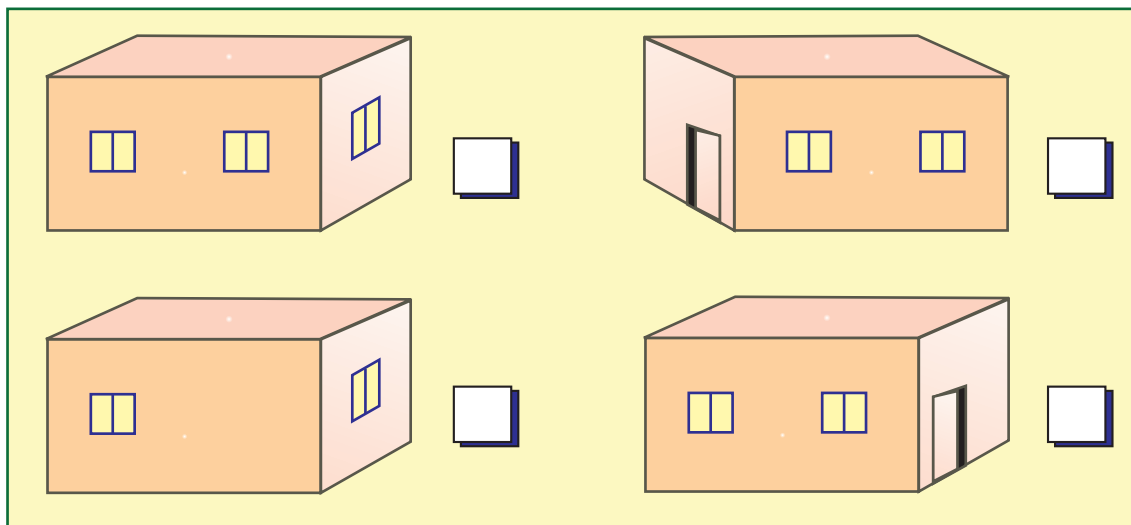
A special way of drawing the house which is deep to show the length, width and height is called a deep drawing.



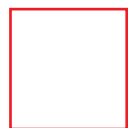
Try these



Put a tick (✓) mark for the correct deep drawing of the given floor map.



Drawing 3-D Shapes from 2-D Shapes



Square



Cube



Rectangle



Cuboid

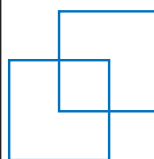
These are some of the two dimensional shapes. Now we are going to draw three dimensional geometric figures.

Any object that takes up space is called a three dimensional object.

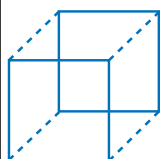
Drawing of cube through squares



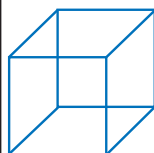
Draw a square on a paper.



Draw another square as shown in the diagram.



Draw dotted lines joining the corresponding corners as shown in the diagram.



Draw perfect lines over the dotted lines.

Activity : Use the above procedure to draw a cuboid using rectangles.

Perspective view

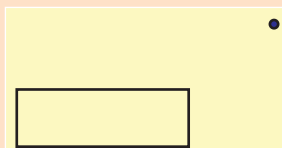
Perspective view is the view of a three dimensional object on a 2-D surface.



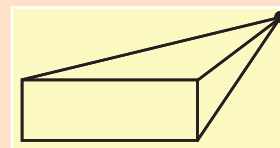
The front view of a thin metal plate is given. Make a perspective sketch of the metal plate.



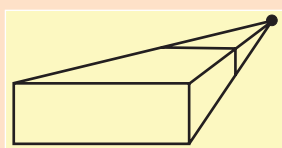
Step 1 : Take a sheet of paper. Draw the front view of the metal plate and mark a point (•) above the figure as shown below.



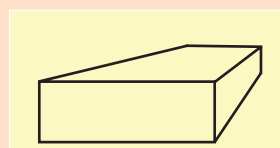
Step 2 : Join the three corners with the point as shown below.



Step 3 : Draw a line across and extend it down as given in the diagram.



Step 4 : Erase the lines outside the new lines drawn.



This is one of the perspective views of the metal plate.

Group Activity

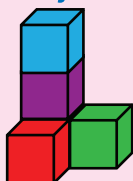


You can take different points outside the metal plate. Corresponding to each point, you will get different views of the three dimensional object.



Draw the right view and front view of the 3-D object shown.

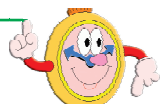
Object



Right view



Front view



Practice Time

Draw the right view and front view of the 3-D objects shown.

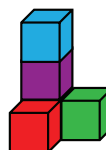
3-D objects	Right view	Front view

Worksheet

Choose the correct answer:

1. The three dimensional shape is _____
 i) Square ii) Rectangle iii) Triangle iv) Cuboid
2. A cube has _____ faces.
 i) 4 ii) 6 iii) 8 iv) 10

3. The right view of the object is _____



- i)
- ii)
- iii)
- iv)

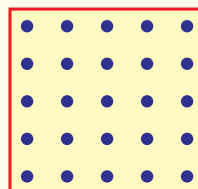
Fun With Maths

1.



Write the given digital numbers in your notebook using pencil. Erase the red coloured number pattern among the given numbers. If you make half a turn of your notebook, what do you observe?

2. Twenty five dots are arranged in the form of a square as shown in the diagram. Can you connect 12 of these dots with straight lines to form a shape which has 5 dots inside it and 8 dots outside?



2 Numbers and Place Value



Recall

(1) Answer the following :

- i) The greatest two digit number is _____.
- ii) The smallest three digit number is _____.
- iii) The greatest three digit number is _____.
- iv) The smallest four digit number is _____.
- v) The greatest four digit number is _____.

(2) Write the number names for the following:

- i) 4005 ii) 4732 iii) 5060
- iv) 5847 v) 8340 vi) 9400

(3) Write the numerals for the following:

- i) Thousand six hundred.
- ii) Five thousand and forty two.
- iii) Seven thousand nine hundred and eighty six.
- iv) Eight thousand nine hundred and thirty.
- v) Nine thousand four hundred and eighty.

(4) Give the place value for the coloured digits in the following numbers

- i) 5**5**07 ii) 63**4**8 iii) 75**4**0
- iv) **8**675 v) **9**143 vi) 931**2**

(5) Write the following in expanded notation:

- | | | |
|----------|----------|-----------|
| i) 3238 | ii) 6520 | iii) 8005 |
| iv) 4317 | v) 7430 | vi) 8502 |

(6) Write the following in standard form:

- i) $2000 + 400 + 20 + 7 = \underline{\hspace{2cm}}$.
- ii) $3000 + 500 + 60 + 5 = \underline{\hspace{2cm}}$.
- iii) $5000 + 200 + 8 = \underline{\hspace{2cm}}$.

(7) Encircle the greatest number among the following:

- i) 429, 536, 209 ii) 6276, 6266, 6267

(8) Encircle the smallest number among the following:

- i) 655, 650, 605 ii) 9099, 9909, 9999

(9) Arrange the following numbers in ascending and descending orders.

- i) 1771, 6217, 4562, 8392, 5505
- ii) 8077, 4212, 1791, 5500, 7508
- iii) 4558, 6354, 8392, 7715, 5678

(10) Using the given digits 4, 6, 7 and 8 write the smallest and greatest four digit numbers without repetition of the digits .

Smallest number :

Greatest number :



Large Numbers

The school bell had rung and then the students came out of their classrooms.



Bama: Where are our teachers going after the school hours with those blue bags?

Aravind: They have to go from house to house to do the census work assigned to them.

Bama: Why is census done?

Aravind: The headmaster of a school can plan the distribution of benefits given by the Government only if he knows the number of students studying in each class. Similarly, there should be a data of the number of men and women residing in a locality. The head count of this data is known as census. In general it is a large number.

Bama: Is that so?

Aravind: Yes. For example the rural population of Thiruvannamalai district is a **6** digit number. The total rural and urban population of other districts can be even greater. It can be either a **seven digit number or more**. To read large numbers, we make use of '**commas**' at appropriate places.

Bama: Thank you Aravind, for the valuable information you have given me.

Last year we learnt that the largest 4 digit number is 9,999.

We shall now study the numbers that come after 9,999.

The largest 4 digit number is 9,999	$9,999+1$	10,000	The smallest 5 digit number
The largest 5 digit number is 99,999	$99,999+1$	1,00,000	The smallest 6 digit number
The largest 6 digit number is 9,99,999	$9,99,999+1$	10,00,000	The smallest 7 digit number
The largest 7 digit number is 99,99,999	$99,99,999+1$	1,00,00,000	The smallest 8 digit number



Try these

Fill in the blanks

- 1) 10,001 , 10,002 , 10,003 , _____, _____, _____, _____, _____, 10,009 , 10,010.
- 2) 10,010 , 10,020 , 10,030 , 10,040 , _____, _____, _____, _____, _____, 10,100.
- 3) 10,100 , 10,200 , 10,300, _____, _____, _____, _____, _____, _____, _____.
- 4) 11,000 , 12,000 , 13,000 , _____, _____, _____, 17,000 , _____, _____, _____.
- 5) 10,000 , 20,000 , 30,000 , 40,000 , _____, _____, _____, _____, _____, 1,00,000.
- 6) 10,00,000, 20,00,000, _____, _____, _____, _____, 70,00,000, _____, _____, 1,00,00,000.

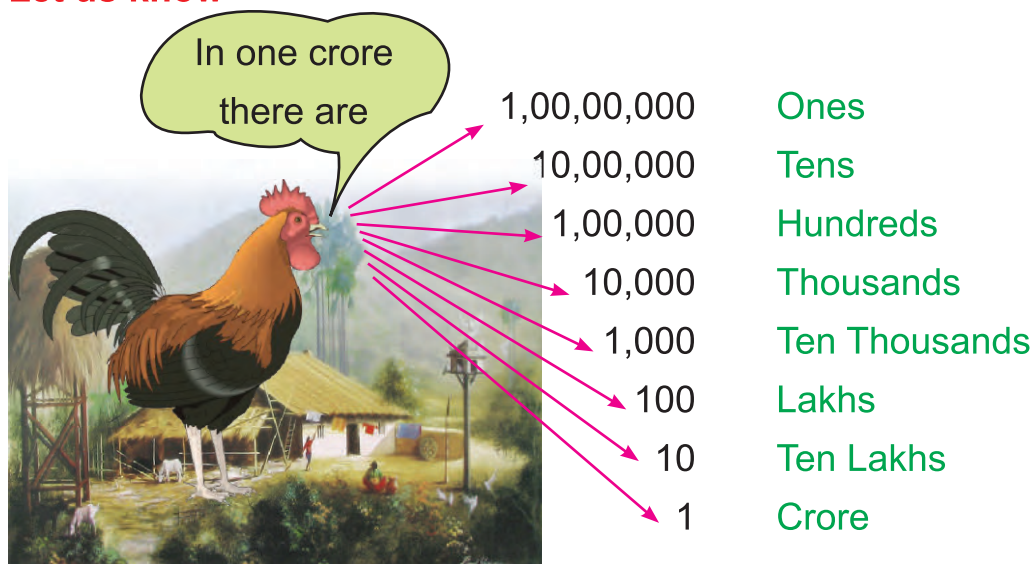


Try these

Fill in the blanks

- 1) 99,990 , 99,991 , 99,992 , _____, _____, _____,
_____, 99,997 , 99,998 , _____, 1,00,000.
- 2) 9,99,910 , 9,99,920 , 9,99,930 _____, _____, _____,
_____, _____, 9,99,990 , 10,00,000.
- 3) 9,99,100 , 9,99,200 , 9,99,300 , _____, _____, _____,
9,99,700 , 9,99,800 , _____, 10,00,000.
- 4) 99,000 , 99,100 , 99,200 , _____, _____, _____,
_____, 99,700 , 99,800 , _____, 1,00,000.
- 5) 99,91,000 , 99,92,000 , 99,93,000 , _____, _____,
_____, _____, 99,98,000 , _____, 1,00,00,000.

