

**Let's pave the way for learning and
Move Forward**

**Standard - 5
Mathematics**



**State Council of Educational Research and Training (SCERT), Kerala
2022**

Dear students,

The evaluation of the answer scripts of the First Terminal Examination 2022 and the classroom experiences shared by the teachers concerned, have brought to light the fact that our children have suffered some serious learning gap due to the non-availability of proper learning experiences as a result of the unprecedented situation created by the Covid Pandemic from 2019 to 2022. An activity book has been designed to assist children internalize the concepts which they ought to have mastered in the previous classes and with the intention to facilitate further learning. Necessary explanations and activities are included in the booklet to help children bridge the gap. It is hoped that this package will facilitate the learners for self-study or for studying with the help of their teachers and I wish them success in their endeavors to move forward with confidence.

Director
SCERT, Kerala

1. Number World - 1

Let's make three digit numbers:

- See the tokens : ① ② ③

We want to make three digit numbers using them.

① ② ③

① ③ ②

② ① ③

② ③ ①

③ ② ①

③ ① ②

① ② ③ - This number is one hundred twenty three.

① ③ ② - One hundred thirty two

Let's write the following numbers. How can we read them?

① ② ③ - One hundred twenty three

① ③ ② - One hundred thirty two

② ① ③ -

② ③ ①

③ ② ①

③ ① ②

Number world - 2

- Let's use the tokens : ① ② ③

① ② ③ is 12

Let's write the numbers, which are not starting with zero.

① ② ③

① ② ③

③ ② ①

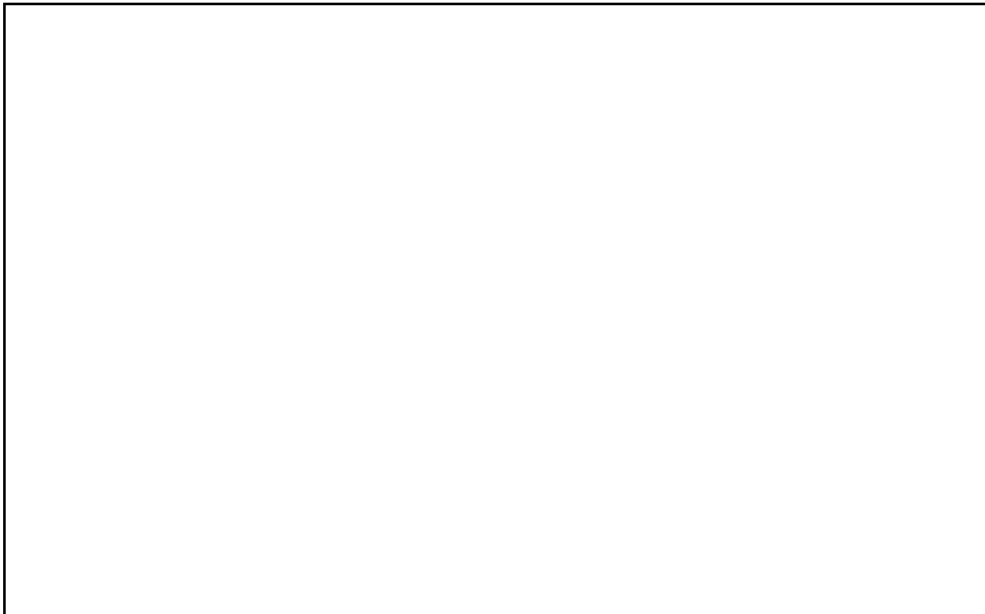
③ ① ③

How can we read them?

① ② ③ - One hundred two

① ③ ③ - One hundred twenty

Write some more numbers. How can we read them?



Number world - 3

Write all the possible three digit numbers using the tokens ③ ⑤ ⑧ . How can we read them?

③ ⑤ ⑧ - Three hundred fifty eight.
③ ⑧ ⑤ -

Number world - 4

The greatest number made by the digits ② ⑤ and ⑨ is : ⑨ ⑤ ②

Tokens are arranged from greater to smaller. The smallest number formed by these tokens is :

② ⑤ ⑨

Tokens are arranged from smaller to greater.

Like this, form the greatest number and the smallest number in each case.

