



**CLICK HERE TO ACTIVATE**

**LESSON**  
PART 4



# 4

+ - x ÷ + - x ÷ + - x ÷ + - x ÷



## MULTIPLICATION

### READY ... STEADY

Write the following as multiplication statements.



$$5 + 5 + 5 = \square = \bigcirc$$



$$3 + 3 + 3 + 3 + 3 = \square = \bigcirc$$



$$4 + 4 + 4 + 4 = \square = \bigcirc$$

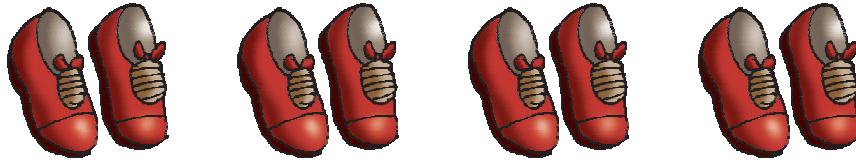


$$6 + 6 = \square = \bigcirc$$



$$2 + 2 + 2 + 2 = \square = \bigcirc$$

## REPEATED ADDITION IS MULTIPLICATION



$$2 + 2 + 2 + 2 = 8$$

There are 4 groups of 2 shoes each.

How many shoes in all ?

How many times did we add 2 to get 8 ? \_\_\_\_\_ times.

We say that : 4 times 2 equals 8

or 4 times 2 are 8

We write this as :  $4 \times 2 = 8$

Number of groups      Number in each group      Total number

' $\times$ ' means 'to multiply'. When each group has the same number of objects, we multiply to find the answer.

Repeated addition is **multiplication**.

### Count and write.

Number of groups : \_\_\_\_\_

Number of flowers in each group : \_\_\_\_\_

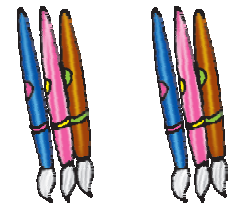
Total number of flowers = \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_



Number of groups : \_\_\_\_\_

Number of brushes in each group : \_\_\_\_\_

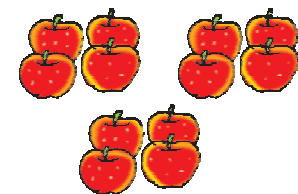
Total number of brushes = \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_



Number of groups : \_\_\_\_\_

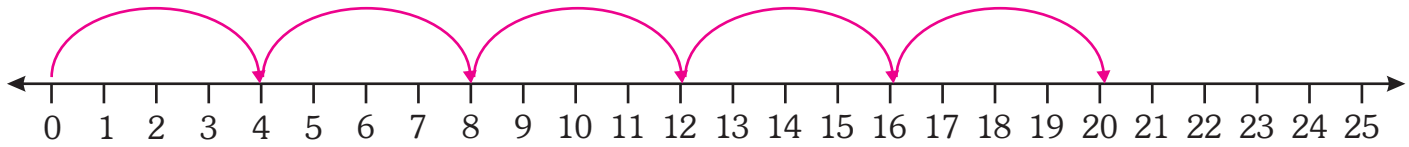
Number of apples in each group : \_\_\_\_\_

Total number of apples = \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_



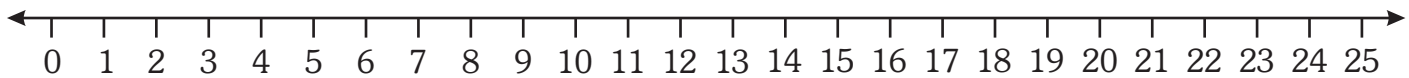
## MULTIPLICATION ON THE NUMBER LINE

Example : Multiply 4 by 5.

