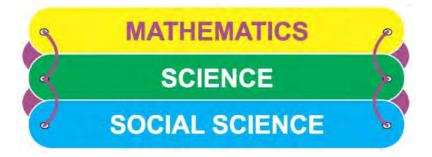


Government of Tamilnadu

IV STANDARD

TERM II

VOLUME 2



NOT FOR SALE

Untouchability is Inhuman and a Crime

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Department of school Education

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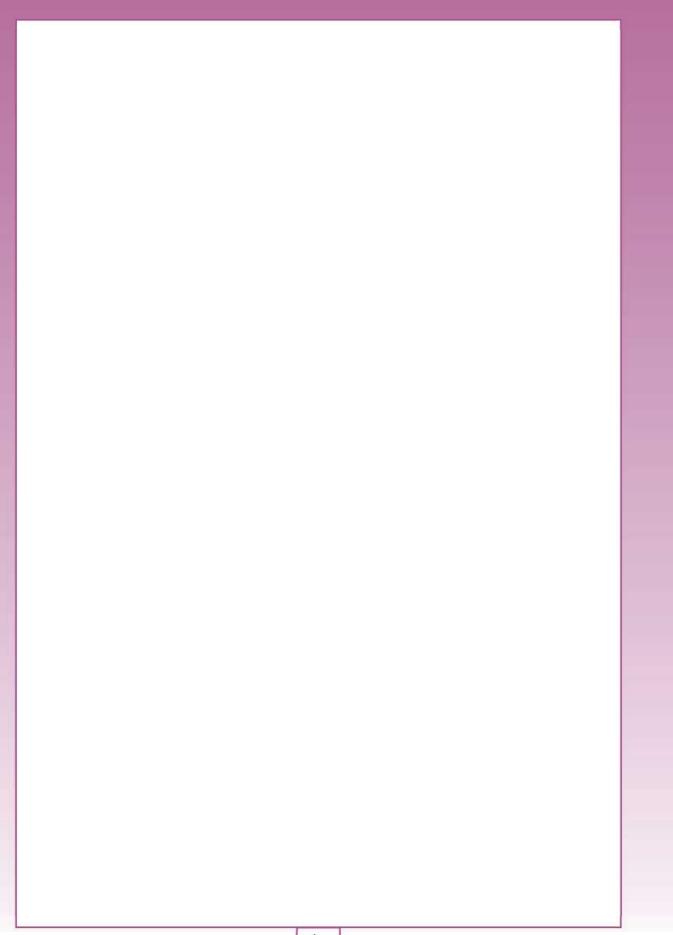
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MATHEMATICS

MATHEMATICS

IV STANDARD

Term II

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What these Icons stand for!













Puzzle







1

MEASURING CAPACITY

Ramu and Somu went to a juice shop. They bought Orange juice and Mango juice.



Who has more juice? Ramu has more juice. Somu may have half of it.



Reeta and her sister Geetha filled water in two buckets of same capacity. They used different measures of jars to fill.



Reeta measured 10 times. Geetha measured 8 times.

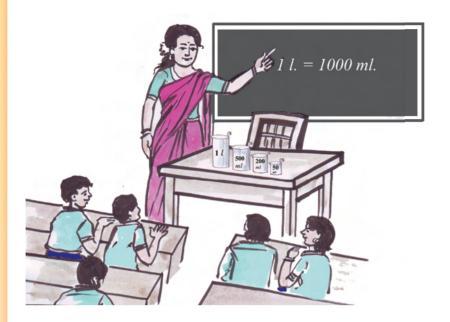


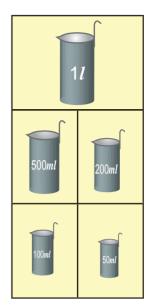
Measures cannot be accurate if we use non - standard measures.

So we are following the standard measures.

To measure the liquids we use millilitre and litre.

Relation between litre and millilitre





Teacher : Students, Have you seen these objects anywhere?

Sankar : I saw them in a fair price shop.

John : I have seen them in an oil shop.

Teacher: Yes, Gopu. Come here. Take 500 millilitre jar.

Using it fill water in 1 litre jar then tell how many times

you used the jar?

Gopu : Two times.

Teacher : From this we understood that two 500 millilitre make

one litre.

500 millilitre + 500 millilitre = 1litre

1000 millilitre = 1 litre

we can write millilitre as ${}^{'}ml{}^{'}$ and litre as ${}^{'}l{}^{'}$

$$\frac{1}{2}l = 500ml$$

$$\frac{1}{4}l = 250ml$$

$$\frac{3}{4}l = 750ml$$

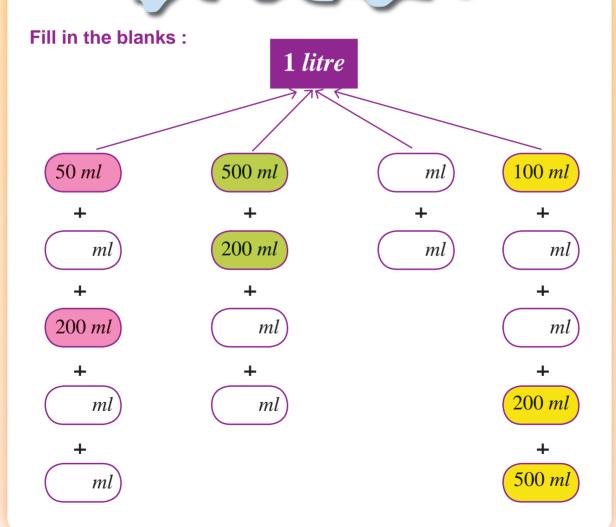


To Pour the water in the following types of containers.