Let us know



Fill in the correct numbers in the following table

	Crore	Ten lakhs	Lakhs	Ten thousand	Thou- sand	Hundred	Tens	Ones
In one crore	1	10	100	1,000	10,000	1,00,000	10,00,000	1,00,00,000
In ten lakhs		1						
In a lakh			1					
In ten thousand				1				
In thousand					1			

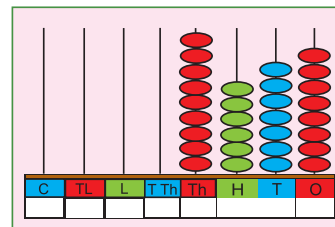
Activity



Let us learn to use the Abacus

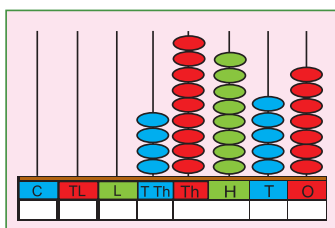
(1) The abacus shows the number 9,678.

In words, it is Nine thousand six hundred and seventy eight.



When expanded, it is, : 9 thousands + 6 hundreds + 7 tens + 8 ones
 $= 9,000 + 600 + 70 + 8$
 $= 9 \times 1000 + 6 \times 100 + 7 \times 10 + 8 \times 1.$

(2)



The abacus shows the number 49,857

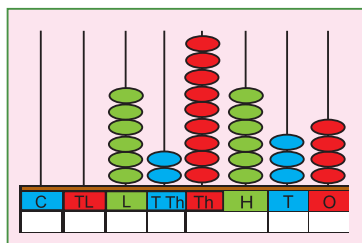
In words, it is : Forty nine thousand eight hundred and fifty seven.

When expanded, it is,

$= 4 \text{ ten thousands} + 9 \text{ thousands} + 8 \text{ hundreds} + 5 \text{ tens} + 7 \text{ ones}$
 $= 40,000 + \underline{\hspace{2cm}} + 800 + \underline{\hspace{2cm}} + 7$
 $= 4 \times 10,000 + 9 \times 1,000 + 8 \times \underline{\hspace{1cm}} + 5 \times 10 + 7 \times 1$

- (3) The abacus shows the number 6,29,634.

In words, it is Six lakhs twenty nine _____ six
hundred and _____ four



when expanded, it is,

$$= 6 \text{ lakhs} + 2 \text{ ten thousands} + 9 \text{ _____}$$

$$+ 6 \text{ hundreds} + 3 \text{ _____} + 4 \text{ ones}$$

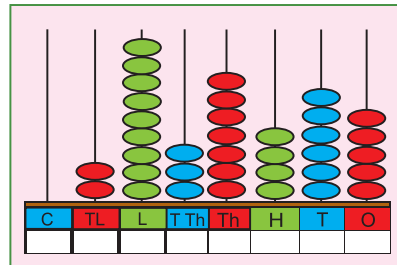
$$= 6,00,000 + 20,000 + \text{_____} + 600 + \text{_____} + 4$$

$$= 6 \times 1,00,000 + 2 \times \text{_____} + 9 \times \text{_____} + 6 \times$$

$$100 + \text{_____} \times 10 + \text{_____} \times 1$$

- (4) The abacus shows the number 29,37,465.

In words, it is : Twenty nine lakhs thirty seven thousand
four hundred and sixty five.



When expanded, it is,

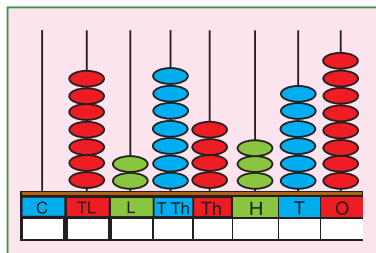
$$= 2 \text{ ten lakhs} + 9 \text{ _____} + 3 \text{ ten thousands}$$

$$+ 7 \text{ _____} + 4 \text{ hundreds} + 6 \text{ tens} + 5 \text{ _____}$$

$$= 20,00,000 + 9,00,000 + \text{_____} + 7,000 + \text{_____} 60 + 5$$

- (5) The abacus shows the number _____

In words, it is _____



Expanded form:

$$= 70,00,000 + 2,00,000 + \text{_____} + 4000$$

$$+ \text{_____} + \text{_____} + \text{_____}$$

$$= 7 \text{ ten lakhs} + \text{_____} + \text{_____} + \text{_____}$$

$$+ \text{_____} + \text{_____} + \text{_____}$$



Practice Time

1. Draw the abacus and place the beads on it according to the place value for the numbers given below. Write them in words and in expanded notation.

i) 38,205

ii) 7,20,045

iii) 23,47,280

iv) 17,35,488

2. Fill in the place value table for the following numbers according to the place value.

Place value Numbers	C	T.L	L	T.Th	Th	H	T	O
	1, 00, 00, 000	10,00,000	1,00,000	10,000	1000	100	10	1
48,769								
7,14,050								
38,29,014		3	8	2	9	0	1	4
19,15,845								
1,00,00,000								

An example to fill up the table for the number 38, 29, 014 is given below. Similarly, fill up the table for the rest of the numbers.

In the number 38,29,014

The place value of 4 is $4 \times 1 = 4$

The place value of 1 is $1 \times 10 = 10$

The place value of 0 is $0 \times 100 = 0$

The place value of 9 is $9 \times 1,000 = 9,000$

The place value of 2 is $2 \times 10,000 = 20,000$

The place value of 8 is $8 \times 1,00,000 = 8,00,000$

The place value of 3 is $3 \times 10,00,000 = 30,00,000$

Activity



Write the place value of each digit for the following numbers:

i) 48,769

ii) 7,14,050

iii) 89,05,946

Importance of Commas or periods

Numbers having 5 or more digits can be read quickly and easily by putting them into groups using commas.

In the place value system, ones, tens, and hundreds form the first group under “ones” period, thousands and ten thousands form second group under “thousands” period, lakhs and ten lakhs form the third group under “lakhs” period and crores and ten crores form the fourth group under “crores” period. Each group is separated by a comma.

i) 78,40,435

ii) 1,23,00,786

iii) 4,58,70,465



Practice Time

(1) Read the following numbers by placing the commas at appropriate periods and write their number names:

i) 247345

ii) 465310

iii) 1946380

iv) 3438375

(2) Use an abacus to show the place value of the given numbers, and write them in words.

i) 59,047

ii) 2,04,854

iii) 3,79,89,750

(3) Write the place value for the red coloured digits in the following numbers.

- i) 5,09,**5**21 ii) 6,**5**0,283 iii) 8,88,40**8** iv) 41,7**9**,001

(4) Write the following numbers in expanded form.

- i) 70,635 ii) 40,06,360 iii) 56,08,866 iv) 99,80,623

(5) Write the following in standard notation.

- i) $20,000 + 4,000 + 300 + 20 + 5$
 ii) $30,000 + 7,000 + 200 + 50 + 6$
 iii) $2,00,000 + 60,000 + 5,000 + 300 + 40$
 iv) $4,00,000 + 60$

Comparison of numbers

We use the symbols **>**, **<** and **=** to compare any two numbers.



Which is smaller between **35,826** and **9,586**?

Number with more number of digits is a larger number and number with a less number of digits is a smaller number.

$$\mathbf{9,586} < \mathbf{35,826}$$

4 digits 5 digits



Which is greater between **67,352** and **84,675**?

Here, both the given numbers are five digit numbers. So, the highest place value is to be compared to find the greater number.

Here, for the given numbers ten thousand is the highest place value. 8 ten thousands is greater than 6 ten thousands.

Hence, **$84,675 > 67,352$**

We read it as Eighty four thousand six hundred and seventy five **is greater than** Sixty seven thousand three hundred and fifty two.



Which is smaller between **63,150** and **61,879**?

Since both the numbers are five digit numbers and the digit in the ten thousands place is equal, the numbers in the thousand's place are to be compared.

When we compare the thousands place, the first number has 3 thousands and the second one has 1 thousand. So the second number is the smaller number.

Hence, **$61,879 < 63,150$**

We read it as sixty one thousand eight hundred and seventy nine **is less than** sixty three thousand one hundred and fifty.



If two numerals contain the same number of digits, we compare them by their left most digit. If the left most digits are also the same, we compare by their next digits from the left and so on.

for example, i) $45,679 < 45,789$

ii) $50,562 > 50,541$

iii) $65,432 < 65,439$



Find out which digits are compared in each example.

Thus numbers can be compared by

③ Counting the number of digits in the given numbers.

③ Checking their place value starting from the left to right.



Try these

The pairs of numbers are given below. Compare them by using $<$, $>$ and $=$ signs.

1) $4,506$ $56,780$

5) $35,703$ $2,308$

2) $18,579$ $18,579$

6) $48,458$ $46,358$

3) $57,939$ $87,399$

7) $76,345$ $76,396$

4) $43,483$ $44,833$

8) $47,346$ $47,634$



Write the smallest and greatest five digit numbers using the given digits only once.

(1) **3, 7, 9, 5, 2**

Smallest Number **23,579**

Greatest Number **97,532**

(2) **7, 4, 3, 8, 2**

Smallest Number **23,478**

Greatest Number **87,432**



Try these

Form the smallest and greatest five digit numbers using the given digits only once.

i) 4, 3, 7, 9, 0

Smallest Number

Greatest Number

ii) 6, 1, 7, 4, 2

Smallest Number

Greatest Number

iii) 9, 4, 6, 3, 1

Smallest Number

Greatest Number

iv) 4, 5, 9, 8, 7

Smallest Number

Greatest Number

Activity



(1) Sort out the greatest and smallest numbers from the list of numbers. Place the smallest numbers in the smaller jar and the greatest numbers in the bigger jar.

i) 45, 7, 50,665

ii) 41,653, 460, 810

iii) 1,235, 22,558, 480

iv) 13,857, 4,790, 865

v) 12,636, 4,170, 8,878



How are the numbers arranged in the two jars?

Ascending and descending order of numbers

Ascending order of numbers is writing the numbers from the smallest to the greatest.



Arrange the given numbers in ascending order.

387, 4,462, 17,347, 986, 38,432

Ascending order

387, 986, 4,462, 17,347, 38,432

Descending order of numbers is writing the numbers from the greatest to the smallest.



Arrange the given numbers in descending order.

986, 6,421, 14,176, 979, 87,346

Descending order

87,346, 14,176, 6,421, 986, 979



Arrange the given numbers in ascending and descending order. 44,565, 36,735, 37,536, 44,655, 7,400

Ascending order : 7,400 , 36,735 , 37,536 , 44,565 , 44,655

Descending order : 44,655 , 44,565 , 37,536 , 36,735 , 7,400



Practice Time

Arrange the following numbers in the ascending and descending orders.

- i) 27,045 , 18,137 , 33,270 , 10,678
- ii) 33,198 , 12,384 , 21,765 , 24,250
- iii) 52,830 , 41,197 , 64,532 , 47,675
- iv) 26,487 , 33,765 , 26,842 , 38,482

3

Four Operations

Addition

Maths teacher asked the students to solve the following problem. She also announced that,

One who gets the correct answer will get a gift."



The students were eagerly waiting for the question.

The teacher said, I bought a cot for ₹ 12,700 , a bureau for ₹ 9,300 and a table for ₹ 2,700. What is the total cost of the things I have bought?

All the students tried to solve the sum. She saw Iniyan and Elango, two students completed the sum ahead of others. She called them to show their note books. Shockingly, they got two different answers.