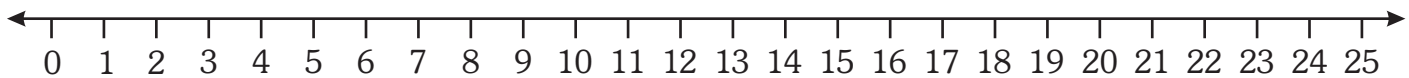


$$4 \times 5 = \boxed{20}$$

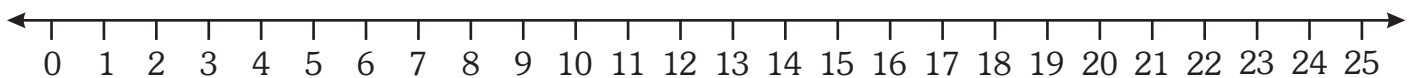
Multiply the following using the number line.



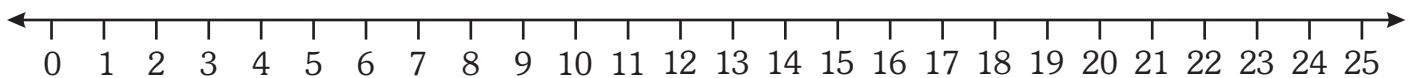
$$6 \times 4 = \boxed{\phantom{00}}$$



$$3 \times 7 = \boxed{\phantom{00}}$$




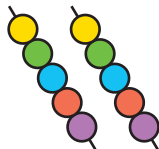
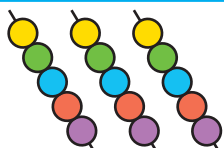
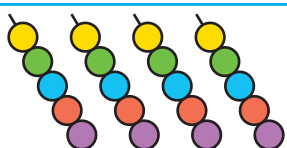
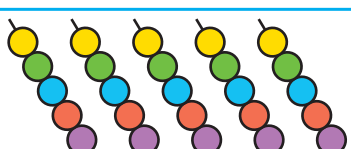
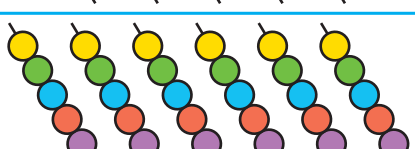
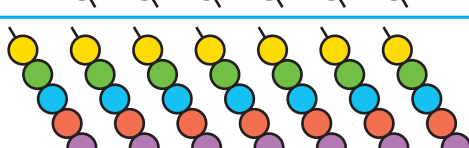
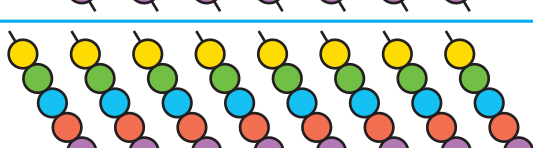
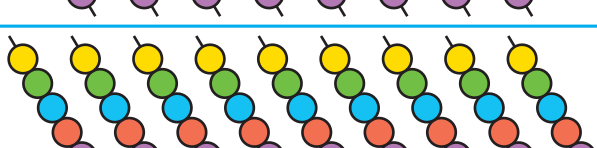
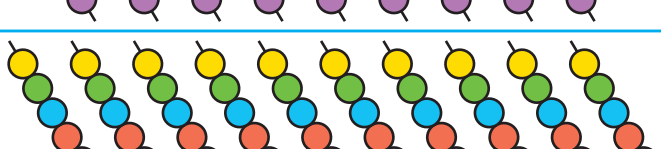
$$5 \times 3 = \boxed{\phantom{00}}$$













$$8 \times 2 = \boxed{\phantom{00}}$$

# MULTIPLICATION TABLES


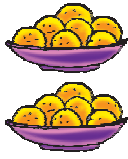
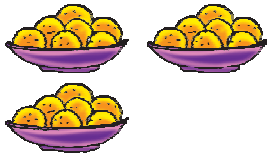
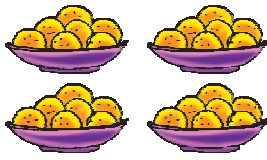
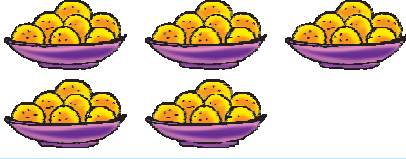
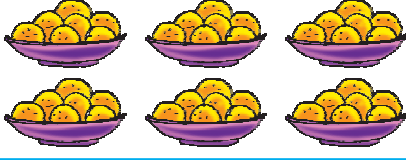