- 1. Which Container has the most capacity?
- 2. Which Container has the least capacity?

The bigger container holds more water than the smallest container





Water! Water!

The table shows the water used one day by Sriram's family of 3 persons.





Drinking	9 <i>l</i>
Cooking	12 <i>l</i>
Cleaning vessels	15 <i>l</i>
Bathing	30 <i>l</i>
Washing clothes	24 <i>l</i>
Other reasons	40 <i>l</i>
Total capacity of water used for one day	



Find the capacity of water for your family to use for one day?

Name of the Student

Total number of persons in your family







$$\bullet$$
 3 l + 75 ml = 3000 ml + 75 ml = 3075 ml

$$\bullet$$
 4 l + 5 ml = 4000 ml + 5 ml = 4005 ml



Practice

(1) Fill in the missing boxes.

1) 1
$$l = 1000 ml$$

$$2) \quad 2 \quad l \quad = \quad ml$$

3) 6
$$l = ml$$

4)
$$5 l = ml$$

5)
$$7000 \ ml = l$$

6)
$$4000 \ ml = l$$

7)
$$9000 \ ml = l$$

8)
$$3000 \ ml = l$$

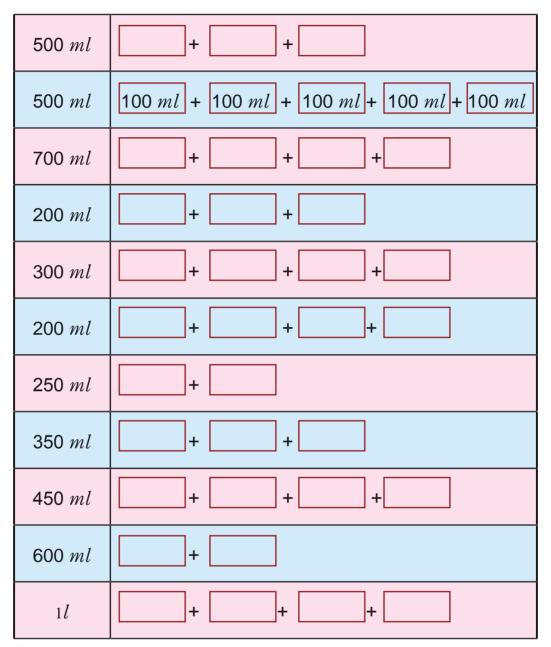
9)
$$3l + 475ml = ml + ml = ml$$

11)
$$7l + 5ml = ml + ml = ml$$

(2) Write the correct matches of A from B.

A	В
1 <i>l</i> 250 <i>ml</i>	
1 <i>l</i> 25 <i>ml</i>	
1 <i>l</i> 5 <i>ml</i>	
1 <i>l</i> 750 <i>ml</i>	
1 <i>l</i> 705 <i>ml</i>	

Fill in the boxes using 500 ml, 200 ml, 100 ml, 50 ml.







List out the measures used in your home for the following items.

Milk , Juice, Buttermilk, Ghee, Coconut oil.



Addition in capacity

Add.

 $25l \ 500ml + 13l \ 225ml$

	l	ml
	25	500
+	13	225
	38	725

Step 1: Add millilitres.

Step 2: Add litres.



Practice

Life related problems

Now it is too hot. Shall we prepare cool drinks? The ingredients are given below.

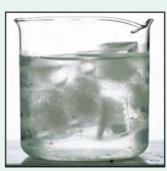
1l sharbath



200*ml* lemon juice



2l 500ml cold water



The total quantity of the cool drinks = 3l 700ml



(Practice)

1) These are three vessels with milk.



17*l* 300*ml*



2*l* 100*ml*



5*l* 200*ml*

- Which vessel has more milk?
- Which has less milk?
- ★ Find the total capacity of milk in the three vessels.



2) The milk given by a cow in three days are given below.

	l	ml
Day 1	13	500
Day 2	14	200
Day 3	12	100

Find the total milk given by the cow in three days.

- 3) Bama had 2l of buttermilk which was very sour in taste. So she added 500ml of water. What was the capacity of buttermilk after adding water?
- 4) Jayanthi buys 1l of idly mix. To make dosa she adds 200ml of water. What is the capacity of dosa mix?
- 5) 200ml of coconut oil, 300ml of sesame oil and 100ml of castor oil are mixed to light a lamp. What is the total of oil mixture?
- 6) What will be the total capacity of mixing 50ml of red, 100ml of green and 500ml of white paint?
- 7) The water used to prepare food items in a function are given below.

Food itom	Quantity of water		
Food item	l ml		
Rice	25 200		
Rasam	15 150		
Butter milk	10 500		
Padam kheer	5 50		

- ★ Find the total quantity of water for preparing rice and rasam.
- ★ How much quantity of water is needed to prepare buttermilk and padam kheer?
- ★ Find the total quantity of water required for preparing all food items.



Subtraction in capacity

Subtract.

 $15l \ 350ml - 13l \ 225ml$

l	ml	`
15	350	
_ 13	225	
2	125	

Step 1 : Subtract 225ml from 350ml.

Step 2 : Subtract 13l from 15l.

Life related problem

Find the quantity of water used for soaking the clothes.