Check the methods they followed and tell whose answer is correct.



Iniyan

Cost of the cot	= ₹ 12,700
Cost of the bureau	= ₹ 9,300
Cost of the table	= ₹ 2,700
	<u>+</u>
Total Cost	= ₹ 1,32,700



Elango

Cost of the cot	= ₹ 12,700
Cost of the bureau	= ₹ 9,300
Cost of the table	= ₹ 2,700
	<u>+</u>
Total Cost	= ₹ 24,700

Can you understand that, Iniyan did not follow the place value correctly, while writing the numbers. So he went wrong in his calculations. Let us learn how to write numbers using place values.



Add the following numbers, by writing them one below the other $64,737 + 3,475 + 22,710 + 276$.

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

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

To add ones

$$6 + 0 + 5 + 7 = 18 \text{ ones} \\ = 1 \text{ ten} + 8 \text{ ones}$$

To add tens

$$7 + 1 + 7 + 3 = 18 + 1 \\ = 19 \text{ tens} = 1 \text{ hundred} + 9 \text{ tens}$$

To add hundreds

$$2 + 7 + 4 + 7 = 20 + 1 \\ = 21 \text{ H} = 2 \text{ Th} + 1 \text{ H}$$

To add thousands

$$2 + 3 + 4 = 9 + 2 \\ = 11 \text{ Th} = 1 \text{ TTh} + 1 \text{ Th}$$

To add ten thousands

$$2 + 6 = 8 + 1 = 9 \text{ TTh}$$



Find the sum of 346 , 64,786 , 9 and 89.

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



If you leave enough space between the numbers, you can avoid making mistakes, while adding the numbers



Try these

(1) Add the following numbers by writing them one below the other :

- i) 18,436 , 11,705 , 26,470 and 39,390
- ii) 74,786 , 375 , 5,450 and 78
- iii) 2,465 , 94,366 , 376 and 56
- iv) 270 , 46,210 , 17 and 6,500
- v) 7 , 493 , 28,786 and 6,405

(2) Replace each ♦ by the correct digit in each of the following:

	TTh	Th	H	T	O
	4	9	8	5	
	♦	4	3	♦	
+	2	♦	2	7	
	1	1	0	4	2

	TTh	Th	H	T	O
	5	♦	7	♦	
	♦	2	3	4	
+	1	0	♦	2	
	1	5	8	9	2



Observe the following price list exhibited in an electric and electronic goods shop.

XYZ & Co.		
PRICE LIST	Television (29")	₹ 12,750
	Home Theatre	₹ 7,550
	Washing Machine	₹ 14,750
	Fan	₹ 1,800
	Electric Cooker (1 L)	₹ 850
	Electric iron box	₹ 570
	Torch light	₹ 65
No. 10, East Car Street, Coimbatore.		



The items purchased by 5 persons are given below:

Shanthi : Television - 1, Fan - 1, Torch light - 1.

Kavya : Home theatre - 1, Electric iron box - 1,
Torch light - 1.

Savitha : Fan - 1, Electric cooker - 1, Home Theatre - 1.

Priya : Washing machine - 1, Torch light - 1, Fan - 1.

Geetha : Television - 1, Torch light - 1, Electric cooker - 1.

Find the total value of things bought by Shanthi.

Shanthi bought,

Cost of Television	=	₹ 12,750
Cost of Fan	=	₹ 1,800
Cost of Torch light	=	₹ 65
	+	
Total value of things	=	₹ 14,615

Total value of things bought by Shanthi = ₹ 14,615

Activity



From the above table, find out the total value of the things bought by Kavya, Savitha, Priya and Geetha.



Practice Time

- (1) The rough estimation of cement needed to construct a house is as follows:-

For construction	- 1,150 bags of cement
For laying concrete	- 850 bags of cement
For plastering the walls	- 98 bags of cement



What is the total number of cement bags required to construct a house?

- (2) A family spent ₹ 3,500 monthly for grocery, ₹ 1,200 for milk, ₹ 4,800 for rent and electricity, and ₹ 950 for other expenses. Find the total expenditure of the family in the month?



- (3) A Municipality collects ₹ 8,430 as water tax, ₹ 9,890 as professional tax, ₹ 1,480 as entertainment tax and ₹ 2,740 as service tax. What is the total amount collected by the municipality?
- (4) In an exhibition, the amount collected from the sale of books, Electronic items, Textiles, Household items are ₹ 1,700, ₹ 18,585, ₹ 9,200 and ₹ 22,000 respectively. What is the total amount collected in the exhibition?



Subtraction

“Why have you not completed your homework still?” asked Sarala’s mother.

“Mother, I am not able to complete one particular problem”, replied Sarala.

Mother had a glance of Sarala’s problem.

$$27632 - 8267 = ?$$

The mother saw, how she has written the numbers one below the other. She explained her daughter the mistake committed by her.

$$\begin{array}{r} 27632 \\ - 8267 \\ \hline \end{array}$$

Now you would have understood why Sarala was not able to get the correct answer.

Can you correct Sarala’s mistake yourselves? Do you need help to solve the problem?





Subtract the following numbers, by writing them one below the other $27,632 - 8,267$.

T	Th	Th	H	T	O		Th	H	T	O
2	7	6	3	2	–	8	2	6	7	

T	Th	Th	H	T	O
					12
1	17	5	2	12	
2	7	6	3	2	
–	8	2	6	7	
1	9	3	6	5	

To subtract ones

Since 2 is smaller than 7, convert 1 ten from 3 and then regroup into ones ($10 + 2 = 12$). Hence $12 - 7 = 5$

To subtract tens

Since 2 is smaller than 6, convert 1 hundred from 5 and then regroup into tens. $12 - 6 = 6$

To subtract hundreds

Subtract 2 hundreds from 5 hundreds. $5 - 2 = 3$

To subtract thousands

Since 7 is smaller than 8, convert 1 ten thousand from 2 and then regroup into thousand. $17 - 8 = 9$

To subtract ten thousands

$1 - 0 = 1$



Try these

(1) Subtract the following

i) $76,236 - 987$

ii) $9,827 - 992$

iii) $60,006 - 27,822$

iv) $98,765 - 7,988$

(2) Subtract 58,600 from 69,848.

(3) Find the difference between 6,589 and 74,569.

(4) How much 75,000 is more than 23,569?

(5) What should be added to 5,600 to get 90,000.



In a cement factory 63,665 bags of cement are produced in a year. Among them 52,980 bags are sold. Find the number of cement bags unsold.

Number of cement bags produced =
 Number of bags sold =
 Number of bags unsold

Tth	Th	H	T	O
		15		
	2	5	16	
6	3	6	6	5
— 5	2	9	8	0
1	0	6	8	5

Number of cement bags unsold = 10,685



Practice Time

- Find the difference between the largest five digit number and smallest six digit number.
- The cost of a motorbike is ₹ 45,800. If the cost of a bicycle is ₹ 42,910 less than the cost of a motor bike, find the cost of the bicycle.
- Arivazhagan deposited his monthly income of ₹ 26,000 in a bank. He withdrew ₹ 7,600 from the bank once and ₹ 12,400 from the bank second time to meet his family expenditure. Calculate the balance amount left in his account?
- In a flower show 35,000 flowers were used for decoration. After 3 days 1,314 flowers were removed and the remaining flowers were used to make a new model of decoration. How many flowers were used for making the new model?



- (5) In a town bus, ₹ 27,432 was collected in the first week and ₹16,758 was collected in the second week. By how much was the collection amount less in the second week compared to that of the first week?



- (6) Replace each * by the correct digit in each of the following

i)

	Tth	Th	H	T	O
	4	6	3	5	7
–	*	*	*	*	*
	2	1	2	1	3

ii)

	Tth	Th	H	T	O
	*	6	4	3	*
–	4	*	7	*	9
	3	2	*	2	1

Multiplication

Bharani has done a multiplication problem in the class. Eventhough he had completed the problem, he had a doubt about the method he followed to solve the problem. He clarified it with his friend. He too was unable to clear his doubt. Finally, their maths teacher cleared their doubt.



Bharani's way of solving the multiplication problem:

$$\begin{array}{r}
 658 \times 46 \\
 \hline
 3948 \\
 + 2632 \\
 \hline
 30268
 \end{array}$$

When 658 is multiplied by 4, the product is written from tens place. They wanted the explanation for this.

Explanation 1

	H	T	O
	6	5	8
×	4	6	
	3	9	4
+	2	6	3
	3	0	2

$$658 \times 6 \text{ ones} = 658 \times 6 = 3948$$

$$658 \times 4 \text{ tens} = 658 \times 40 = 26320$$

Explanation 2

	H	T	O
6	5	8	
×	4	6	
<hr/>			
3	9	4	8
+	2	6	3
2	0	2	6
3	0	2	6
			8

Write all the values, according to place value and add them

$$658 \times 6 \text{ ones}$$

$$\begin{array}{l} \text{O} \\ 8 \end{array} \times \begin{array}{l} \text{O} \\ 6 \end{array} = 48 \text{ ones}$$

$$\begin{array}{l} \text{T} \\ 5 \end{array} \times \begin{array}{l} \text{O} \\ 6 \end{array} = 30 \text{ tens}$$

$$\begin{array}{l} \text{H} \\ 6 \end{array} \times \begin{array}{l} \text{O} \\ 6 \end{array} = 36 \text{ hundreds}$$

$$658 \times 4 \text{ tens}$$

$$\begin{array}{l} \text{O} \\ 8 \end{array} \times \begin{array}{l} \text{T} \\ 4 \end{array} = 32 \text{ tens}$$

$$\begin{array}{l} \text{T} \\ 5 \end{array} \times \begin{array}{l} \text{T} \\ 4 \end{array} = 20 \text{ hundreds}$$

$$\begin{array}{l} \text{H} \\ 6 \end{array} \times \begin{array}{l} \text{T} \\ 4 \end{array} = 24 \text{ thousands}$$

In the multiplier 46, the place value of 4 is tens. Hence, the product should be written from the tens place instead of ones place.

Thus, the teacher cleared Bharani's doubt.



Try these

Multiply the following numbers

(1) $9,500 \times 2$

(2) $7,426 \times 39$

(3) $9,427 \times 67$

(4) $8,085 \times 94$

(5) $9,707 \times 52$

(6) 354×256



In a students hostel, the amount spent for the students per day is ₹ 350. Calculate the amount spent for 30 days.

$$\text{Amount spent for one day} = ₹ \quad 350$$

$$\text{Amount spent for 30 days} = ₹ \quad 350 \times 30$$

$$\underline{₹ \quad 10,500}$$

Thus, ₹ 10,500 is the amount spent for 30 days in a student's hostel.



If the number of tickets sold in a circus on one day is 126, find the number of tickets sold for 16 days.

To find the product of 126 and 16.

$$\begin{array}{r} 126 \times 10 = 1,260 \\ 126 \times 6 = + 756 \\ \hline 2,016 \end{array}$$

Thus, 2,016 tickets were sold for 16 days.

The multiplier 16 can be split as $(10 + 6)$. Hence first find the product of 126×10 and 126×6 and then add both of them.



Note

If a multiplier has a number followed by zeros, multiply the number and then add the number of zeros to the right of the answer.



The cost of a ceiling fan is ₹ 735. Find the cost of 125 ceiling fans?

The price of 1 ceiling fan = ₹ 735

The price of 125 ceiling fans = ₹ 735×125

$$\begin{array}{r} 735 \times 125 \\ \hline 3675 \\ 14700 \\ 73500 \\ \hline 91875 \end{array}$$

$$\begin{array}{l} 735 \times 5 = 3675 \\ 735 \times 20 = 14700 \\ 735 \times 100 = 73500 \end{array}$$

Thus, cost of 125 ceiling fans is ₹ 91,875.