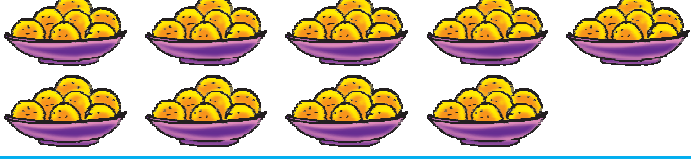
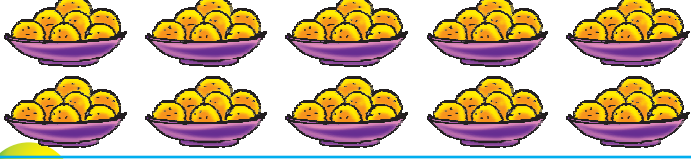
## Table of 5

	1 time 5 is 5	$1 \times 5 = \underline{\quad}$
	2 times 5 is 10	$2 \times 5 = \underline{\quad}$
	3 times 5 is 15	$3 \times 5 = \underline{\quad}$
	4 times 5 is 20	$4 \times 5 = \underline{\quad}$
	5 times 5 is 25	$5 \times 5 = \underline{\quad}$
	6 times 5 is 30	$6 \times 5 = \underline{\quad}$
	7 times 5 is 35	$7 \times 5 = \underline{\quad}$
	8 times 5 is 40	$8 \times 5 = \underline{\quad}$
	9 times 5 is 45	$9 \times 5 = \underline{\quad}$
	10 times 5 is 50	$10 \times 5 = \underline{\quad}$


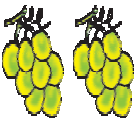
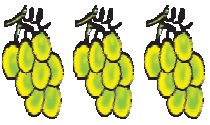


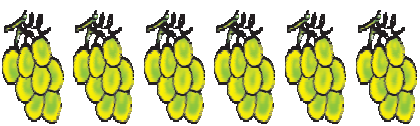

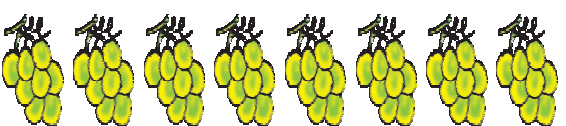
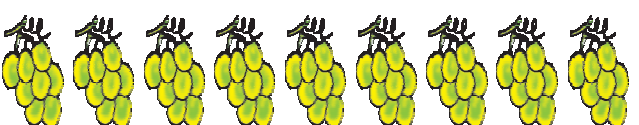
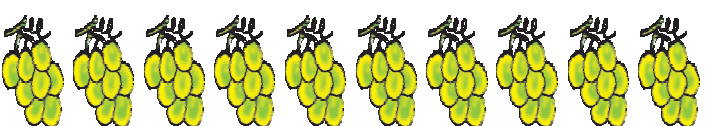
## Table of 6

	1 time 6 is 6	$1 \times 6 = \underline{\quad}$
	2 times 6 is 12	$2 \times 6 = \underline{\quad}$
	3 times 6 is 18	$3 \times 6 = \underline{\quad}$
	4 times 6 is 24	$4 \times 6 = \underline{\quad}$
	5 times 6 is 30	$5 \times 6 = \underline{\quad}$
	6 times 6 is 36	$6 \times 6 = \underline{\quad}$
	7 times 6 is 42	$7 \times 6 = \underline{\quad}$
	8 times 6 is 48	$8 \times 6 = \underline{\quad}$
	9 times 6 is 54	$9 \times 6 = \underline{\quad}$
	10 times 6 is 60	$10 \times 6 = \underline{\quad}$

## Table of 7

	1 time 7 is 7	$1 \times 7 = \underline{\quad}$
	2 times 7 is 14	$2 \times 7 = \underline{\quad}$
	3 times 7 is 21	$3 \times 7 = \underline{\quad}$
	4 times 7 is 28	$4 \times 7 = \underline{\quad}$
	5 times 7 is 35	$5 \times 7 = \underline{\quad}$
	6 times 7 is 42	$6 \times 7 = \underline{\quad}$
	7 times 7 is 49	$7 \times 7 = \underline{\quad}$
	8 times 7 is 56	$8 \times 7 = \underline{\quad}$
	9 times 7 is 63	$9 \times 7 = \underline{\quad}$
	10 times 7 is 70	$10 \times 7 = \underline{\quad}$