Token	Greatest number	Smallest number
⑥ ③ ⑨		
② ⑤ ③		
⑥ ② ④		
② ⑥ ⑧		
⑤ ③ ①		

What about the tokens ⑤ ① and ② .

Is it possible to place the token ① first?

Smallest number - 205

Greatest number - 520

Like this, write the greatest number and the smallest number in each case.

Token	Greatest number	Smallest number
① ⑤ ③		
④ ① ⑦		
⑤ ⑦ ①		
⑥ ① ④		

Number world - 5

KL-24	Registration number of a new school bus is
V-0045	KL Twenty Four V Zero Zero Four Five

Registration number of a vehicle must contain four digits. So we include 2 zeros in the beginning. But read this as forty five, that's enough

What about the registration number of this scooter?

KL-82	It is sixty seven, thirteen.
6713	

It is for our convenience. But actually it is six thousand seven hundred thirteen.

We will read four digit numbers starting from thousands

Number world - 6

Write the registration number of vehicles in your family or your neighbours in the boxes given below. How we will read it? Write them.

KL - 32 4050

KL Thirty two, Four thousand Fifty.

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Number world - 7

10000 - 10 Thousands make ten thousand

How many one - rupee coins are needed to make 10000 rupees.

What about 10 rupees notes?

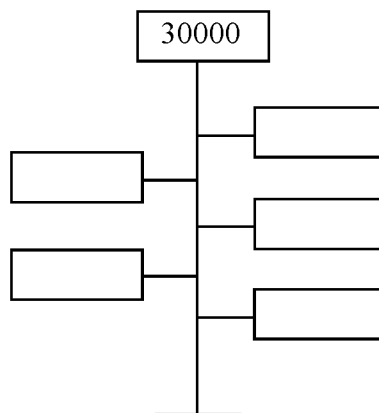
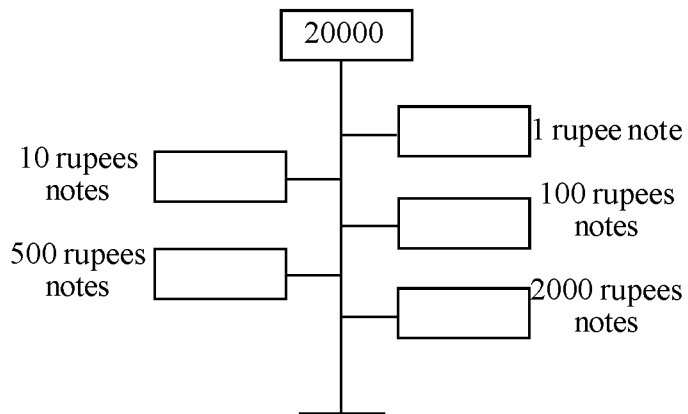
Thousand 10 rupees notes make 10000

What about 100 rupees notes?

Hundred of 100 rupees notes makes 10000.

How many 500 rupees notes are needed to make 10000 rupees.

What about 2000 - rupees notes?



Number world - 8

How can we interpret this number?

Ones, right?

Like these:

tens and ones

hundreds and ones

thousands and ones

ten thousands and ones

Splitting more than two parts:

hundreds tens ones

thousands tens ones

thousands hundreds ones

ten thousands hundreds ones

ten thousands thousands ones

Like this write 62547 in different ways:

Number world - 9

Let's arrange in order

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

See the numbers in the table. We want to arrange in ascending order.

Let's first arrange the numbers with lesser number of digits. There are two numbers having four digits. So, we can write 2347, 6346 in ascending order.

Now, we can check the numbers with 5 digits. 36285 and 36574. There are two numbers having 3 in leftmost side. Then consider the next digit in the numbers. They are same in both the numbers, right? Then see the next digit. 2 is in one number and 5 is in the other. So the number having 2 is smaller.

36285, 36574 in ascending order.

56470 and 56440 are numbers with the left most digit is 5.

So,

5 - 5 equal

6 - 6 equal

4 - 4 equal

7 - 4 7 is greater

In 85463, the left most digit is greater.