Water in a pot The clothes are soaked. Remaining water







The quantity of water

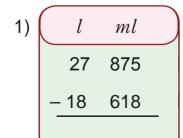
Remaining water

Water used for soaking the clothes

$$= - 11 l$$

9 *l*

(Practice)





4) Find the remaining mango juice when 200*ml* is taken from 1*l* 500 *ml* of mango juice.

Remaining mango juice



5) Raja and his friends went to an oil shop. The quantity of oil bought by them are given below.

S. No	Name	Sun flower oil	Groundnut oil	Gingelly oil	Mustard oil	Coconut oil
140		l ml	l ml	l ml	l ml	l ml
1	Raja	5 000	1 300	3 000	0 100	0 050
2	Elizabeth	8 100	0 250	1 100	0 300	0 100
3	Nithish	1 200	0 050	0 250	4 150	2 000
4	Revathi	4 150	3 100	2 600	0 050	
5	Rajeswari	2 250	4 050	4 050	0 200	0 400

- Find the total quantity of oils bought by Elizabeth.
- ⇒ What is the quantity of sunflower oil bought by all?
- ⇒ Who bought more mustard oil?
- ⇒ Which oil was bought more?
- ⇒ How much more groundnut oil did Raja buy than Nithish?







Fill in the table.

S. No	Things	Number of times	Approximate value in ℓ or $m\ell$	Correct value in ℓ or $m\ell$
1.		20		
2.	0	5		
3.		3		
4.		1		
5.		2		
6.	4 .	1		
7.		20		
8.	•	1		
9.		4		





Fill in the blanks.

1)
$$7l + 500ml = ml$$

2)
$$4l + 65ml = ml$$

3)
$$8l + 5ml = ml$$

4)
$$4l \ 890ml = ____m ml$$

5)
$$6l \ 856ml = ____l + ___m ml$$

6)
$$3l \ 567ml = ____ l + ___ ml$$

7)
$$4l \ 890ml = ____ l + ___ ml$$

Do the sums.

- 7) A drum contains 54l 250ml of varnish and another drum contains 75l 650ml. What is the total capacity?
- 8) A bucket contains 15l 20ml water and another bucket contains 12l 300ml. What is the total quantity?
- 9) A curd vendor has 89l 500ml of curd. If he sells 39l 250ml, how much is left with him?



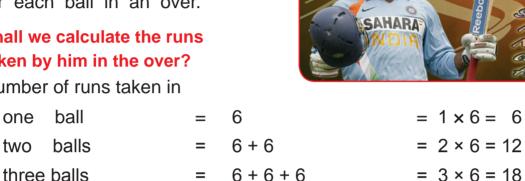
MULTIPLICATION AND DIVISION

MULTIPLICATION

In a World Cup Cricket Match, 2007, Yuvaraj Singh took six runs for each ball in an over.

Shall we calculate the runs taken by him in the over?

Number of runs taken in



= 6+6+6+6four balls $= 4 \times 6 = 24$ $= 6+6+6+6+6 = 5 \times 6 = 30$ five balls

balls (one over) = $6+6+6+6+6+6=6\times 6=36$ six

Multiplication is the short form of repeated addition

6th table

$$1 \times 6 = 6$$

 $2 \times 6 = 12$
 $3 \times 6 = 18$
 $4 \times 6 = 24$
 $5 \times 6 = 30$

$$6 \times 6 = 36$$

 $7 \times 6 = 42$
 $8 \times 6 = 48$
 $9 \times 6 = 54$
 $10 \times 6 = 60$

6 notebooks are needed for one student. How many notebooks are needed for 7 students?

Solution:

To find the total notebooks we have to multiply 7 by 6. $(7 \times 6 = 42)$ 42 notebooks are needed for 7 students





Practice

- 1) 3×6 =
- 2) 4×6 =
- 3) $5 \times 6 =$
- 4) If a shirt has 6 buttons, how many buttons will be in 8 shirts?
- 5) Number of fans in a house is 6. Find the number of fans in 9 houses.

Complete the 7th table

Flower has 7 petals.	$1 \times 7 = 7$
**	2 × 7 = 14
***	3 × 7 = 21

*****	6 × 7 = 42

******	8 × 7 = 56

*******	10 × 7 =70



Practice

- 1) 4 × 7 =
- 2) $7 \times 7 =$
- 3) 9 × 7 =
- 4) A box contains 7 pencils. How many pencils are there in 5 boxes?
- 5) One week has 7 days. Calculate the numbers of days in 8 weeks.



Complete the 8th table

0000000	1 × 8 = 8
0000000 0000000	2 × 8 = 16
	3 × 8 = 24
	5 × 8 = 40
0000000 0000000 0000000	
0000000 0000000 0000000	7 × 8 = 56
	10 × 8 = 80



Practice

- 4) Number of rods in a window is 8. Find the number of rods in 8 windows.
- 5) Find the number of pillars for 7 buildings, if a building has 8 pillars.



9 + 9 + 9 + 9 $= 4 \times 9 = 36$

9+9+9+9+99+9+9+9+9+9 $= 6 \times 9 = 54$

9+9+9+9+9+9+9

9+9+9+9+9+9+9+9 $= 8 \times 9 = 72$

9+9+9+9+9+9+9+9

 $9+9+9+9+9+9+9+9+9+9 = 10 \times 9 = 90$

Practice)

Complete the 9th table.

9

9 + 9

9 + 9 + 9

- 4) A Kho Kho team has 9 persons. How many persons are there in 6 teams?
- 5) Number of idlies prepared for one time is 9. How many idlies will be prepared for 9 times?

Complete the 10th table.