Another Method of multiplying 735 and 125.

		MULTIPLIER			
MULTIPLICAND	Place value	1H (100)	2T (20)	5 O (5)	Total
	7 H (700)	70,000	14,000	3,500	87,500
	3 T (30)	3,000	600	150	3,750
	5 O (5)	500	100	25	625
	Total	73,500	14,700	3,675	91,875



Practice Time

- (1) If the cost of 1 litre milk is ₹ 22, find the cost of 20 litre of milk?



- (2) The cost of a folding chair is ₹ 182. Calculate the cost of 25 folding chairs?



- (3) The price of a book ₹ 250. What is the amount needed to buy 40 such books?



- (4) A factory produces 285 PVC pipes in a day. How many PVC pipes will it produce in a year, if the factory has 293 working days in the year?



- (5) A carton can hold 144 apples. 675 cartons of apples were brought to a market on a day. Find the total number of apples brought to the market on the day?



Activity



Magic Square

Fill up the boxes with the numbers from 46 to 54. The numbers should be filled in such a way that the sum in both rows and columns should be 150.

		49
46		
	52	47

Complete this magic square with numbers from 21 to 29. The sum of both horizontal and vertical boxes should be 75.

21		

Group Activity



Make some more magic squares with your friends.

Activity



Read the following five statements and choose the appropriate question from the list given for each statement and put a tick (✓) mark against the correct one.

- (1) A fruitseller has 50 boxes with 38 fruits in each box.

- How much of money, he might have spent to buy all the fruits?
- How many fruits does the fruit seller have?
- What is the selling price of each fruit?



- (2) Revathi and Anu bought books for ₹ 47 and ₹ 43 respectively. They gave ₹ 100 to the shop keeper.

- What is the total number of books in the shop?
- What is the balance money given by the shopkeeper?
- Does the book-shop have enough stock?

- (3) In an Aquarium, there are 15 fish tanks. Each fish tank has got 20 varieties of fishes.



- Find the total number of fishes in the aquarium?
- How many varieties of fishes were sent to other places?
- How many persons were there in the Aquarium?

- (4) A circus group has 176 members. They stayed in tents, with 8 persons in each tent.



- How many persons saw the circus?
- How many tents were made for the circus group?
- How many persons left the circus group?

- (5) The shopkeeper has 144 eggs. He puts them in egg trays. Each tray has 12 eggs.

- How many more eggs will he need?
- How many fresh eggs does he sell?
- How many egg trays does he need?

Division

Dhivya's Aunty with her 3 daughters Varsha, Reshma and Priya has come from Delhi to Dhivya's house for Dasara holidays.

Divya's brother Kumar had a doubt in the division of numbers. He clarified his doubt from his sister and cousins. All of them tried the sum separately.

The sum is $7692 \div 6$

Priya solved by the following method

$$\begin{aligned} 7692 &= 7000+600+90+2 \\ &= 6000+1000+600+90+2 \\ &= 6000+1600+90+2 \\ &= 6000+1200+400+90+2 \\ &= 6000+1200+490+2 \\ &= 6000+1200+480+10+2 \\ &= 6000+1200+480+12 \end{aligned}$$

Let us share 7692 equally among 6 persons.

$$\begin{aligned} 7692 \div 6 &= (6000 \div 6) + (1200 \div 6) \\ &\quad + (480 \div 6) + (12 \div 6) \\ &= 1000+200+80+2 \end{aligned}$$

So, the share of each person is **1282**.

Varsha solved by this method

$$\begin{aligned} 7692 &= 7\text{Th}+6\text{H}+9\text{T}+2\text{O} \\ &= 6\text{Th}+1\text{Th}+6\text{H}+9\text{T}+2\text{O} \\ &= 6\text{Th}+16\text{H}+9\text{T}+2\text{O} \\ &= 6\text{Th}+12\text{H}+4\text{H}+9\text{T}+2\text{O} \\ &= 6\text{Th}+12\text{H}+49\text{T}+2\text{O} \\ &= 6\text{Th}+12\text{H}+48\text{T}+12\text{O} \end{aligned}$$

Let us share 7692 equally among 6 persons

$$\begin{aligned} 7692 \div 6 &= (6\text{Th} \div 6) + (12\text{H} \div 6) \\ &\quad + (48\text{T} \div 6) + (12\text{O} \div 6) \\ &= 1\text{Th}+2\text{H}+8\text{T}+2\text{O} \\ &= 1282 \end{aligned}$$

So, the share of each person is **1282**.

Reshma solved by the following method. Let us share 7692 equally among 6 persons.

$$\begin{array}{r} 500 + 500 + 200 + 80 + 2 \\ 6 \overline{) 7692} \\ \underline{3000} \\ 4692 \\ \underline{3000} \\ 1692 \\ \underline{1200} \\ 492 \\ \underline{480} \\ 12 \\ \underline{12} \\ 0 \end{array}$$



Dividend	=	7692
Divisor	=	6
Quotient	=	1282
Remainder	=	0



Divya solved by this method.

Let us share 7692 equally among 6 persons.

Equal Share



7 Th 1000 1000 1000 1000 1000 1000

Let us change 1000 into 10 hundreds

1000

→

100
100
100
100
100

100
100
100
100
100

10 H + 6 H

100 100 100 100 100 100
100 100 100 100 100 100

Let us change 400 into 40 tens

100

→

10
10
10
10
10
10
10
10
10
10

100

→

10
10
10
10
10
10
10
10
10
10

100

→

10
10
10
10
10
10
10
10
10
10

100

→

10
10
10
10
10
10
10
10
10
10

40 T + 9 T

10 10 10 10 10 10
10 10 10 10 10 10
10 10 10 10 10 10
10 10 10 10 10 10
10 10 10 10 10 10
10 10 10 10 10 10
10 10 10 10 10 10
10 10 10 10 10 10

Let us change 10 into 10 ones

10

→

1
1
1
1
1

1
1
1
1
1

10 O + 2 O

1 1 1 1 1 1
1 1 1 1 1 1

Quotient = 1282

Remainder = 0

Share of each person is 1282

All the four got the same answer irrespective of their different methods.

Let us follow the steps for solving division problems.

Step 1

Seven thousands can be split as 1 group of 6 thousands. So, $7 \div 6 = 1$ thousand, remainder 1.

	1			
	Th	H	T	O
6	7	6	9	2
	6			
	1			

Step 2

Bring down the 6 from the hundreds place and write next to '1'. 16 hundreds split into 2 groups of 6 hundreds. So, $16 \div 6 = 2$ hundred, remainder 4.

	1	2		
	Th	H	T	O
6	7	6	9	2
	6			
	1	6		
	1	2		
		4		

Step 3

Bring down the '9' from the tens place and write next to '4'. 49 tens can be split into 8 groups of 6 tens. So, $49 \div 6 = 8$ tens, remainder = 1.

	1	2	8	
	Th	H	T	O
6	7	6	9	2
	6			
	1	6		
	1	2		
		4	9	
		4	8	
			1	

Step 4

Bring down the '2' from the ones place and write next to '1'. 12 ones can be split into 2 groups of 6 ones. So, $12 \div 6 = 2$ ones remainder = 0.

	1	2	8	2
	Th	H	T	O
6	7	6	9	2
	6			
	1	6		
	1	2		
		4	9	
		4	8	
			1	2
			1	2
				0

Therefore, $7692 \div 6 = 1282$, Remainder = 0.



In a student's hostel, the amount spent in a week for food was ₹ 4,809. Find the amount spent for a day.



$$\begin{aligned}\text{Amount spent for 7 days} &= ₹ 4,809 \\ \text{Amount spent for a day} &= ₹ 4,809 \div 7\end{aligned}$$

Divide 4,809 by 7.

Step 1

Can you split 4 thousands into groups of 7 thousands? **No.**

But 48 hundreds can be further split into 6 groups of 7 hundreds.

So, $48 \div 7 = 6$, Remainder is 6 hundreds.

	Th	H	T	O
	0	6		
7	4	8	0	9
	4	2		
		6		

Step 2

Bring down the '0' from the tens place and write next to '6', split 60 tens as 8 groups of 7 tens.

So, $60 \div 7 = 8$, Remainder is 4 tens.

	Th	H	T	O
	0	6	8	
7	4	8	0	9
	4	2		
		6	0	
		5	6	
			4	

Step 3

Bring down the '9' from the ones place and write next to 4, 49 ones can be split as 7 groups of 7 ones.

So, $49 \div 7 = 7$, Remainder is 0.

	Th	H	T	O
	0	6	8	7
7	4	8	0	9
	4	2		
		6	0	
		5	6	
			4	9
			4	9
				0

Hence, money spent for one day = ₹ 687.



In a factory, the price of 36 bags of poultry food is ₹ 3024. Find the cost of 1 bag?

Cost of 36 bags of poultry food = ₹ 3024

Cost of 1 bag of poultry food = ₹ 3024 ÷ 36

Divide 3,024 by 36.

Step 1

Can you split 3 thousands into groups of 36 thousands? **No.**

Can you split 30 hundreds into groups of 36 hundreds? **No.**

so 302 tens can be split as 8 groups of 36 tens.

$$7 \times 36 = 252$$

$$8 \times 36 = 288$$

$$9 \times 36 = 324$$

302 ÷ 36 = 8 tens and remainder is 14.

	Th	H	T	O
	0	0	8	
36	3	0	2	4
	2	8	8	
			1	4

Step 2

Bring down the 4 from the ones place and write next to 14.

144 ones can be split as 4 groups of 36 ones.

$$3 \times 36 = 108$$

$$4 \times 36 = 144$$

$$5 \times 36 = 180$$

144 ÷ 36 = 4 ones and remainder is 0.

	Th	H	T	O
	0	0	8	4
36	3	0	2	4
	2	8	8	
		1	4	4
		1	4	4
				0

Hence, the cost of 1 bag of poultry food is ₹ 84



Practice Time

- (1) Divide and find out quotient and remainder for the following sums.

i) $6,005 \div 5$

ii) $3264 \div 3$

iii) $5,697 \div 9$

iv) $9,450 \div 30$

v) $5,150 \div 25$

vi) $6,490 \div 55$

- (2) If you arrange 3,375 mangoes in 75 baskets, find the number of mangoes arranged in one basket?



- (3) In a fair price shop, the amount of rice sold for 50 days is 13,500kg. Find the rice sold for 1 day? (in Kg)



- (4) In a farm, the number of eggs collected in June is 19,500. How many eggs were collected on each day in the month of June?



- (5) In a post office, stamps worth ₹ 12,750 were sold in 10 days. Calculate the amount of stamps sold for a day?



- (6) If a company manufactures 13,365 utensils in 27 days, find out the number of utensils manufactured in a day.



Worksheet

Answer the following.