So we can write them in the ascending order as

2 3 4 7

6 3 4 6

3 6 2 8 5

3 6 5 7 4

5 6 4 4 0

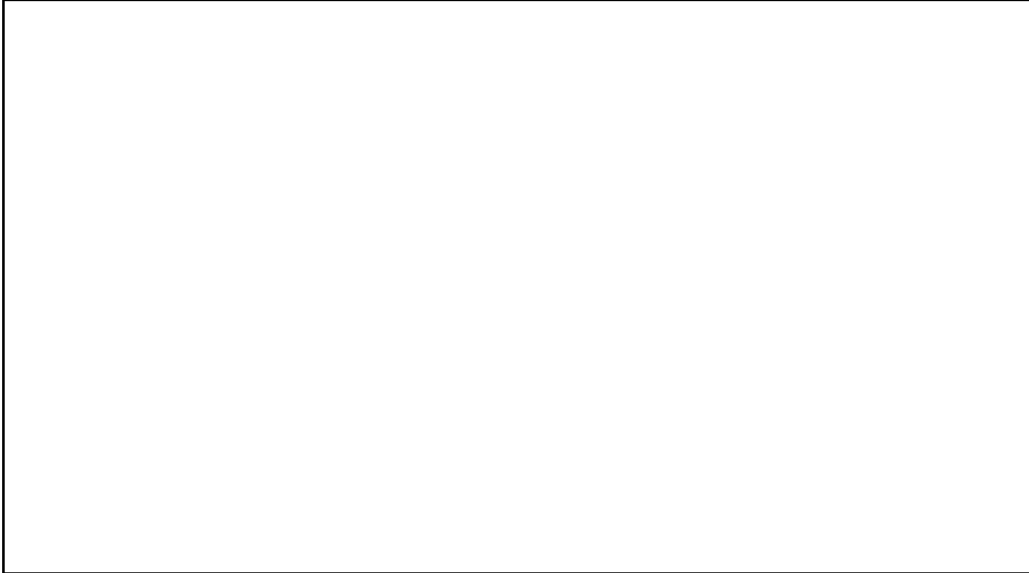
5 6 4 7 0

8 5 4 6 3

For arranging the numbers in the descending order, write them in the reverse order.

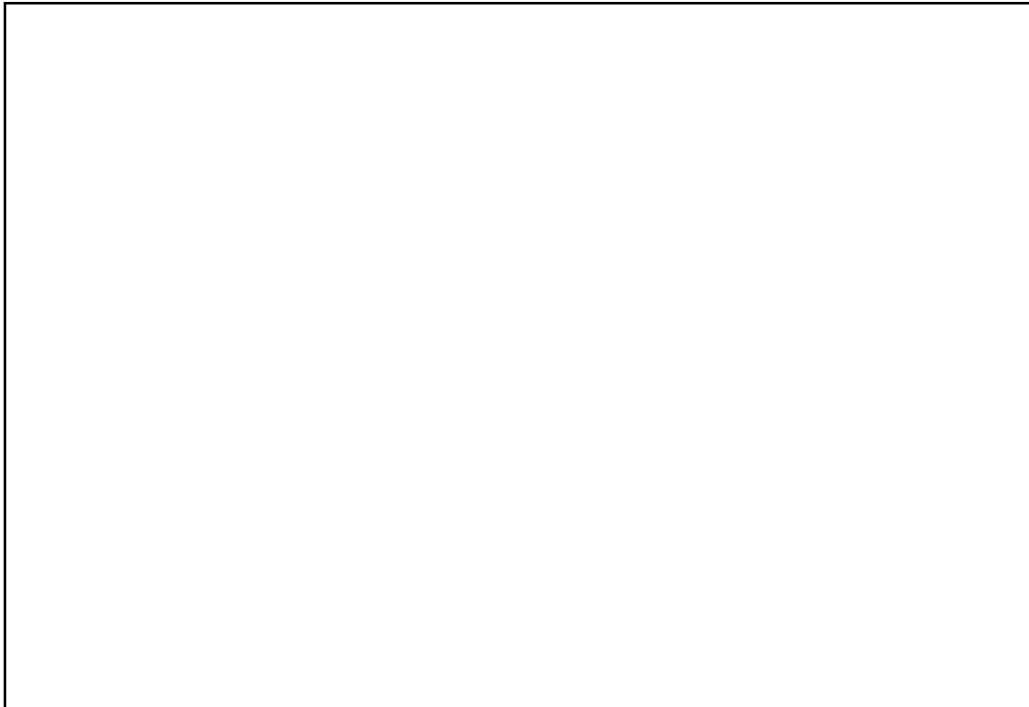
- Arrange the numbers given below in the ascending order.