From the tables 1 to 9 we know the following. Complete the following.

$$10 \times 1 = 10$$

$$10 \times 2 = 20$$

$$10 \times 3 = 30$$

$$10 \times 4 = 40$$

$$10 \times 5 = 50$$

$$10 \times 6 = 60$$

$$10 \times 7 = 70$$

$$10 \times 8 = 80$$

$$10 \times 9 = 90$$

$$1 \times 10 = 10$$

$$2 \times 10 = 20$$

 $10 \times 10 = 100$

MATHEMATICS

Multiplication by 10, 100, 1000

Fill in the boxes

When a number is multiplied by 10, 100, 1000, it is enough to write one zero, two zeros, three zeros respectively after that number.

Multiplication by 1

$$5 \times 1 = 5$$

 $48 \times 1 = 48$

The product of one and any number is the number itself.

Multiplication by 0

 $760 \times 1 = 760$

$$7 \times 0 = 0$$

$$50 \times 0 = 0$$

 $384 \times 0 = 0$

The product of zero and any number is zero.

Order of multiplication

$$1 \times 2 = 2 \times 1$$
$$27 \times 5 = 5 \times 27$$

 $768 \times 4 = 4 \times 768$

The product of two numbers does not change, if we interchange the order of numbers.

Fill in the blanks.

$$7 \times 8 = 56 = 8 \times 7$$

$$7 \times 6 = \underline{\hspace{1cm}} = 6 \times 7$$

$$5 \times 9 = 45 = 9 \times 5$$

$$_{---}$$
 = 72 = 8 × 9

$$10 \times 7 = 70 = 7 \times 10$$



Multiplication - Easy methods

Multiplication by 30, 50 ... etc.

1. Multiply 36 by 50

$$36 \times 50 = 36 \times (5 \times 10)$$
$$= (36 \times 5) \times 10$$
$$= 180 \times 10$$
$$= 1800$$

2. Multiply 245 by 30

$$245 \times 30 = 245 \times (3 \times 10)$$

$$= (245 \times 3) \times 10$$

$$= 735 \times 10$$

$$= 7350$$

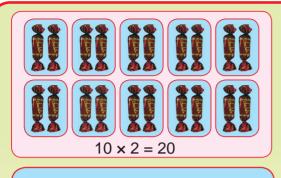
$$245 \times 30 = 7350$$

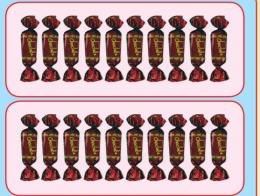
To multiply by a number 30, 50. etc first multiply the number by the non - zero digit of the multiplier and put as many zeros as there are in the multiplier to the right of the result.

Multiply

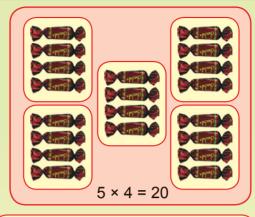


Srinath arranged 20 chocolates in the following ways.





 $2 \times 10 = 20$





 $4 \times 5 = 20$

(Practice)

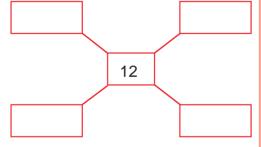
Complete the chart for the following numbers.

1)
8 × 3
24
6 × 4
4 × 6

20

2)

4)



18

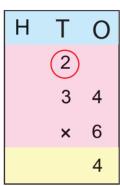


Multiplication of two digit number by one digit number

If one class has 34 students, find the number of students in 6 classes.

Solution: Number of students in one section = 34

Number of students in 6 sections = 34×6



Step 1:

 $4 \times 6 = 24$ ones

Write 4 in the 'ones' place

and carry (2) in the 'tens' place.

Step 2:

 $3 \times 6 = 18 \text{ tens}$

Add 18 tens and (2) tens.

Write 0 in tens place and

2 in hundreds place.

Number of students in 6 sections = 204

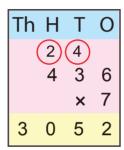
Multiplication of 3 digit number by one digit number

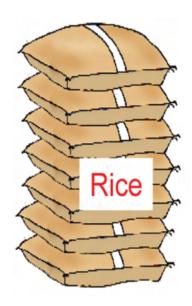
The cost of a rice bag is ₹ 436. Find the cost of 7 rice bags.

Solution:

Cost of a rice bag = ₹436

Cost of 7 rice bags = ₹436 × 7





Steps:

 \star 6 × 7 = 42

write 2 in ones place and carry 4 in tens place

 \star 3 × 7 = 21, 21 + 4 = 25

write 5 in tens place and carry 2 in hundreds place

 \star 4 × 7 = 28, 28 + 2 = 30

write 0 in hundreds place and 3 in thousands place.

Cost of 7 rice bags = ₹ 3052





Practice

3)
$$47 \times 8$$
 4) 87×5

- 13) A pearl necklace has 52 pearls. How many pearls are there in 7 necklaces?
- 14) Number of roses needed for a garland is 72. Calculate the number of roses needed for 9 garlands.
- 15) 485 sugarcane bundles are loaded in a cart. How many bundles are loaded in 7 carts?
- The cost of an iron box is ₹ 565. Find the cost of 8 iron boxes. 16)

Multiplication of two digit number by two digit number

A box contains 48 apples. How many apples are there in 56 boxes?