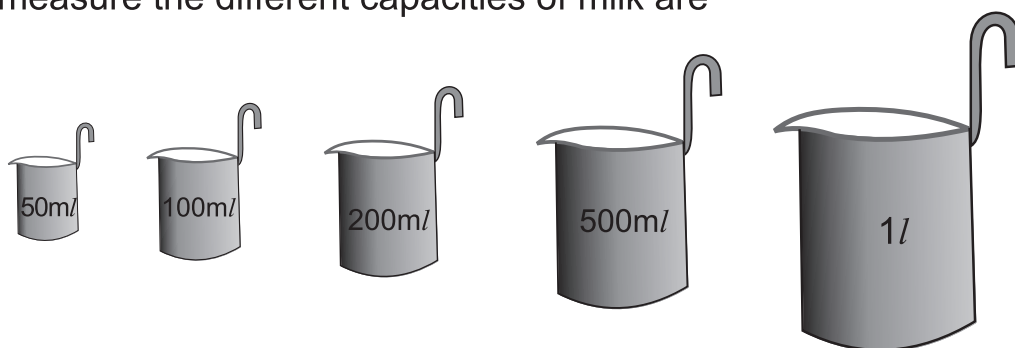
- (1) The five digit number is _____.
 - i) Ten thousand
 - ii) Thousand forty
 - iii) Hundred
 - iv) Ten
- (2) The numeral for "six lakhs fifty thousand and forty" is _____.
 - i) 65,040
 - ii) 6,50,040
 - iii) 6,50,400
 - iv) 654
- (3) The number name of 6,54,302 is _____.
 - i) Six lakhs fifty four thousand three hundred and two.
 - ii) Sixty five thousand four hundred thirty two.
 - iii) Sixty lakh fifty four thousand three hundred two.
 - iv) Sixty five lakh four thousand thirty two.
- (4) The place value of 7 in 76,543 is _____.
 - i) 7
 - ii) 70
 - iii) 70,000
 - iv) 7,000
- (5) 54,302 is equal to _____.
 - i) $5 + 4 + 3 + 0 + 2$
 - ii) $5,000 + 400 + 30 + 2$
 - iii) $50,000 + 4,000 + 300 + 2$
 - iv) $5,000 + 4,000 + 30 + 2$
- (6) The difference between place value of two 6's in 96,160 is _____.
 - i) 0
 - ii) 994
 - iii) 5,940
 - iv) 6,000

- (7) Form the greatest 5 digit number by using the digits 2,9,5,4 and 6 is _____.
i) 24,569 ii) 96,542
iii) 92,456 iv) 95,624
- (8) Which is correct ?
i) 49,505 is less than 49,550.
ii) 49,550 is less than 45,950.
iii) 45,960 is less than 40,965.
iv) 45,906 is less than 45,609.
- (9) Which is the greatest number?
i) 5,405 ii) 4,505
iii) 5,054 iv) 5,504
- (10) In the numeral 75,432, the digits 5 and 3 are interchanged to get new number. Find the difference between the new number and the given numeral is _____.
i) 1,980 ii) 9,990
iii) 990 iv) 1,890
- (11) The difference between the greatest 6 digit and smallest 5 digit number is _____.
i) 89,999 ii) 9,89,999
iii) 10,000 iv) 1,00,999
- (12) The product of 405 and 40 is _____.
i) 445 ii) 16,200
iii) 1,620 iv) 1,800
- (13) If, 7427 is divided by 7 then the quotient is _____.
i) 161 ii) 1,061
iii) 1,006 iv) 1,001

4

Capacity

Ramu helps his father in a milk depot. The vessels used by him to measure the different capacities of milk are



Even though Ramu knows that the 1 litre (l) vessel is bigger than the 500 millilitres (ml) vessel, he wants to find the relationship between the two. He poured milk from the jar into the 500 ml measuring vessel till it read 500 ml. He then poured it into the 1 l vessel. He noticed that it was not full.

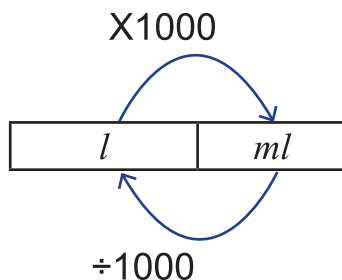
So, he poured one more vessel of 500 ml milk into the 1 l vessel. He found that the level of milk in the vessel reached the 1 l mark. From this, we observe that $1l = 500\text{ ml} + 500\text{ ml} = 1000\text{ ml}$



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

Try to do the above activity with water using 200ml, 100ml vessels and compare their quantities.

Conversion of litres into millilitres & millilitres into litres



Conversion of litres into millilitres

To convert litres into millilitres, multiply litres by 1000



Convert 2 litres into millilitres

$$2l = 2 \times 1000 = 2000ml$$



Practice Time

Complete the table.

Litre (l)	1	2	3	4	5	6	7	8	9
Millilitre (ml)	1000	2000	3000	4000					



Convert 2 l 250 ml into millilitres

$$\begin{aligned}
 2l\ 250ml &= 2l + 250ml \\
 &= (2 \times 1000)ml + 250ml \\
 &= 2000ml + 250ml \\
 &= 2250ml
 \end{aligned}$$



Convert $5\text{ l } 50\text{ ml}$ into millilitres

$$\begin{aligned} 5\text{ l } 50\text{ ml} &= 5\text{ l} + 50\text{ ml} \\ &= (5 \times 1000)\text{ ml} + 50\text{ ml} \\ &= 5000\text{ ml} + 50\text{ ml} \\ &= 5050\text{ ml} \end{aligned}$$



Try these

Convert the following values into millilitres

- | | |
|--------------------|-----------------------------------|
| i) 3 l | ii) $1\text{ l } 500\text{ ml}$ |
| iii) 8 l | iv) $6\text{ l } 200\text{ ml}$ |
| v) 10 l | vi) $7\text{ l } 50\text{ ml}$ |
| vii) 25 l | viii) $9\text{ l } 100\text{ ml}$ |

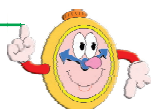
Conversion of millilitres into litres

To convert millilitres into litres divide millilitres by 1000



Convert 3000 ml into l

$$\begin{aligned} 3000\text{ ml} &= 3000 \div 1000 \\ &= 3\text{ l} \end{aligned}$$



Practice Time

Complete the table.

ml	1000	2000	3000	4000	5000	6000	7000	8000	9000
l	1	2	3	4					



Convert 3150ml into litres and millilitres.

$$\begin{aligned} 3150 \text{ ml} &= 3000 \text{ ml} + 150 \text{ ml} \\ &= (3000 \div 1000) \text{ l} + 150 \text{ ml} \\ &= 3 \text{ l } 150 \text{ ml} \end{aligned}$$

Convert 4500ml into litres and millilitres.

$$\begin{aligned} 4500 \text{ ml} &= 4000 \text{ ml} + 500 \text{ ml} \\ &= (4000 \div 1000) \text{ l} + 500 \text{ ml} \\ &= 4 \text{ l } 500 \text{ ml} \end{aligned}$$



Try these

Convert the following into litres and millilitres

i) 3500 ml

ii) 4150 ml

iii) 5500 ml

iv) 6200 ml

v) 9050 ml

vi) 9250 ml

Addition

Meera, Geetha and Priya went to a shop and bought the following things and made a list of them.

Name	Items			
	Milk	Coconut oil	Groundnut oil	Sunflower oil
Meera	2l 500 ml	500ml	3l 250 ml	2l
Geetha	1l 500 ml	2 l	1 l	500ml
Priya	500ml	500ml	1l 500 ml	1l

From the above list, let us calculate how much of milk was bought by all of them.

Milk bought by Meera =

Milk bought by Geetha = +

Milk bought by Priya =

<i>l</i>	<i>ml</i>
2	500
1	500
0	500
3	1500

Arrange the given values against *l* and *ml* and then add them.

$$3\text{ l } 1500\text{ ml} = 3\text{ l} + (1500\text{ ml} \div 1000) = 3\text{ l} + (1\text{ l } 500\text{ ml}) = 4\text{ l } 500\text{ ml}$$

Therefore, the quantity of milk bought by all of them = **4 l 500 ml**



Activity

From the table given, find out how many litres of coconut oil, groundnut oil and sunflower oil, they bought?



Add 12 l 250 ml and 34 l 800 ml

	<i>l</i>	<i>ml</i>
	1	
	12	250
+	34	800
	47	050

Add the millilitres.

$$250\text{ ml} + 800\text{ ml} = 1050\text{ ml}.$$

Convert it into litres and millilitres.

$$1050\text{ ml} = 1\text{ l } 050\text{ ml}.$$

Add the litres

$$1 + 12 + 34 = 47\text{ l}.$$



Note

To teacher: Similarly, more statement sums can be assigned to students for practice.



Try these

Add the following

i) 3 l 250 ml, 6 l 150 ml

ii) 7 l 850 ml, 9 l 300 ml

iii) 5 l 550 ml, 3 l 300 ml

iv) 85 l 450 ml and 70 l 350 ml

v) 20 l 500 ml and 35 l 600 ml

vi) 45 l 600 ml and 20 l 500 ml

Subtraction

A barrel can hold 40 l of water and a bucket can hold 5 l of water. Jean filled the whole barrel with water. She then took one bucket full of water from the barrel for watering the plants. Can you tell how much of water is left in the barrel?

$$\begin{array}{rcl} \text{Capacity of the barrel} & = & 40\text{ l} \\ \text{Quantity of water used for the plants} & = & - 5\text{ l} \\ \hline \text{Quantity of water left in the barrel} & = & 35\text{ l} \end{array}$$

Therefore, 35 l of water is left in the barrel.



Note

To teacher: Similarly, more statement sums can be assigned to students for practice.



Subtract 56 l 350 ml from 75 l 200 ml

	l	ml
	74	1200
	75	200
-	56	350
	18	850

To subtract 350 ml from 200 ml, convert 1 l into ml and add with ml.

$$75\text{ l} - 1\text{ l} = 74\text{ l}$$

$$1000\text{ ml} + 200\text{ ml} = 1200\text{ ml}$$

$$1200\text{ ml} - 350\text{ ml} = 850\text{ ml}$$

Subtract 56 l from 74 l

$$74\text{ l} - 56\text{ l} = 18\text{ l}$$



Try these

Subtract the following

- | | |
|---------------------------------|----------------------------------|
| i) 5 l 250 ml - 2 l 150 ml | ii) 9 l 200 ml - 3 l 150 ml |
| iii) 9 l 500 ml - 7 l 600 ml | iv) 14 l 150 ml from 17 l 450 ml |
| v) 34 l 400 ml from 84 l 600 ml | vi) 32 l 800 ml from 55 l 750 ml |

Multiplication

John drinks a glass of milk daily both in the morning and evening. The glass can hold 200ml of milk. Find out the quantity of milk he drinks per day.



$$\begin{aligned}\text{Capacity of the cup} &= 200\text{ ml} \\ \text{Number of cups he drinks} &= \times 2 \\ \text{Quantity of milk he drinks per day} &= \underline{400\text{ml}}\end{aligned}$$

Therefore, he drinks 400 ml per day.



Multiply $3\text{ l } 150\text{ ml}$ by 4

$$\begin{array}{r} \text{l} \quad \text{ml} \\ 3 \quad 150 \\ \times \quad 4 \\ \hline 12\text{l} \quad 600\text{ ml} \end{array}$$

$$\begin{array}{r} \text{l} \quad \text{ml} \\ 150\text{ml} \times 4 = 600 \\ 3\text{l} \times 4 = 12 \\ \hline 12 \quad 600 \end{array}$$

Multiply $48\text{ l } 200\text{ ml}$ by 7

$$\begin{array}{r} \text{l} \quad \text{ml} \\ \textcolor{red}{1} \\ 48 \quad 200 \\ \times \quad 7 \\ \hline 337\text{l} \quad 400\text{ ml} \end{array}$$

$$\begin{array}{r} \text{l} \quad \text{ml} \\ 200\text{ ml} \times 7 = 1\text{ } 400 \\ 48\text{l} \times 7 = 336 \\ \hline 337 \quad 400 \end{array}$$



Try these

Multiply the following

i) 7l 350ml by 2

ii) 55l 400ml by 5

iii) 35l 300ml by 6

iv) 8l 400ml by 7

v) 9l 500ml by 8

vi) 18l 200ml by 9

Division

Mrs. Lakshmi prepared 400 ml of fruit juice for her children. She shared the juice equally between the two. How much of juice did each one get?



Quantity of juice mother prepared = 400ml

Number of children = 2

Quantity of juice each one got = $400 \div 2$

= 200ml

$$\begin{array}{r} 200 \\ 2 \overline{)400} \\ - 400 \\ \hline 00 \\ 0 \\ \hline 0 \\ 0 \\ \hline 0 \end{array}$$

Therefore, each one got 200ml of juice.