5050, 55055, 50550, 505, 5500, 55500



- Arrange the numbers given below in the descending order.

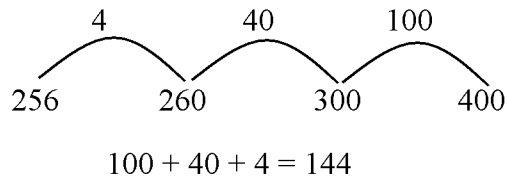
80516, 79819, 81310, 79999, 80917, 81518, 80500, 81018



Number world - 10

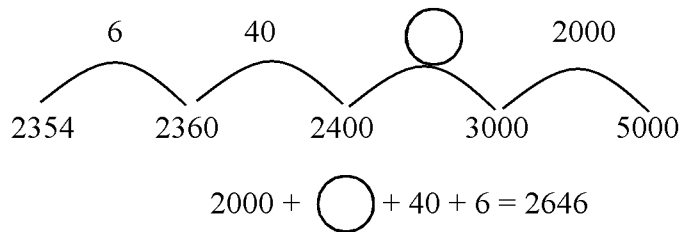
Subtraction by jumping

What should be added to 256 to make 400?



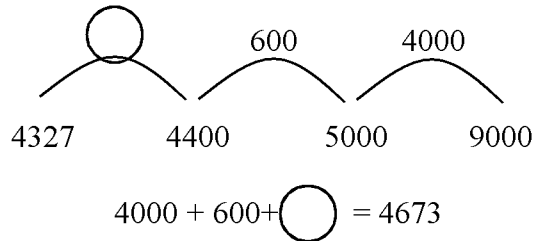
What should be added to 2354 to get 5000?

What is the missing number in the circle?

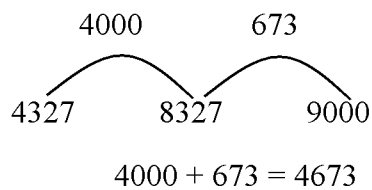
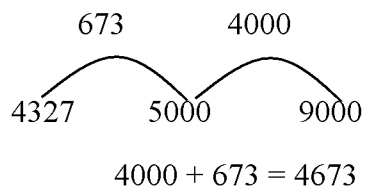


What should be added to 4327 to make 9000?

Now we can reduce the number of jumps?



Reducing the number of jumps again and again



Compute the following by drawing convenient number jumps:

1. What should be added to 4632 to get 7000?
2. What should be added to 5346 to get 8000?
3. What should be added to 3040 to get 6000?

Another way

What should be added to 2356 to get 5000?

For this we want to subtract 2356 from 5000, right?

$$\begin{array}{r} 5000 - \\ 2356 \\ \hline \end{array}$$

Reduce one from each number and then subtract like this:

$$\begin{array}{r} 4999 - \\ 2355 \\ \hline 2644 \end{array}$$

6000 - 1345

We can change them and compute like this:

$$\begin{array}{r} 5999 - \\ 1344 \\ \hline \end{array}$$

Now it is easy to subtract, right?

Compute the following by changing the numbers conveniently..

- 4000 - 3246 = 3999-3245 =
- 5000 - 2134
- 6000 - 3333
- 9000 - 5041
- 7000 - 4386
- 3000 - 2919
- 8000 - 6347

Number world - 11

Multiplication

$$4 \times 5 = 20$$

$$2 \times 10 = 20$$

$$6 \times 5 = 30$$

$$3 \times 10 = 30$$

$$8 \times 5 = 40$$

$$4 \times 10 = 40$$

What is the peculiarity of the product of numbers in each box?

What is the change of numbers in the second row?

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Using this property, compute the following:

$12 \times 10 =$	$24 \times 5 =$
$14 \times 10 =$	$28 \times 5 =$
$16 \times 10 =$	$32 \times 5 =$
$18 \times 10 =$	$36 \times 5 =$

$$32 \times 50 = 16 \times 100 = 1600$$

$$44 \times 50 = 22 \times 100 = 1100$$

$$50 \times 50 = 25 \times 100 = 2500$$

So, for finding the product, we changed both the numbers.