Solution:

Number of apples in a box = 48

Number of apples in 56 boxes $= 48 \times 56$

We can write 56 = 50 + 6

Number of apples in 56 boxes = 2688



Another way

Th	Н	Т	O	
44				
		4	8	
	×	5	6	
	2	8	8	
2	4	0	0	
2	6	8	8	

Step 1

Multiply ones by ones

$$8 \times 6 = 48$$

Multiply tens by ones

$$4 \times 6 = 24$$

$$24 + 4 = 28$$

$$48 \times 6 = 288$$

Step 2

Multiply ones by tens

$$8 \times 5 = (4)0$$

Multiply tens by tens

$$4 \times 5 = 20$$

$$20 + 4 = 24$$

$$48 \times 5 = 2400$$

Number of apples in 56 boxes = 2688.



(Practice)

- 1) 59×43 2) 58×56 3) 95×60 4) 78×66 5) 38×71
- 6) 92×76 7) 60×88 8) 54×90 9) 70×92 10) 65×98
- 11) In a marriage hall 28 persons are seated in a row. How many persons are seated in 36 rows?
- 12) Bus fare for a person from Tambaram to Cuddalore is ₹93. Find the bus fare for 43 persons.
- 13) A Mini van is loaded with 44 onion bags. How many onion bags are loaded in 37 Mini vans?
- 14) One quire of paper contains 24 sheets. How many sheets are there in 36 quires?
- 15) How many hours are there in the month of July?



Puzzle

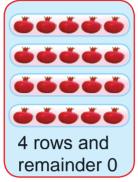
I am a two digit number. I lie in between 40 and 50.
I am an even number. I appear in sixth and seventh multiplication table. Who am I?

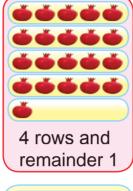


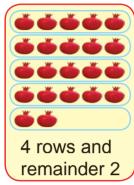
DIVISION

Sharing

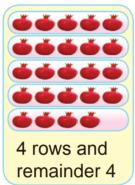
There are 20, 21, 22, 23, 24 and 25 pomegranates in each box. In how many rows they can be arranged if each row has 5 pomegranates?

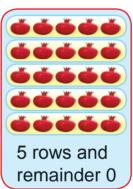












Arrange in groups

If 42 students are grouped equally into 3 teams, how many students will be there in each team?

Divide : 42 ÷ 3

$$\begin{array}{r}
 10 + 4 &= 14 \\
 \hline
 30 + 12 \\
 \hline
 0
 \end{array}$$

Quotient = 14Remainder = 0

14 students will be in each team.



Division of three digit number by a one digit number

Division without remainder

Divide 875 by 7

Step 1: Take 8 hundreds. Divide 8 by 7.

Quotient =1 and remainder = 1

Step 2: Take 17 tens

Divide 17 by 7. Quotient = 2 and

remainder = 3

Step 3: Take 35 ones

Divide 35 by 7. Quotient = 5 and

remainder = 0

 $875 \div 7 = 125$

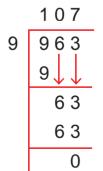
Quotient = 125, Remainder = 0

Find the number of plates distributed equally to 9 hostels if the total number of plates are 963.



Number of hostels

Number of plates distributed to each hostel = 963 - 9



Step 1: Take 9 hundreds.

 $9 \div 9 = 1$.

Step 2: Take 6 tens.

6 cannot be divided by 9.

So, put 0 tens in quotient's place.

Now take 63 ones.

 $63 \div 9 = 7$, remainder 0.

107 plates are distributed for each hostel



MATHEMATICS

Division with remainder

Divide 657 by 8

Step 1: Take 6 hundreds. 6 cannot be divided by 8. So take 65 tens.

Divide 65 by 8. Quotient = 8 and remainder = 1

Step 2: Take 17 ones. Divide 17 by 8.

Quotient = 2 and remainder = 1

Quotient = 82 Remainder = 1



(Practice)

2)
$$336 \div 6$$

4)
$$658 \div 7$$

8)
$$829 \div 9$$

- 9) An electrician fixed 4 bulbs in a room. In how many rooms can 216 bulbs be fixed by him?
- 10) 9 saplings are planted in a row. In how many rows are 873 saplings planted?

Division of 4 digit number by one digit number

Division without remainder

Divide 7847 by 7

Step 1: Take 7 thousands. Divide 7 by 7.

Quotient = 1 and remainder = 0

Step 2: Take 8 hundreds. Divide 8 by 7.

Quotient = 1 and remainder = 1

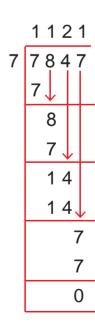
Step 3: Take 14 tens. Divide 14 by 7.

Quotient = 2 and remainder = 0

Step 4: Take 7 ones. Divide 7 by 7.

Quotient =1 and remainder = 0

Quotient = 1121, Remainder = 0





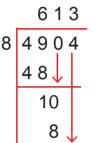
8 children collected 4904 shells from the sea shore. If the shells are equally shared, how many shells will each one get?

Solution:

Total number of shells = 4904

Number of children = 8

Number of shells for each child = $4904 \div 8$



Step 1: Take 4 thousands. 4 cannot be

divided by 8. So take 49 hundreds.

Divide 49 by 8. Quotient = 6 and

remainder =1

Step 2:

Take 10 tens. Divide 10 by 8. Quotient = 1 and remainder = 2.

2 4 Step 3:

Take 24 ones. Divide 24 by 8. Quotient =3 and remainder = 0.

Each child will get 613 shells.

Division with remainder

24

0

Divide 7004 by 6

Step 1: Take 7 thousands. Divide 7 by 6.

Quotient = 1 and remainder = 1.

Step 2: Take 10 hundreds. Divide 10 by 6.