Divide 4l 640ml by 4

$$\begin{array}{r} \text{l} \quad \text{ml} \\ 1 \quad 160 \\ 4 \overline{)4 \, 640} \\ - 4 \quad \downarrow \downarrow \downarrow \\ \hline 0 \, 6 \quad \downarrow \downarrow \downarrow \\ - 4 \quad \downarrow \downarrow \downarrow \\ \hline 24 \quad \downarrow \downarrow \downarrow \\ - 24 \quad \downarrow \downarrow \downarrow \\ \hline 000 \\ 0 \\ \hline 0 \end{array}$$

4l 640ml \div 4 = 1l 160ml

Divide 64l 320ml by 8

$$\begin{array}{r} \text{l} \quad \text{ml} \\ 8 \quad 040 \\ 8 \overline{)64 \, 320} \\ - 64 \quad \downarrow \downarrow \downarrow \\ \hline 0 \, 32 \quad \downarrow \downarrow \downarrow \\ - 32 \quad \downarrow \downarrow \downarrow \\ \hline 000 \\ 0 \\ \hline 0 \end{array}$$

64l 320ml \div 8 = 8l 040ml



Divide $74\text{ l } 440\text{ ml}$ by 8

$$\begin{array}{r} 9 \\ 8 \overline{)74} \\ \underline{72} \\ 2 \end{array}$$

Step1: Divide $74\text{ l} \div 8 = 9\text{ l}$, Remainder 2 litres.

We know that $1\text{ l} = 1000\text{ ml}$

Therefore $2\text{ l} = 2000\text{ ml}$

Step2: Add 2000 ml and 440 ml , now we get 2440 ml

Step3: Divide 2440 ml by 8.

Now we get 305 ml

Hence, the answer is $9\text{ l } 305\text{ ml}$

$$\begin{array}{r} 305 \\ 8 \overline{)2440} \\ \underline{-24} \\ 04 \\ \underline{0} \\ \underline{40} \\ \underline{-40} \\ \underline{00} \end{array}$$



Try these

Divide the following

- i) $36\text{ l } 480\text{ ml} \div 6$ ii) $21\text{ l } 420\text{ ml} \div 7$ iii) $40\text{ l } 720\text{ ml} \div 8$
iv) $81\text{ l } 540\text{ ml} \div 9$ v) $42\text{ l } 980\text{ ml} \div 14$ vi) $24\text{ l } 600\text{ ml} \div 12$



Practice Time

- (1) Deepthi poured 350 ml of juice in the first bottle and 750 ml of juice in the second bottle. How much of juice did she pour?
- (2) A petrol pump sold $15\text{ l } 500\text{ ml}$, $20\text{ l } 100\text{ ml}$ and $50\text{ l } 200\text{ ml}$ of petrol to three persons. Find the total quantity of petrol sold ?
- (3) A shop keeper sold $50\text{ l } 500\text{ ml}$ of sunflower oil and $35\text{ l } 500\text{ ml}$ of coconut oil. How many litres of oil did he sell?

- (4) Mr.David bought 20 l of paint. After painting his house he had 4 l of paint left.How much paint did he use?
- (5) An oil drum contains 60 l of oil in it. If $22\text{ l } 500\text{ ml}$ of oil is taken out of it, find how much is left?
- (6) Swetha purchased 500 ml of milk. She used 200 ml during the day. How much of milk is left over?
- (7) There are two water tanks on the terrace of a building.One tank can hold 90 l of water and the other one can hold 20 l of water. How much more water can the first tank hold than the second one?
- (8) If a jar fills 150 ml of water, find how much of water 4 such jars can fill?
- (9) One can can contain $3\text{ l } 500\text{ ml}$ of petrol. How much petrol can 8 cans contain?
- (10) The capacity of one flask is $1\text{ l } 500\text{ ml}$. What is the total capacity of 9 such flasks?
- (11) Geetha poured 500 ml of milk equally into 4 bottles. How much of milk does each bottle hold?
- (12) A barrel holds 24 l of water. If it is poured equally into 4 buckets, how much of water does each bucket hold?
- (13) A can contains $10\text{ l } 500\text{ ml}$ of kerosene.If it is poured equally into 5 bottles, how much of kerosene does each bottle hold?
- (14) Meera makes $7\text{ l } 200\text{ ml}$ of lime juice for her 6 friends. How much will each one get?

Activity



- (1) How many glasses of water do you drink after the various activities you do in a day? Express the quantity in *ml / l* and fillup the table.



Activities	Glasses of water	<i>ml / l</i>

- (2) Find out from your doctor the quantity of water you should drink everyday. Find out for yourself how much more or less water you have taken.

FunTime

Secret Numbers

Can you guess the secret number?

It is larger than half of 100

It is more than 7 tens and less than 8 tens

The tens digit is two more than the ones digit

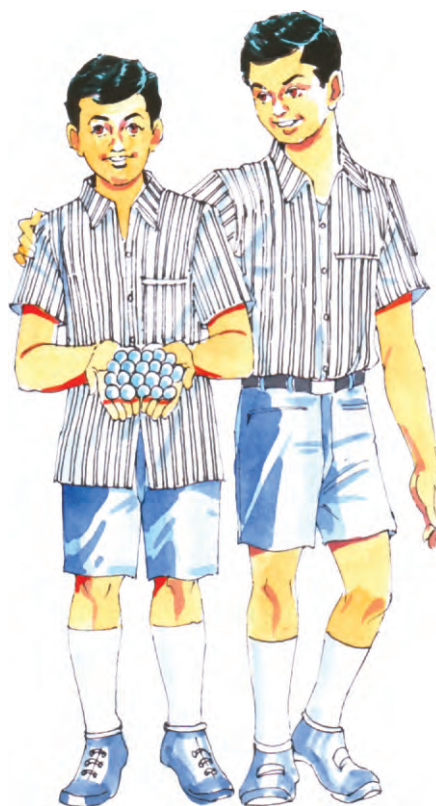
Together the digits have a sum of twelve.

What is the secret number? Find it out.

Write set of clues for a secret number of your own. Then give it to a friend to guess your secret number?

Volume

Ezhilan at the end of his play, came with a lot of marbles in his hand. His brother Akilan said, “Why do you have so many marbles in your hand”. He replied, “I was playing marble game with my friends.” Akilan asked his brother, “Let us make a simple **measuring glass** with these marbles and observe the procedure of making measuring glass.”

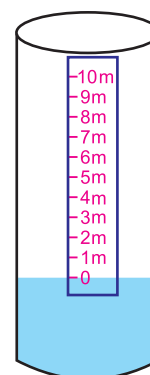


Akilan took a glass tumbler. He poured some water in the tumbler. Outside the glass tumbler, he stuck a white paper. He marked the initial water level as **0** in the white paper.

He took a few similar sized marbles. He dropped one marble inside the tumbler. The water level raised a little, and then he marked the water level as 1 marble (**1 m**). Similarly, he dropped the other marbles one by one and marked the respective water levels as **2m, 3m, 4m** and so on

Then he removed all the marbles from the tumbler. The water level came back approximately to **0** level.

Now, observe the simple **measuring glass** prepared by Ezhilan and Akilan.

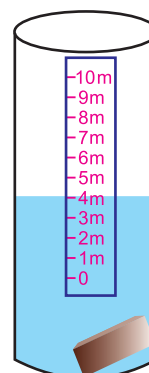
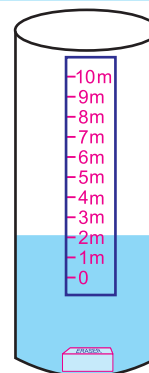


Using this measuring glass, we can measure the water level raised by the immersion of different objects which get completely immersed in water.

Ok. Let me drop an eraser in the glass. Akilan said, the water level immediately raised to approximately 2 m level.

Then he dropped an iron piece in the glass. Since the iron piece is bigger in size the water level raised upto approximately 4 m level

Ezhilan dropped various objects like lemon, onion, potato and coins in the measuring glass and noted down the water level accordingly.



Note

Before you drop each object in the measuring glass ensure that the water level should be at 0 level.

Group Activity



Prepare a measuring glass yourself, drop different objects into it and mark the water level

as given in the above guidelines.

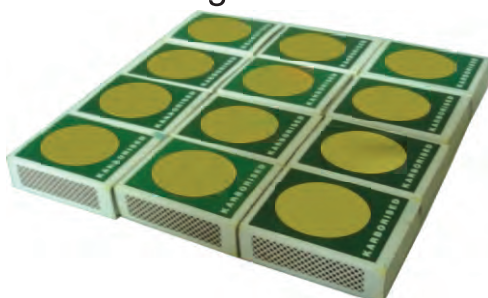
Fill up the given table.

Things	Water Level

Shall we arrange the match boxes

In the following each diagram pattern, count the number of match boxes and write in the given box.

1)



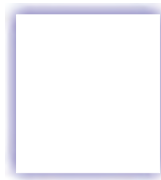
2)



3)



4)



5)



Group Activity

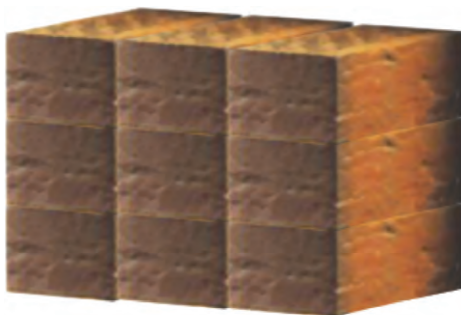


Make different patterns using empty match boxes and count them.

Arrangement of Bricks

Different arrangement patterns with bricks are given below. Find the number of bricks used and write in the given box.

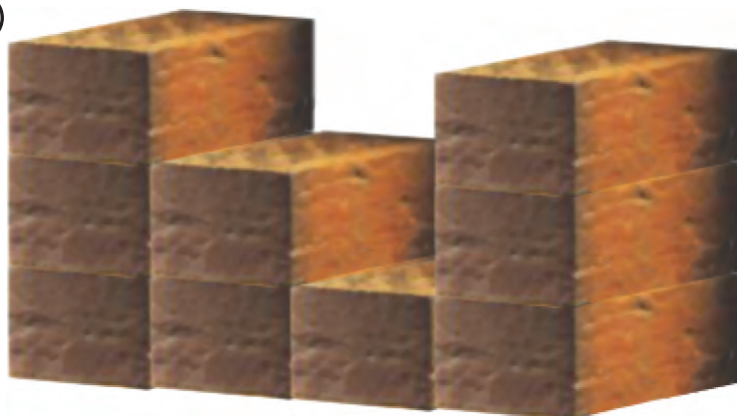
1)



2)



3)



Eventhough, they differ in pattern, their volume is same.

Group Activity

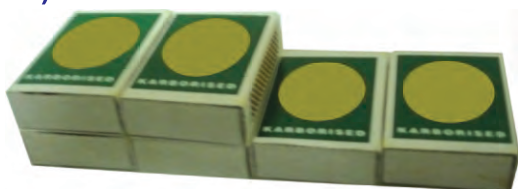


Arrange some more different patterns with 9 bricks.

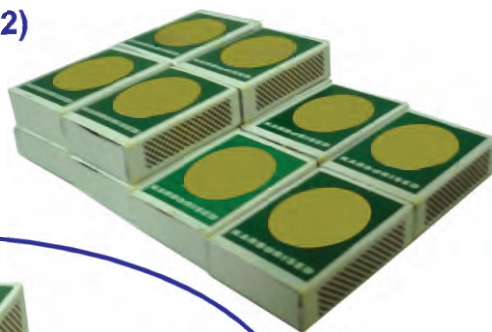
Forming Solid Shapes

Observe the patterns given below. Count the number of match boxes and write it. Also count the number of match boxes required to complete the solid shape. Then, count the total number of match boxes present in the full solid shape.