Like this compute the following:

$36 \times 50 =$
$64 \times 50 =$
$72 \times 50 =$
$88 \times 50 =$
$90 \times 50 =$

Similarly, find the product 17×50

$$16 \times 50 = 800$$

So, to get the answer add 50 to 800, right?

$$17 \times 50 = 800 + 50 = 850$$

- To find 23×50 , first compute 22×50 and then add 50.

$$23 \times 50 = (22 \times 50) + 50$$

$$= 1100 + 50 = 1150$$

- Like this, compute the following:

$27 \times 50 =$
$31 \times 50 =$
$43 \times 50 =$
$47 \times 50 =$
$55 \times 50 =$

$$12 \times 18 = 216$$

- We see that the product of half of a number with twice of another number will not change the answer.

If we take the half of one of the numbers, then the product is like this:

$12 \times 18 = 216$	$8 \times 6 = 48$	$16 \times 14 = 224$	$24 \times 12 = 288$
$6 \times 18 = 108$	$8 \times 3 = 24$	$8 \times 14 = \dots\dots$	$12 \times 12 = \dots\dots$
$12 \times 9 = 108$	$4 \times 6 = 24$	$16 \times 7 = \dots\dots$	$24 \times 6 = \dots\dots$

What is the change in the product of two numbers, if one of the number is halved?

Using this property, compute the following:

$24 \times 18 = 432$
$24 \times 9 =$ <input style="width: 50px;" type="text"/>
$12 \times 18 =$ <input style="width: 50px;" type="text"/>

$18 \times 16 = 288$
$9 \times 16 =$ <input style="width: 50px;" type="text"/>
$18 \times 8 =$ <input style="width: 50px;" type="text"/>

Mathematics

- Compute the following, by doubling one of the numbers:

$8 \times 6 = 48$

$12 \times 18 = 216$

$16 \times 6 = 96$

$24 \times 18 = 432$

$8 \times 12 = 96$

$12 \times 36 = 432$

What is the change in the product of two numbers, if one is doubled?

Using this property, compute the following:

$14 \times 16 = 224$

$12 \times 18 = 216$

$28 \times 16 = \boxed{}$

$24 \times 18 = \boxed{}$

$14 \times 32 = \boxed{}$

$12 \times 36 = \boxed{}$

If $14 \times 16 = 224$, then compute 28×32 without doing actual multiplication.

$28 \times 32 = \boxed{}$

If $26 \times 18 = 468$

- $13 \times 18 = \boxed{}$

- $52 \times 9 = \boxed{}$

- $26 \times 9 = \boxed{}$

- $52 \times 18 = \boxed{}$

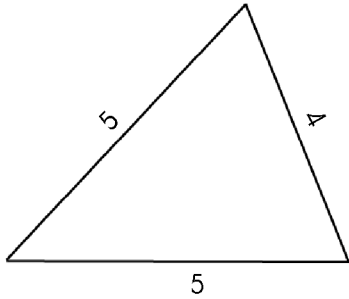
- $13 \times 36 = \boxed{}$

- $26 \times 36 = \boxed{}$

2. When Lines Join

Observe the figures given below:

i)



Name :

Properties :

.....

.....

Perimeter : centimetres

ii)



Name :

Properties :