Quotient = 1 and remainder = 4

Step 3: Take 40 tens. Divide 40 by 6.

Quotient = 6 and remainder = 4

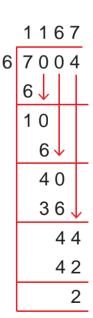
Step 4: Take 44 ones. Divide 44 by 6.

Quotient = 7 and remainder = 2.

Check: $1167 \times 6 = 7002$

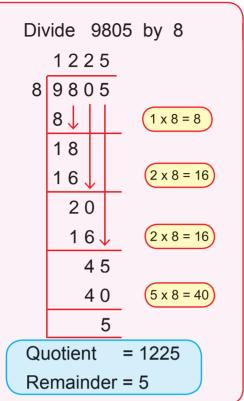
adding the remainder 2

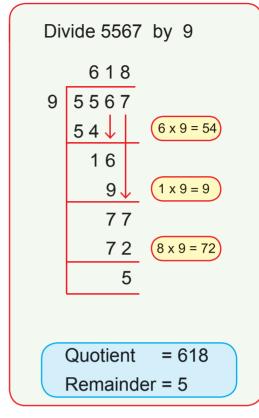
7002 + 2 = 7004



Quotient = 1167 Remainder = 2









(Practice)

1)
$$5232 \div 6$$
 2) $8540 \div 7$ 3) $4624 \div 8$ 4) $2340 \div 9$

6)
$$6205 \div 7$$

5)
$$8348 \div 6$$
 6) $6205 \div 7$ 7) $3426 \div 8$ 8) $3352 \div 9$

- 9) 6 students can be seated in a bench. How many benches are required for 6264 students?
- 10) A six storey building has 2292 rooms. If every floor has the same number of rooms, how many rooms are there on each floor?
- 11) 7 containers have 7630 mugs of water. How many mugs of water are in one container?

Observe and fill in the blanks.

$$42 \div 6 = 7$$
 $56 \div 7 = _____ 81 \div 9 = _____$
 $420 \div 6 = 70$ $560 \div 7 = _____ 810 \div 9 = _____$
 $4200 \div 6 = 700$ $5600 \div 7 = _____ 8100 \div 9 = _____$



Observe the following pictures and frame problems





Bus fare for one person is ₹96. Find the fare for 5 persons.

Vegetable and Fruit stall



Onion	1kg	₹ 15
Potato	1kg	₹ 25
Tomato	1kg	₹12
Drumstick	1kg	₹ 30
Apple	1kg	₹ 80
Banana	1	₹ 3

Problems

1.

2.

3.

4.





Problem

Cost of 6 soap cakes are ₹ 132. What is the cost of a soap cake?



Problem



Problem





Estimation in multiplication

A tourism company collected ₹ 85 per head for a field trip. Estimate the amount collected from 27 persons.

Actual amount Estimated amount Amount per head ₹ 85 ₹ 90 = Amount for 27 persons ₹ 85×27 ₹90×30 595 0.0 170 270 ₹ 2700 Amount for 27 persons ₹2295

Difference between estimated amount and actual amount

= ₹2700 - ₹2295

Difference = ₹405

(Practice)

A person delivers 92 newspapers in a day. Estimate the number of newspapers that he delivers in 28 days?

Estimate and calculate.

Numbers	Actual value	Estimated value	Difference
45 × 12	540	50 × 10 = 500	40
92 × 18			
26 × 22			
33 × 37			





Multiply.

1)
$$62 \times 4$$

4)
$$89 \times 8$$

7)
$$237 \times 8$$

10)
$$30 \times 70$$

- 13) The cost of a toothpaste packet is ₹ 26. Find the cost of 48 tooth paste packets?
- 14) A lorry is loaded with 6 cars. How many cars can be loaded in 450 lorries?

Divide.

3)
$$98 \div 6$$

6)
$$342 \div 6$$

10)
$$8505 \div 5$$

12)
$$6027 \div 7$$

- 13) If 6 notebooks have 9120 lines, how many lines are there in a notebook?
- 14) If 9 ice cream cups are placed in a tray, how many trays are needed for 504 ice cream cups?
- 15) Find the quotient and remainder for the following divisions.

$$2.2519 \div 2$$

$$3.2519 \div 3$$

$$4.\ 2519 \div 4$$
 $5.\ 2519 \div 5$ $6.\ 2519 \div 6$

$$5.2519 \div 5$$

$$6.2519 \div 6$$

7.
$$2519 \div 7$$
 8. $2519 \div 8$ 9. $2519 \div 9$

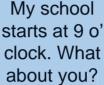


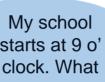
CALCULATING TIME

Two friends studying in different schools are conversing each other.



At what time your school starts?





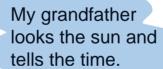


My school starts at 9:10. How do you find the time?

I see the wall clock.



I use my wrist watch.









Look at the clock. It has two hands. One is long and the other one is short.

Yes, the long hand shows the minute and the short hand shows the hour.





What is the time now?



It is 3 o' clock because the minute hand is at 12 and the hour hand is at 3.



Hour and minute are standard units for calculating time.



(Practice

Look at the clock and write the time.



____ o' clock



o' clock



____ o' clock



o' clock



o' clock



____ o' clock



Hours and minutes







Look at the clock. The minute hand is at 1 and the hour hand is at 3.

Yes, now the time is 5 minutes past 3 or three-five or 3:05.







Look at the clock. The minute hand is at 2 and the hour hand lies between 3 and 4. Is it 10 minutes past 3?