## Table of 8











	1 time 8 is 8	$1 \times 8 = \underline{\quad}$
	2 times 8 is 16	$2 \times 8 = \underline{\quad}$
	3 times 8 is 24	$3 \times 8 = \underline{\quad}$
	4 times 8 is 32	$4 \times 8 = \underline{\quad}$
	5 times 8 is 40	$5 \times 8 = \underline{\quad}$
	6 times 8 is 48	$6 \times 8 = \underline{\quad}$
	7 times 8 is 56	$7 \times 8 = \underline{\quad}$
	8 times 8 is 64	$8 \times 8 = \underline{\quad}$
	9 times 8 is 72	$9 \times 8 = \underline{\quad}$
	10 times 8 is 80	$10 \times 8 = \underline{\quad}$



## Table of 9

	1 time 9 is 9	$1 \times 9 = \underline{\quad}$
	2 times 9 is 18	$2 \times 9 = \underline{\quad}$
	3 times 9 is 27	$3 \times 9 = \underline{\quad}$
	4 times 9 is 36	$4 \times 9 = \underline{\quad}$
	5 times 9 is 45	$5 \times 9 = \underline{\quad}$
	6 times 9 is 54	$6 \times 9 = \underline{\quad}$
	7 times 9 is 63	$7 \times 9 = \underline{\quad}$
	8 times 9 is 72	$8 \times 9 = \underline{\quad}$
	9 times 9 is 81	$9 \times 9 = \underline{\quad}$
	10 times 9 is 90	$10 \times 9 = \underline{\quad}$

## Table of 10

	1 time 10 is 10	$1 \times 10 = \underline{\quad}$
	2 times 10 is 20	$2 \times 10 = \underline{\quad}$
	3 times 10 is 30	$3 \times 10 = \underline{\quad}$
	4 times 10 is 40	$4 \times 10 = \underline{\quad}$
	5 times 10 is 50	$5 \times 10 = \underline{\quad}$
	6 times 10 is 60	$6 \times 10 = \underline{\quad}$
	7 times 10 is 70	$7 \times 10 = \underline{\quad}$
	8 times 10 is 80	$8 \times 10 = \underline{\quad}$
	9 times 10 is 90	$9 \times 10 = \underline{\quad}$
	10 times 10 is 100	$10 \times 10 = \underline{\quad}$

## Fill in the blanks

$1 \times 8 =$

$5 \times 5 =$

$4 \times 7 =$

$6 \times 7 =$

$2 \times 6 =$

$5 \times 6 =$

$8 \times 9 =$

$7 \times 4 =$

$1 \times 9 =$

$9 \times 3 =$

$3 \times 5 =$

$3 \times 8 =$

$4 \times 10 =$

$3 \times 2 =$

$3 \times 9 =$

$10 \times 2 =$

$4 \times 4 =$

$2 \times 1 =$

$5 \times 1 =$

$6 \times 9 =$

$3 \times 8 =$

$8 \times 3 =$

$2 \times 10 =$

$6 \times 3 =$

$8 \times 2 =$

$7 \times 1 =$

$1 \times 7 =$

$8 \times 8 =$

$7 \times 2 =$

$2 \times 8 =$

$9 \times 1 =$

$10 \times 5 =$

$1 \times 6 =$

$9 \times 4 =$

$4 \times 9 =$

$10 \times 7 =$

$6 \times 10 =$

$7 \times 6 =$

$8 \times 5 =$

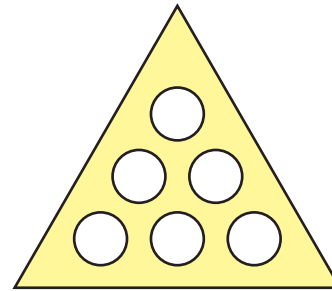
## MATHS LAB

**Objective :** To learn and reinforce the concept of multiplication

**Materials Required :** Bingo cards, Pencils, Crayons for all students

For example,

This is a bingo card.