1)



2)



3)



4)



5)



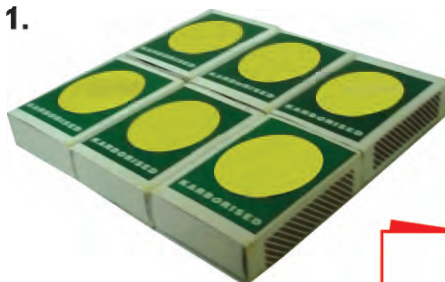
Sl. No.	Number of match boxes in the given picture	Number of match boxes needed to complete it	Total number of match boxes in the full solid shape
1.			
2.			
3.			
4.			
5.			



Practice Time

Find the number of match boxes in each figure by counting them and write it in the box given below.

1.



2.



3.



4.



5.



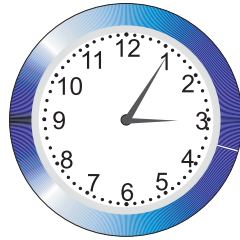


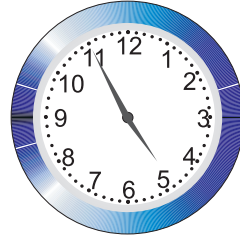
There is an another way to find the number of match boxes in each pattern without counting? Find it.

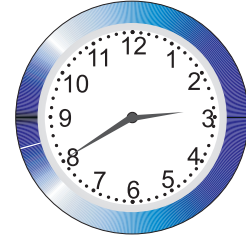
5

Time

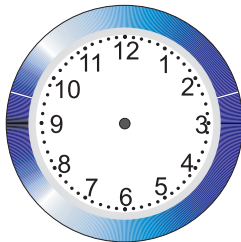
What time does each clock show?

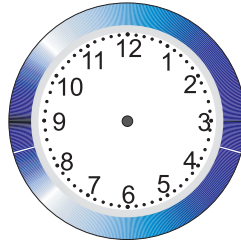


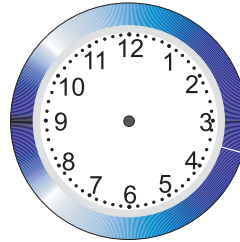




Draw the hands of the clocks for the time given below:









Anand travelled from Chennai to Kanniyakumari by bus. He noted that the time of departure and the time of arrival at various places. Observe the time schedule and answer the question given below.



Name of the Places	Time of arrival	Time of departure
Chennai	—	06:30 a.m
Tambaram	07:25 a.m	07:30 a.m
Tindivanam	09:45 a.m	09:55 a.m
Villupuram	11:05 a.m	11:15 a.m
Trichy	02:10 p.m	02:40 p.m
Madurai	04:55 p.m	05:05 p.m
Virudhunagar	05:55 p.m	06:00 p.m
Tirunelveli	08:10 p.m	08:20 pm
Kanniyakumari	09:35 p.m	—





Remember

60 Seconds = 1 minute

60 Minutes = 1 hour



How long did the bus stop at Tambaram?



Time of departure at Tambaram	=	7:30 a.m
Time of arrival at Tambaram	=	– 7:25 a.m
The duration of time, the bus stopped } at Tambaram }	=	<u>0:05 minutes</u>

Usually it is read as 5 minutes



Try these

What is the time taken to travel from Madurai to Virudunagar?



Time of arrival at Virudhunagar =
Time of departure from Madurai =
Time travelled =



Find the travelling time from Tindivanam to Villupuram.



Arrival time at Villupuram	=	11 05 a.m
Departure time from Tindivanam	=	– 09 55 a.m
Travelling time	=	_____

Note:

Hour	Minutes
(11 – 1) = 10	(60 + 5 = 65)
11	05
– 09	55
1	10
= 1hr 10 min	

When subtracting 55 min from 5 min, convert 1 hour into minutes and add with the 05 minute and then subtract

11 – 1 = 10 Hr
1 Hr = 60 Min.
05 + 60 = 65 Min.
65 – 55 = 10 Min.
Subtract the hours.
10 – 9 = 1 Hour

Travelling time from Tindivanam to Villupuram = 1 hr 10 min.



Try these

Find the travelling time from Chennai to Villupuram.

Chennai

Arrival time at Villupuram =

Departure time at Chennai =

Travelling time =

Villupuram



Practice Time

Using the travelling schedule, find the answers for the following:

- 1) Calculate the travelling time from **Madurai** to **Kanyakumari**.
- 2) How long did the bus stop at **Madurai**?
- 3) Find the travelling time from **Trichy** to **Tirunelveli**.



Villupuram

Tirunelveli

Find the travelling time from Villupuram to Tirunelveli.

Arrival time at Tirunelveli = 8 : 10 p.m

Departure time at Villupuram = 11 : 15 a.m

Travelling time =



To subtract a.m from p.m, 12 hours should be added to p.m.

Know this

	Hr	Min
Arrival time at Tirunelveli	(20-1) = 19	(10+60) = 70
(12 : 00 + 8 : 10 = 20 : 10)	20	: 10
Departure time at Villupuram	- 11	: 15
Travelling time	= 8	= 55

Hence, the travelling time from **Villupuram** to **Tirunelveli** is 8 hr 55 min.



Practice Time

Using the travelling schedule, find the answers for the following:

- 1) Find the travelling time from **Tindivanam** to **Madurai**.
- 2) Calculate the travelling time from **Chennai** to **Kanniyakumari**.
- 3) Find out the travelling time from **Villupuram** to **Virudhunagar**.



From Joseph's diary:

Joseph has noted his one day schedule in his diary. Find out the time duration for each of his activity.

Activity	From	To	Time Hr	Duration Min
In the morning				
Gets up	6 : 00 a.m			
Bathing	6 : 00 a.m	6 : 50 a.m		
Prayer	6 : 50 a.m	7 : 00 a.m		
Study time	7 : 00 a.m	8 : 30 a.m	1	30
Break fast	8 : 30 a.m	8 : 45 a.m		
Going to school	8 : 45 a.m	9 : 00 a.m		
At School				
Morning Prayer	9 : 20 a.m	9 : 30 a.m		
Forenoon school time	9 : 30 a.m	12 : 40 p.m	3	10
Lunch break	12 : 40 p.m	2 : 00 p.m	1	20
Afternoon school time	2 : 00 p.m	4 : 10 p.m	2	10
Evening prayer	4 : 10 p.m	4 : 20 p.m		
In the evening				
Playing games	4 : 30 p.m	6 : 00 p.m		
Home work	6 : 00 p.m	6 : 45 p.m	0	45
Study time	6 : 45 p.m	7 : 30 p.m	0	45
Watching T.V	7 : 30 p.m	8 : 15 p.m		
Dinner	8 : 15 p.m	8 : 30 p.m		
Goes to bed	8 : 30 p.m	—		



Find the forenoon and afternoon school time in school:

		Hr	Min
Forenoon school time	=	3	10
Afternoon school time	=	+ 2	10
Total school time	=	5	20

Forenoon and afternoon school time is 5 hrs and 20 min.



Find the time taken by Joseph to complete his home work and study at home?

		Hr	Min
Forenoon study time	=	1	30
Evening study time	=	0	45
Time taken to complete his home work	=	+ 0	45
Total time	=	3	00

Add the Minutes

$$45 + 45 + 30 = 120 \text{ min}$$

Convert the minutes into hour

$$120 \div 60 = 2 \text{ Hrs}$$

Add the hours

$$2 + 1 = 3 \text{ Hrs}$$

So, time taken to study and complete his home work at home is 3 hrs.



Try these

(From the Joseph's diary)

1. Get the total time taken for finishing breakfast and dinner.
2. Calculate the total time taken for prayer at home and at school.
3. Find the time taken for playing and watching T.V?



Practice Time

1. A person travelled 4 hrs 40 min by train, 1 hr 15 min by bus to reach his home town. How much of time did he spend in travelling?
2. An artist started his drawing at 6:30 a.m and finished at 11:50 a.m. How much of time did he spend on drawing?



3. A departmental store, stopped the sale of goods from 1:30 p.m to 4:00 p.m. How long were goods not sold at the store?
4. An overhead tank takes 2 hrs 50 min to get it completely filled up. It takes 3hrs 45 min to distribute water to all the houses. Find out the time required for the tank to fill up twice completely and distribute it to all the houses?
5. An exhibition in a school started at 10:30 a.m and ended at 3:00 p.m. Find the time duration of the exhibition.



Activity



Carefully, observe the time sequence shown by the watches in each row. Find the time for the last four watches in each row.

6

Money



Naveen opened his filled up savings box. He found the currency notes and coins. They were as follows.



Number of 10 Rupee notes	-	25
Number of 5 Rupee coins	-	40
Number of 1 Rupee coins	-	150
Number of 20 Rupee notes	-	10
Number of 100 Rupee notes	-	4
Number of 50 Rupee notes	-	8
Number of 2 Rupee coins	-	45



Activity

Shall we count the total value of his savings?



Value of 100 Rupee Notes	100×4	₹ 400
Value of 50 Rupee Notes		
Value of 20 Rupee Notes		
Value of 10 Rupee Notes		
Value of 5 Rupee coins		
Value of 2 Rupee Coins	2×45	90
Value of 1 Rupee Coins		
Total		

Total value is

Activity



He distributed ₹ 550 to his sister Radha.

(i) Find out 3 possible denominations of arriving at ₹ 550.

One example is given to you

Number of denominations					Amount
₹ 50	x	5	=		₹ 250.00
₹ 10	x	20	=		₹ 200.00
₹ 2	x	30	=		₹ 60.00
₹ 1	x	40	=		₹ 40.00
Total =					₹ <u>550.00</u>



(ii) How much money is left with him?

Remember

₹ 1 = 100 paise

Addition



Find the total amount of ₹ 37.50, ₹ 473.75, ₹ 6,076.50 and ₹ 9.50.

	1 2 2
₹ 37.50	
₹ 473.75	
₹ 6,076.50	
₹ 9.50	
₹ 6,597.25	

Add the paise

$$50 + 50 + 75 + 50 = 225 \text{ paise}$$

Convert the paise into ₹

$$225 \div 100 = ₹ 2 \text{ and } 25 \text{ paise}$$

Add the ₹

$$9 + 6076 + 473 + 37 + 2 = ₹ 6,597$$



Try these

- Answer the following:
 - ₹ 645.75 + ₹ 760.50 + ₹ 135.50
 - ₹ 4375.50 + ₹ 8436.50 + ₹ 9647.75
- Find the total amount.
 - ₹ 8000.50, ₹ 6366.50 and ₹ 2322.50
 - ₹ 9600.50, ₹ 35.50 and ₹ 205.50



In a shop, the sale value of three consecutive days are ₹ 436.75, ₹ 278.75 and ₹ 678.75 respectively. What is the total sale value?

Sale value of first day	=	₹ 436.75
Sale value of second day	=	₹ 278.75
Sale value of third day	=	₹ 678.75
Total value	=	₹ 1,394.25

122 1

Add the Paise

$$75 + 75 + 75 = 225 \text{ P}$$

Convert into ₹

$$225 \div 100 = ₹ 2 \text{ and } 25 \text{ P}$$

Add the ₹

$$678 + 278 + 436 + 2$$

$$= ₹ 1,394$$

The total value of sales for 3 days is ₹ 1,394.25



Note

To teacher: Similarly, more statement sums can be assigned to students for practice.