Yes, we write it as three - ten or 10 minutes past 3 or 3:10



Can you tell me to find the time quickly?



Oh, sure! look here.

Quarter of an hour

 $=\frac{1}{4}$ hour = 15 minutes

Half of an hour

 $=\frac{1}{2}$ hour = 30 minutes

Three - quarter of an hour $=\frac{3}{4}$ hour = 45 minutes





When the minute hand shows 3, the time is 15 minutes past 3 or quarter past 3 or three - fifteen.

It is written as **3:15.**



When the minute hand shows 6, the time is 30 minutes past 3 or half past 3 or three - thirty.

It is written as **3:30**.



When the minute hand shows 9, the time is 45 minutes past three or 15 minutes to four or three - forty five. It is written as **3:45**.

The minute hand moves from one clock number to the next number means, 5 minutes have passed.

Minute hand takes 60 minutes to complete one rotation. That is one hour. So, 1 hour = 60 minutes.



Practice

See the clock and write the time.









1:20







5)



Fill in the blanks to show your daily activities. Draw the hour and minute hands on the clock faces.

I get up at 6 o' clock 1)

I take bath at _____ 2)







My school gets over at _____





My lunch time is _____

My evening play time is _____ 8) My study time is _____ 7)







Time with a.m and p.m



In the above pictures both the clock shows 6 o'clock only.

One clock shows 6 o' clock in the morning and the other clock shows 6 o' clock in the evening.

6 o' clock in the morning is 6 anti meridian.

6 o' clock in the evening is 6 post meridian.

We can write anti meridian as a.m. and post meridian as p.m.



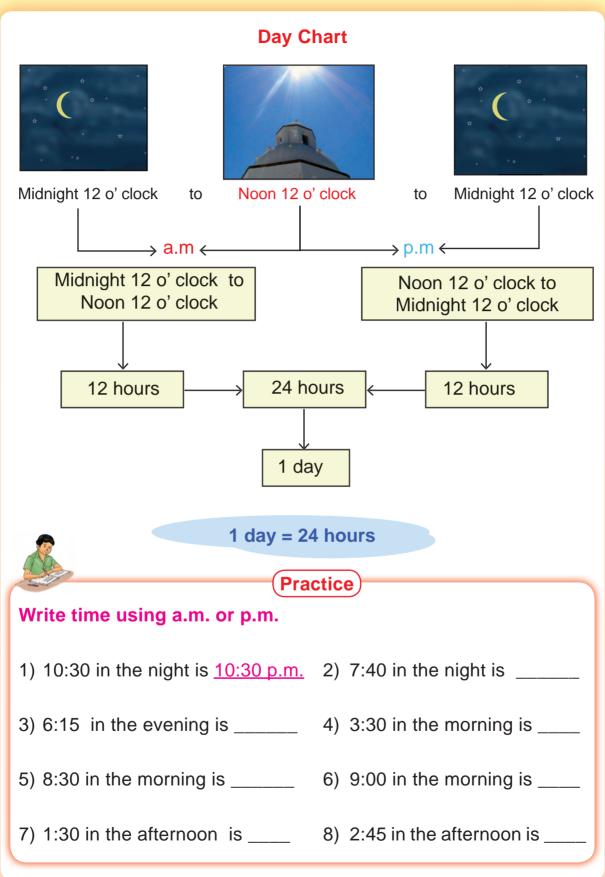
12 o' clock at night is12 midnight.



12 o' clock in the day is 12 midday or noon.

When it is exactly 12 noon or 12 midnight it is not mentioned with a.m. or p.m.







Duration of daily activities

Sundar is studying in class IV. He gets up at 6 o' clock in the morning. He goes to school at 8.30 a.m. and comes back home at 5 o' clock in the evening. He plays for some time and sits for studies. He goes to bed at 9 0' clock in the night.

Can you find the duration of his daily activities?







Sundar gets up at 6 o' clock in the morning and then he goes to school at 8:30 a.m.

Duration between 6:00 a.m to 8:30 a.m is 2 hours 30 minutes.

Minute can be written as min. and hour can be written as hr. .

- 1) First period starts at 9:30 a.m, and duration of one period is an hour. The first period gets over at ____a.m.
- Morning session gets over by 12:40 p.m.Duration of the morning session is _____ hr ____ min.
- Afternoon session starts at 2:00 p.m.How long is the lunch break?_____ hr ____ min.
- School gets over by 4:10 p.m.Duration of the afternoon session is _____ hr ___min.
- 5) Sundar studies from 6:30 p. m to 8:30 p.m. Duration of his study time is _____ hrs.



CALENDER 2012

	January						
Su	Мо	Tu	We	Th	Fr	Sa	
1	2	3	4	5	6	7	
8	9	10	11	12	13	14	
15	16	17	18	19	20	21	
22	23	24	25	26	27	28	
29	30	31					

February						
Su	Мо	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26 27 28 29						

March						
Su	Мо	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April						
Su	Мо	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

	May						
Su	Мо	Tu	We	Th	Fr	Sa	
		1	2	3	4	5	
6	7	8	9	10	11	12	
13	14	15	16	17	18	19	
20	21	22	23	24	25	26	
27	28	29	30	31			

June						
Su	Мо	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24 25 26 27 28 29 30						

July						
Su	Мо	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

August						
Su	Мо	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

September						
Su	Мо	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

October							
Su	Мо	Tu	We	Th	Fr	Sa	
	1	2	3	4	5	6	
7	8	9	10	11	12	13	
14	15	16	17	18	19	20	
21	22	23	24	25	26	27	
28	29	30	31				

November						
Su	Мо	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

December						
Su	Мо	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

The calender shows days of the weeks and months of the year. We can find date of a particular day of a particular month from it.