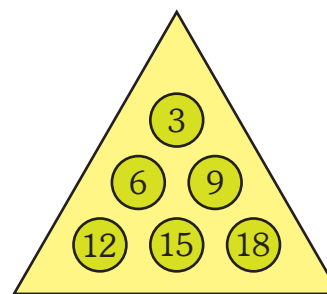
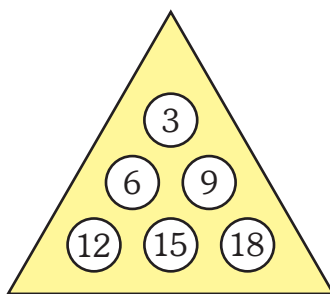


### Steps :

1. Give each student a card like the one shown above, with 6 circles in each card.
2. Ask the students to write any 6 multiples of 3 in the circles.
3. Give a crayon to each student. Start calling out the multiples of 3 in any order. If a student has one of the called out numbers in his card, then he should colour that circle.

There are 3 ways of completing first.

- The three corners
- Each row
- All the circles



It is an excellent way of finding out if they know all the multiples of a given number. The game could be played many times to help every child get a chance to complete first.

## MULTIPLICATION FACTS

When a number is multiplied by 0, the answer is always zero.

$2 \times 0 = 0$

$14 \times 0 = 0$

$19 \times 0 = 0$

When a number is multiplied by 1, the answer is the number itself.

$7 \times 1 = 7$

$12 \times 1 = 12$

$22 \times 1 = 22$

A change in the order of the factors does not change the answer.

$3 \times 4 = 12$

$4 \times 3 = 12$

**Fill in the blanks.**

$3 \times 0 = \square$

$10 \times 0 = \square$

$5 \times 0 = \square$

$12 \times 0 = \square$

$4 \times 0 = \square$

$8 \times 0 = \square$

$14 \times 1 = \square$

$23 \times 1 = \square$

$7 \times 1 = \square$

$27 \times 1 = \square$

$18 \times 1 = \square$

$21 \times 1 = \square$

$3 \times 5 = \square$

$5 \times 3 = \square$

$7 \times 4 = \square$

$4 \times 7 = \square$

$4 \times 2 = \square$

$2 \times 4 = \square$



## MULTIPLICATION OF A 2-DIGIT NUMBER WITH A 1-DIGIT NUMBER

**Example :** Multiply 23 by 2.

**Step 1 :** Multiply the digit 3 in ones place by 2 and write the answer in ones column.

$$(3 \times 2 = 6)$$

**Step 2 :** Multiply the digit 2 in tens place by 2 and write the answer in tens column.

$$(2 \times 2 = 4)$$

$$\text{So, } 23 \times 2 = 46$$

T	O
2	3
×	2
4	6

**Find the product.**

T	O
2	3
×	3

T	O
1	5
×	1

T	O
1	2
×	3

T	O
5	1
×	1

T	O
1	3
×	3

T	O
2	1
×	4

T	O
3	1
×	3

T	O
3	2
×	3

T	O
3	3
×	2

T	O
2	2
×	3

T	O
1	1
×	7

T	O
4	4
×	2

T	O
3	3
×	3

T	O
3	2
×	2

T	O
4	2
×	2

## MULTIPLICATION OF A 2-DIGIT NUMBER WITH A 1-DIGIT NUMBER (WITH CARRYING)

**Example :** Multiply 27 by 3.

**Step 1 :** Multiply the digit 7 in ones place by 3.  
 $7 \times 3 = 21$  (2 tens + 1 one)

Write 1 in the ones column of the answer.  
 Carry 2 tens to the tens column.

**Step 2 :** Multiply the digit 2 in tens place by 3.  
 $2 \times 3 = 6$  tens

Add 2 tens (carried from the ones column)  
 $6$  tens +  $2$  tens =  $8$  tens  
 Write 8 in the tens column.

Answer is 81.