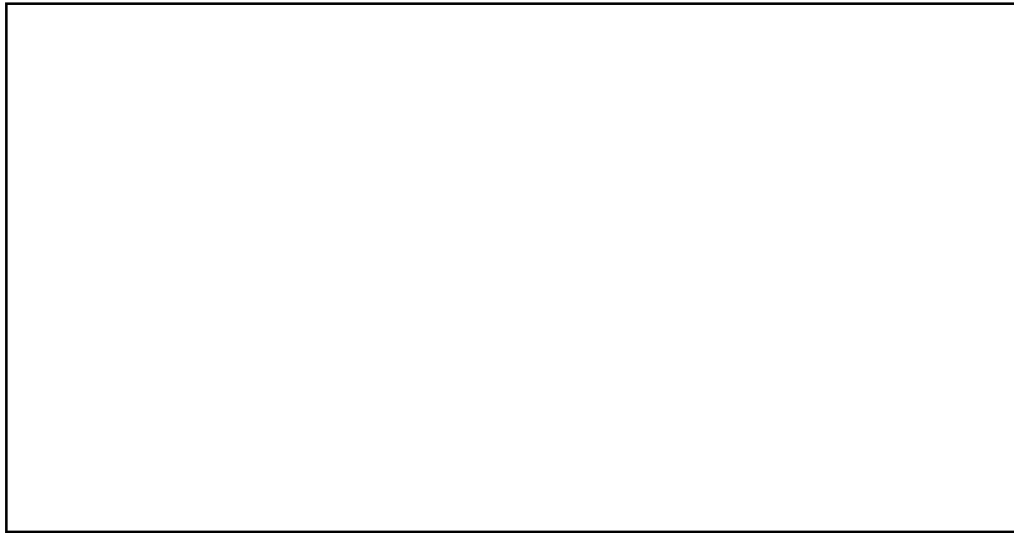
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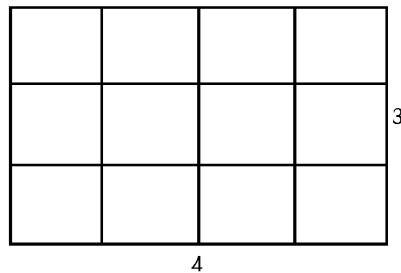
Perimeter : centimetres

3. Equal Sharing

1. Raju's father planted 15 plantain trees. He divided them equally to Raju, brother and sister. How many plantain trees will each get?



2. Colour the following figure using four different colours. Each pattern should be of same size and shape.

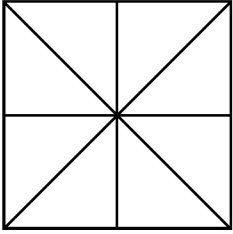


3. Compute:

1. $35 \div 7 =$
2. $150 \div 5 =$
3. $270 \div 9 =$
4. $366 \div 6 =$
5. $648 \div 8 =$

5. Part Number

1. If one kilogram chilly powder is divided equally into two packets, then the weight of each packet is :

2.  Give two different colours to this figure. Give same colour to the alternative triangles.

1. Total number of triangles is:

2. Number of triangles with the same colour is :

3. If one metre long strip is divided into four equal parts, then the length of one part is :

4. A bottle contains $\frac{3}{4}$ litre coconut oil. How many such bottles of oil are needed to make 3 litres?

5. Shiby needs $\frac{3}{4}$ kilogram sugar. How many $\frac{1}{4}$ kilogram packets should he take?

6. In a shop, chilly powder is available in $\frac{1}{4}$ kg, $\frac{1}{2}$ kg and $\frac{3}{4}$ kg packets. How many packets of each should be taken to make one-kilogram?

i. _____

ii. _____

iii. _____

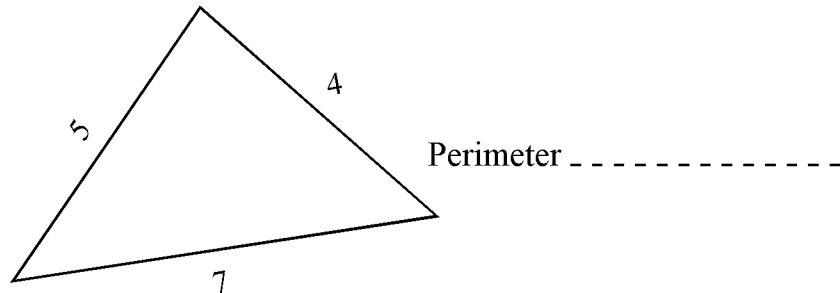
6. Area

1. Observe the figure and answer the following? Measures in centimetres.



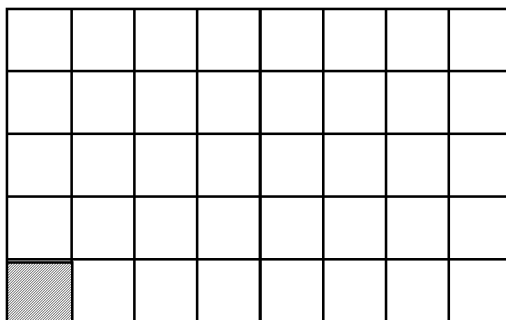
- i. Length of the rectangle = _____
- ii. Breadth of the rectangle = _____
- iii. Perimeter of the rectangle = _____