Look at the calendar and write down the names of the months.

Months having 31 days	Months having 30 days

February month has ____ days.



Practice

Look at the month of July and answer the following questions.

August 2012						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- 1) How many Mondays are there in this month?
- 2) How many Sundays are there in this month? _____
- 3) Which celebration falls on 15th August?
- 4) Mention the dates fall on Friday.
- 5) Write the first day of this month.
- 6) Name the last day of this month.



Months, weeks and days in the year 2012 Fill in the boxes.

Name of the month	Number of days	Number of weeks and		
Name of the month	in the month	days		
January	31	4 weeks 3 days		
February	29	4 weeks 1 day		
March	31	4 weeks 3 days		
April	30	4 weeks 2 days		
May	31	weeks days		
June	30	weeks days		
July	31	weeks days		
August	31	weeks days		
September	30	weeks days		
October	31	weeks days		
November	30	weeks days		
December	31	weeks days		
Total	366	48 weeks 30 days		

1 Week = 7 days

48 weeks + 30 days = 48 weeks + 28 days + 2 days

= 48 weeks + 4 weeks + 2 days

= 52 weeks and 2 days

Approximately

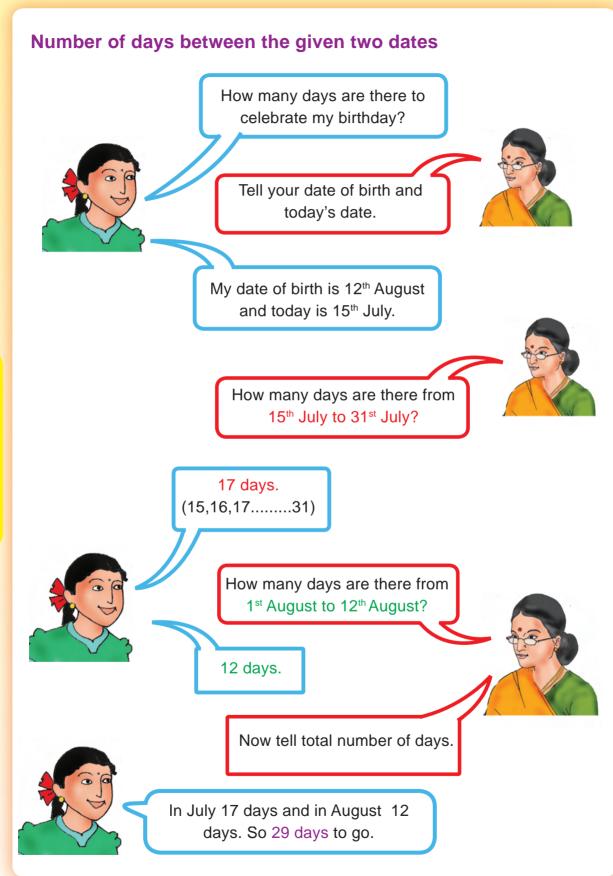
1 month = 4 weeks 1 year = 52 weeks

An ordinary year = 365 days A leap year = 366 days

In a leap year February has 29 days.

Normally a leap year comes once in four years.







MATHEMATICS

Count the number of days from 13th April to 3rd June.

April _____ 18 days

May ____ 31 days

June ____ + 3 days

Total 52 days





Practice

Calculate the number of days between given two dates.

- 1) From 4th May to 21st June.
- 2) From 9th October to 11th December.
- 3) From 3rd January to 15th February.
- 4) From 15th August to 2nd October.

Calculate the number of holidays.

Holidays	From	То	Total days
Summer holidays			





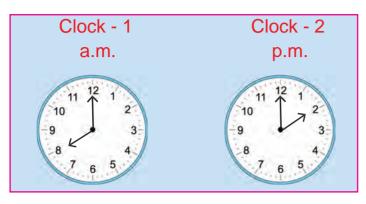
Look at the current year calendar and fill up the table.

Festival	Month	Date	Day
Deepawali			
Christmas			
Miladinabi			
Children's day			
Teacher's day			









clock - 1 8:00 a.m.

clock - 2 2:00 p.m.

Time lapse 6 hours

- ♦ Divide the students into three groups.
- ♦ First group shows the a.m. time in the clock 1
- ♦ Second group shows the p.m. time in the clock 2
- Third group tells the time lapse.

Fill in the blanks:

Days of an ordinary year	Months	Days of a leap year
	January	
	February	
31 days	March	
	April	30 days
	May	
	June	
	July	31 days
	August	
30 days	September	
	October	
	November	
	December	



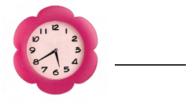




Answer the following questions.

1) Write the time of the following.





- 2) Write time with a.m or p.m.
 - i) 4 o' clock in the morning _____
 - ii) 11 : 30 in the night _____
 - iii) 11 : 30 before noon _____
- 3) Which two successive months have 31 days?
- 4) Name the month which has less than 30 days.
- 5) How many days are there in a leap year?
- 6) Which is the last month of the year?
- 7) Calculate the number of days between Children's day and Christmas.



Fill in the blanks.

1) 1 hour = ____ minutes

2) ____ hours = 1 day

3) 1 year = ____ days

4) 1 year = ____ weeks

5) 12 months = ____ year

6) Quarter of an hour = ____ minutes

7) Three - quarter of an hour = ____ minutes