T	O
2	7
×	3
8	1

**Find the product.**

T	O
4	8
×	2

T	O
1	3
×	6

T	O
3	9
×	2

T	O
3	6
×	2

T	O
1	4
×	7

T	O
2	5
×	3

T	O
4	5
×	2

T	O
1	8
×	5

T	O
2	4
×	4

T	O
2	8
×	3

T	O
2	7
×	2

T	O
2	6
×	3

T	O
2	4
×	3

T	O
4	5
×	2

T	O
2	4
×	3

## MULTIPLICATION OF A 3-DIGIT NUMBER WITH A 1-DIGIT NUMBER (without carrying)

**Example :** Multiply 224 by 2.

**Step 1 :** Multiply the digit 4 in ones place by 2.

4 ones  $\times$  2 = 8 ones. Write 8 in the ones column.

**Step 2 :** Multiply the digit 2 in tens place by 2.

2 tens  $\times$  2 = 4 tens. Write 4 in the tens column.

**Step 3 :** Multiply the digit 2 in hundreds place by 2.

2 hundreds  $\times$  2 = 4 hundreds. Write 4 in the hundreds column.

Answer is 448.

H	T	O
2	2	4
		$\times$ 2
4	4	8

**Find the product.**

H	T	O
2	2	1
		$\times$ 2

H	T	O
3	2	3
		$\times$ 2

H	T	O
2	0	4
		$\times$ 2

H	T	O
2	0	1
		$\times$ 4

H	T	O
3	1	2
		$\times$ 3

H	T	O
3	2	1
		$\times$ 2

H	T	O
3	0	0
		$\times$ 2

H	T	O
1	2	4
		$\times$ 2

H	T	O
2	0	0
		$\times$ 4

H	T	O
3	3	3
		$\times$ 3

H	T	O
2	2	5
		$\times$ 1

H	T	O
2	1	3
		$\times$ 3



## MULTIPLICATION OF A 3-DIGIT NUMBER WITH A 1-DIGIT NUMBER (with carrying)

**Example :** Multiply 224 by 3.

**Step 1 :** Multiply the digit 4 in ones place by 3.  
 $4 \text{ ones} \times 3 = 12 \text{ ones. (1 ten + 2 ones)}$   
 Write 2 in the ones column.  
 Carry 1 ten to the tens column.

**Step 2 :** Multiply the digit 2 in tens place by 3.  
 $2 \text{ tens} \times 3 = 6 \text{ tens.}$   
 Add 1 ten carried from the ones column.  
 $6 \text{ tens} + 1 \text{ ten} = 7 \text{ tens.}$   
 Write 7 in the tens column.

**Step 3 :** Multiply the digit 2 in hundreds place by 3.  
 $2 \text{ hundreds} \times 3 = 6 \text{ hundreds}$   
 Write 6 in the hundreds column.  
 Answer is 672.