2. Find the perimeter of the triangle:



Area - 2

Observe the figure and answer the following questions:



- i. Number of small squares in a row = _____
- ii. Number of small squares in a column = _____
- iii. Total number of small squares in the figure = _____

Explain the method for finding the answer to question 3 :

7. Inside Numbers

1. In each of the following number patterns, three numbers are given. Write three more numbers.

- i. 2, 4, 6, _____, _____, _____
- ii. 5, 10, 15, _____, _____, _____
- iii. 4, 8, 12, _____, _____, _____
- iv. 3, 6, 9, _____, _____, _____
- v. 60, 50, 40, _____, _____, _____
- vi. 2, 4, 8, _____, _____, _____
- vii. 3, 6, 12, _____, _____, _____
- viii. 5, 15, 45, _____, _____, _____

2. Complete the following:

i.

$2 \times 9 = \underline{\quad}$
$3 \times 6 = \underline{\quad}$
$1 \times 18 = \underline{\quad}$

ii.

$5 \times 6 = \underline{\quad}$
$2 \times \underline{\quad} = 30$
$\underline{\quad} \times 30 = 30$
$3 \times \underline{\quad} = 30$
$2 \times \underline{\quad} \times 5 = 30$

iii. Write the following numbers as a product of two numbers. Then, write one of the numbers obtained as a product of two numbers. Continue the process.

Example: $60 = 10 \times 6 = \underbrace{2 \times 5}_{10} \times 6 = 2 \times 5 \times \underbrace{2 \times 3}_6$

50 = -----

20 = -----

30 = -----

8. Joining Parts

1. Let's divide a circle

Draw a circle and divide it into four equal parts. Give red colour to one part and yellow colour to another part.

- i. What part of the circle is coloured red?
- ii. What part of the circle is coloured yellow?
- iii. What part of the circle is without any colour?

2. Draw a circle and divide into 6 equal parts. Give green colour to two parts and yellow to another two parts. Remain the other parts uncoloured:

- i. What part of the circle is coloured yellow?
- ii. What part of the circle is coloured green?
- iii. What part of the circle is not coloured?
- iv. What part of the circle is coloured yellow and green?

Joining parts 2

Draw a square of side 4 centimeters and divide it into smaller squares of side as shown 1 centimetre in the figure. Give four different colours to different numbers in the boxes. (1 - red, 2 - yellow, 3 - green, 4 - white)

- i. What part of the total is coloured white?
- ii. What part of the total is coloured red?
- iii. What part of the total is coloured yellow?
- iv. What part of the total is coloured green?
- v. What part of the total is coloured green and yellow?
- vi. What part of the total is coloured red and yellow?
- vii. What part of the total is coloured red and green?

1	2	3	4
2	3	4	3
3	4	3	2
4	3	2	2

9. Let's Read Pictures

1. Rain Math

Measure : Millimetre

Day	Thiruvananthapuram	Kannur
Monday	12	5
Tuesday	16	9
Wednesday	8	12
Thursday	21	16
Friday	13	7
Saturday	35	22
Sunday	24	28

The table shows the quantity of rain obtained in Thiruvananthapuram and Kannur in the first week of June. Observe the table and answer the following :

- i. The day in which minimum rain obtained in Thiruvananthapuram _____
- ii. The day in which maximum rain obtained in Kannur _____
- iii. Total quantity of rain obtained in Thiruvananthapuram _____

Make 2 more questions based on the above table.

2. In a month, Jeena's father spent 1200 rupees for grocery, 1800 rupees for vegetables, 750 rupees for milk, 400 rupees for medicine, 350 rupees for electricity, 140 rupees for water charges, 1600 rupees for travel and 2800 rupees for other expenses. His savings in the month is twice the amount spent for journey. Prepare 5 different questions and write the answers based on the above information.