Subtraction



Subtract ₹ 739.75 from ₹ 5,269.50

$$\begin{array}{r}
 18 \quad 14 \\
 4 \quad 125 \quad 8 \quad 4 \quad 10 \\
 \hline
 ₹ \quad 5 \quad 2 \quad 6 \quad 9 \quad . \quad 5 \quad 0 \\
 ₹ \quad 7 \quad 3 \quad 9 \quad . \quad 7 \quad 5 \\
 \hline
 ₹ \quad 4 \quad 5 \quad 2 \quad 9 \quad . \quad 7 \quad 5
 \end{array}$$

When we subtract 75 paise from 50 paise convert ₹ 1 into paise add with 50 paise and then subtract.

$$5269 - 1 = ₹ 5268$$

$$₹ 1 = 100 \text{ paise}$$

$$100 + 50 = 150 \text{ paise}$$

$$150 - 75 = 75 \text{ paise}$$

Subtract the ₹

$$5268 - 739 = ₹ 4529$$



Try these

(1) Find the answer:

i) ₹ 684.75 – ₹ 294.50

ii) ₹ 188.00 – ₹ 88.00

iii) ₹ 6,846.50 – ₹ 436.75

(2) Subtract ₹ 1984.75 from ₹ 2144.50

(3) Find the difference between ₹ 12.75 and ₹ 6888.50



A person had ₹ 6435 and he spent ₹ 745.50.
How many rupees does he have now?

			5	13	12	14	100
Amount had	=	₹	6	4	3	5	00
Amount spent	=	₹		7	4	5	. 50
Balance	=	₹	5	6	8	9	. 50

The Balance Amount is ₹ 5689.50



Note

To teacher: Similarly, more statement sums can be assigned to students for practice.

When we subtract 50 paise from 00 paise, convert ₹ 1 into paise, add with 00 paise and then subtract.

$$6435 - 1 = ₹ 6434$$

$$₹ 1 = 100 \text{ paise}$$

$$100 + 0 = 100 \text{ paise}$$

$$100 - 50 = 50 \text{ paise}$$

Subtract the ₹

$$6434 - 745 = ₹ 5689$$

Multiplication



Find the answer ₹ 543.75 × 15.

₹	543.75 × 15
₹	8156.25

Multiply the paise

$$75 \times 15 = 1125 \text{ paise}$$

75 × 15
375
75
1125

Convert the paise

$$\text{Into ₹ } 1125 \div 100$$

$$= ₹ 11 \text{ 25 P}$$

11
100) 1125
100
125
100
25



Try these

Find the answer

i) ₹ 355.50 × 7

ii) ₹ 960.75 × 8

iii) ₹ 66.75 × 9

iv) ₹ 212.50 × 11

v) ₹ 243.50 × 12

Multiply the ₹

$$543 \times 15 = ₹ 8145$$

Add the rupees

$$8145 + 11 = ₹ 8156$$

543 × 15
2715
543
8145



The cost of 1 pen is ₹ 15.50.
Find the cost of 7 such pens?

$$\begin{array}{rcl} \text{Cost of 1 pen} & = & ₹ \quad 15 . 50 \\ \text{Cost of 7 pens} & = & ₹ \quad 15 . 50 \times 7 \\ \hline \text{Total cost} & = & ₹ \quad 108 . 50 \end{array}$$

The cost of 7 pens is ₹ 108.50



Note

To teacher: Similarly, more statement sums can be assigned to students for practice.



Multiply the paise

$$50 \times 7 = 350 \text{ P}$$

Convert into Rupees

$$350 \div 100 = ₹ 3.50$$

Multiply the Rupees

$$15 \times 7 = ₹ 105$$

Add the Rupees with the Rupees

$$3 + 105 = ₹ 108$$

Division



Find the answer ₹ 6834.00 ÷ 12.

$$₹ 6834.00 \div 12 = ₹ 569.50$$

Divide the ₹

$$6834 \div 12 = ₹ 569$$

$$\begin{array}{r} 569 \\ 12 \overline{) 6834} \\ \underline{60} \\ 83 \\ \underline{72} \\ 114 \\ \underline{108} \\ 6 \end{array}$$



Try these

Find the answer

i) ₹ 787.50 ÷ 5

ii) ₹ 24.00 ÷ 6

iii) ₹ 7286.00 ÷ 8

iv) ₹ 6529.50 ÷ 9

v) ₹ 4375.50 ÷ 25

Convert the remainder
₹ 6 into paise and add
with 00 paise

$$6 \times 100 = 600 \text{ paise}$$

$$600 + 00 = 600 \text{ paise}$$

Divide the paise

$$600 \div 12 = 50 \text{ paise}$$

$$\begin{array}{r} 50 \\ 12 \overline{) 600} \\ \underline{60} \\ 00 \\ \underline{0} \\ 0 \end{array}$$



An institution equally distributed ₹ 26,000 to 40 persons.
How much money does each person get?

Amount distributed to 40 persons = ₹ 26000




Amount distributed to 1 person = ₹ 26000 ÷ 40

Amount paid to each person = ₹ 650

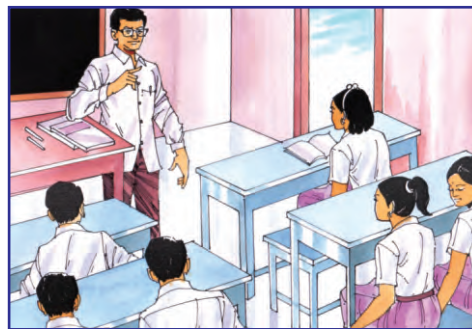
$$\begin{array}{r} 650 \\ 40 \overline{) 26000} \\ \underline{240} \\ 200 \\ \underline{200} \\ 00 \\ \underline{00} \\ 0 \\ \underline{0} \end{array}$$



Practice Time

- (1) A man bought a bureau for ₹ 6750, a table for ₹ 4550 and a chair for ₹ 950 for his house. What is the total value of the things he bought?
- (2) The price of 5 books are ₹ 35.00, ₹ 75.50, ₹ 275.00, ₹ 52.00 and ₹ 9.50 respectively. Find the total price of the books. 
- (3) In a bus, the collection made for 3 days are ₹ 4775.50, ₹ 5350.50 and ₹ 4785.50 respectively. Find the total collection for 3 days?
- (4) A person bought a Television set worth of ₹ 25,000. He paid ₹ 12,375. Find the balance amount he has to pay. 
- (5) Sundar's bank balance is ₹ 76,350. How much more rupees he has to deposit in his account to reach the target of ₹ 80,000
- (6) Bhoopathi's monthly salary is ₹ 25,000. He saved ₹ 6435. How much money has been spent?
- (7) The cost of 1 metre cloth is ₹ 365. What will be the cost of 15 metres of cloth? 
- (8) The cost of 1 kg tomato is ₹ 15.50. Find the cost of 13kg tomatoes?
- (9) The cost of 1 rice bag is ₹ 1,750. Find the cost of 24 such rice bags?
- (10) The cost of 8 kg of sweets is ₹ 1,200. What will be the cost of 1 kg sweets?
- (11) A person found that ₹ 30,600 in his R.D.passbook after one year. What is his monthly contribution towards the R.D.?

Educational Tour



H.M. : Dear students, we have planned to go on an educational trip next week .

Students : How many students can participate sir? How much money we need to pay?

H.M. : Each one should pay ₹ 175 and only 55 students can participate.

If each student pays ₹ 175, how much money can be collected from 55 students?

Money collected from 1 student	= ₹ 175
Money collected from 55 students	= ₹ 175×55
Total	= ₹ <input type="text"/>

Students successfully completed their educational tour.

H.M. : Dear students, was the trip useful to you?

Students : Yes Sir.

H.M. : Do you know the total expenditure of the trip?

Students : We are eagerly waiting to know about the expenditure sir?

H.M. : We spent ₹ 4925 towards hiring the bus, ₹ 2250 for food and ₹ 1350 for other expenses. Can you calculate the total expenditure?

Bus fare	= ₹ 4925
Food	= ₹ 2250
Other expense	= ₹ 1350
Total expenditure	= ₹ <input type="text"/>



H.M. : Can you calculate the balance money?

Money collected = ₹

Money spent = ₹

Money left = ₹

Students : What shall we do with the balance money sir?

H.M. : I am going to distribute the remaining money to all the 55 students. Can you guess how much money will each one get?

Balance money = ₹

Amount to be given to each student = ₹ ÷ 55

Each one gets = ₹



Note

In this incident, we have used all the four fundamental operations such as addition, subtraction, multiplication and division.

You can also think of such incidents and create problems.



Practice Time

- (1) Praveen earns ₹ 16,500 per month. He spent ₹ 1,750 for rent, ₹ 500 for entertainment and ₹ 2,300 for children's education and spent the remaining money for food and savings. How much money did he spend for food and savings?
- (2) A person bought a Computer for ₹ 24,500, refrigerator for ₹ 12,750, and a washing machine for ₹ 12,525 in a shop. He gave ₹ 50,000 to the shop keeper. How much money he can get back from the shop keeper?
- (3) Shankar bought 6 apples each costing ₹ 12 and 12 oranges each costing ₹ 3.50. He gave ₹ 200 to the fruits-seller. How much amount will he get back?
- (4) Arul saves ₹ 3,540 every month in a bank for one year. At the end of the year, he distribute the sum equally to his three daughters. How much will each daughter get?



Activity



Five friends went to a textile shop. Each person had ₹ 1,000. Each one wanted to buy any three things mentioned below for ₹ 1,000. Guess the things bought by them and fill up the blanks.

The image displays various clothing items with their respective prices:

- Saree**: ₹ 820
- Pant**: ₹ 400
- Chudithar**: ₹ 500
- Shirt**: ₹ 320
- Trouser**: ₹ 180
- T. Shirt**: ₹ 80
- Towel**: ₹ 100
- Bedsheet**: ₹ 600
- Dhoti**: ₹ 420

In the center, there is a green pentagon with the text "₹ 1,000". Surrounding it are several colored wedges, each containing a list of items that can be bought for ₹ 1,000:

- Orange wedge**: T. Shirt ₹ 80, Towel ₹ 100, Saree ₹ 820
- Purple wedge**: (Empty)
- Pink wedge**: (Empty)
- Light blue wedge**: (Empty)
- Yellow wedge**: (Empty)

Work Sheet

Answer the following.

- (1) Kavitha made 10 l 500 ml of juice for her 10 friends, then each friend gets _____.
 i) 1 l 500 ml ii) 1 l 50 ml
 iii) 105 l iv) 1000 l
- (2) Rama went to bed at 10 p.m. And she woke up 6.30 a.m. She slept for _____ hours.
 i) $6\frac{1}{2}$ hrs. ii) $4\frac{1}{2}$ hrs. iii) $5\frac{1}{2}$ hrs. iv) $8\frac{1}{2}$ hrs.
- (3) A train starts at 3 p.m. And reaches Kanniyakumari the next day at 9 a.m. The time taken by the train will be _____.
 i) 6 hrs. ii) 9 hrs.
 iii) 12 hrs. iv) 18 hrs.
- (4) The correct time for 75 minutes after 3 p.m. is _____.
 i) 3 : 45 p.m. ii) 3 : 75 p.m.
 iii) 4 : 15 p.m. iv) 4 : 75 p.m.
- (5) A four hour film ends at 5 : 15 p.m. The film started at _____.
 i) 9 : 15 p.m. ii) 1 : 15 p.m.
 iii) 9 : 15 a.m. iv) 1 : 15 a.m.
- (6) Sekar spent ₹ 15.00 for four note books and ₹ 3.50 for two pencils. The total amount spent by Sekar is _____.
 i) ₹ 67.00 ii) ₹ 18.50 iii) ₹ 37.00 iv) ₹ 60.00
- (7) From the figure, the number of match boxes are _____.
 i) 8 ii) 5
 iii) 4 iv) 7



‘I can, I did’ Student’s Activity Record

Subject :

S.No	Date	Lesson No.	Topic of the Lesson	Activities	Remarks