H	T	O
2	2	4
		× 3
6	7	2

**Find the product.**

H	T	O
2	6	8
		× 2

H	T	O
3	1	8
		× 2

H	T	O
2	3	7
		× 3

H	T	O
2	4	8
		× 3

H	T	O
3	8	7
		× 2

H	T	O
2	4	5
		× 2

H	T	O
1	6	3
		× 4

H	T	O
1	4	8
		× 4

H	T	O
3	5	8
	×	2

H	T	O
1	3	4
	×	7

H	T	O
2	5	8
	×	3

H	T	O
1	4	5
	×	3

H	T	O
4	2	5
	×	2

H	T	O
2	4	7
	×	3

H	T	O
3	8	5
	×	2

H	T	O
3	6	5
	×	2

H	T	O
1	3	7
	×	4

H	T	O
3	8	4
	×	2

H	T	O
1	5	3
	×	5

H	T	O
1	1	6
	×	6

H	T	O
2	5	0
	×	3

H	T	O
1	2	4
	×	8

H	T	O
3	2	5
	×	2

H	T	O
3	6	7
	×	2

H	T	O
1	8	7
	×	5

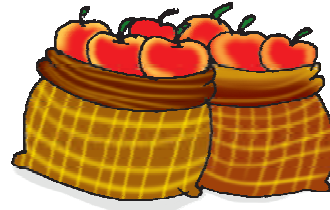
H	T	O
4	5	5
	×	2

H	T	O
1	2	3
	×	8

H	T	O
1	8	8
	×	4

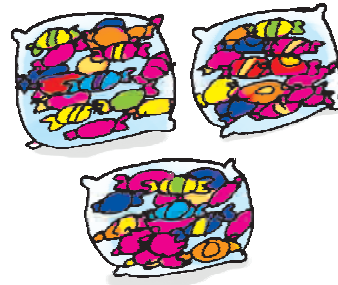
## WORD PROBLEMS

There are 35 bags of apples. Each bag contains 6 apples. How many apples are there in 35 bags ?



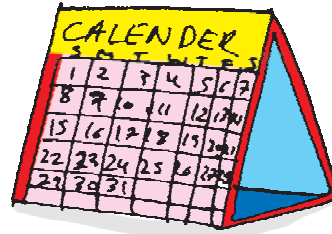
H	T	O
	3	5
	×	6
2	1	0

There are 52 toffees in one packet. How many toffees are there in 3 packets ?



H	T	O

How many days will be there in 32 weeks ? (1 week = 7 days)



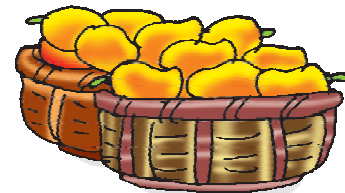
H	T	O

There are 28 rows of trees in a garden. There are 7 trees in each row. How many trees are there in the garden ?



H	T	O

There are 17 mangoes in 1 basket. How many mangoes are there in 4 such baskets ?



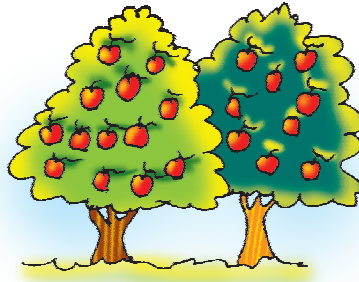
H	T	O

If each boy has 24 toffees, how many toffees do 5 boys have ?



H T O


There are 380 apples on a tree. How many apples are there on 2 trees if they have equal number of apples ?



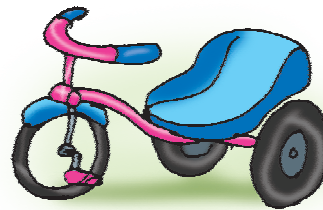
H T O


6 buttons are stitched on each shirt. How many buttons are needed for 129 shirts ?



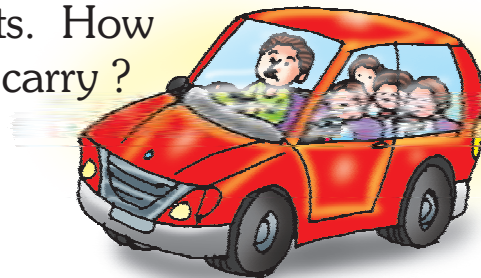
H T O


Each tricycle has 3 wheels. How many wheels will be needed for 243 tricycles ?



H T O


Each car carries 4 students. How many students will 176 cars carry ?



H T O


# WORKSHEET

## 1. Recall and fill up the blanks.

$6 \times 2 = \square$

$3 \times 5 = \square$

$2 \times 4 = \square$

$4 \times 1 = \square$

$10 \times 9 = \square$

$9 \times 10 = \square$

$5 \times 7 = \square$

$7 \times 3 = \square$

$8 \times 8 = \square$

## 2. Multiply.

H	T	O
3	2	
$\times$	2	

H	T	O
4	3	
$\times$	6	

H	T	O
1	2	3
	$\times$	3

H	T	O
3	6	4
	$\times$	2

## 3. Solve these word problems.

How many days are there in 45 weeks ?

H	T	O

How many wheels are there in 236 auto rickshaws ?

H	T	O

There were 3 children standing in 1 row. How many children will stand in 125 rows ?

H	T	O