



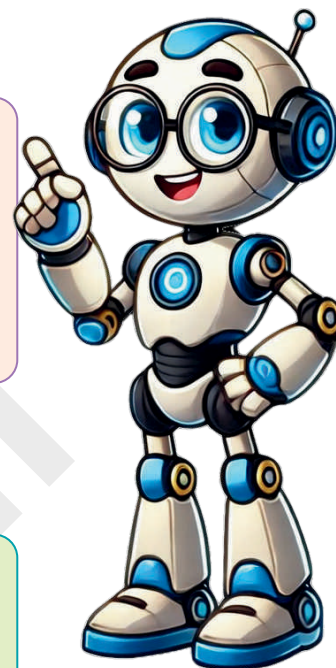
Multiplication

We'll cover the following key points:

- Properties of Multiplication
- Multiplication on the Number line
- Multiplication Tables
- Multiplication by 1-digit Number (Without Carrying)
- Multiplication (With Carry over)

**Do you Remember fundamental concept in previous class:
In class 1st we learnt**

- Multiplication Table of 2
- Multiplication Table of 3
- Multiplication Table of 4
- Multiplication Table of 5
- Combined multiplication Table Chart



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Learning Outcomes

By the end of this chapter, students will be able to:

- Understand and apply the properties of multiplication (e.g., commutative, associative).
- Use a number line to multiply numbers (e.g., skip counting to find the product).
- Learn and recall multiplication tables (e.g., tables of 2, 3, 4, 5).
- Multiply a 2-digit number by a 1-digit number without carrying (e.g., 23×4).
- Multiply a 2-digit number by a 1-digit number with carrying (e.g., 45×6).
- Understand multiplication as repeated addition (e.g., 3×4 is the same as adding 4 three times).
- Solve word problems that involve multiplying numbers up to 100.
- Check the multiplication answers by using repeated addition or skip counting.

Let us add the following:


$$\boxed{2} + \boxed{2} + \boxed{2} = \boxed{6}$$

This is called **repeated addition**. All the equal groups are added to find the total.
3 groups of 2 makes 6.

We can write this in a shorter way *i.e.*

$$2 \times 3 = 6$$

We use a special sign 'x'.

The symbol 'x' stands for multiplication.

In $2 \times 3 = 6$,

6 is called the **product**.

2 and 3 are called the **factors**.



1 boy has two legs.

4 boys have $2 + 2 + 2 + 2 = 8$ legs.
In multiplication, it is written as $2 \times 4 = 8$
We say that four 2's are eight.

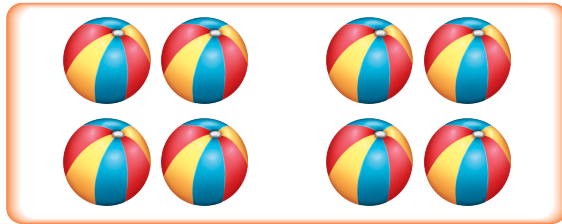


1 cow has 4 legs.

5 cows have $4 + 4 + 4 + 4 + 4 = 20$ legs.
In multiplication, it is written as $4 \times 5 = 20$
We say that five 4's are twenty.

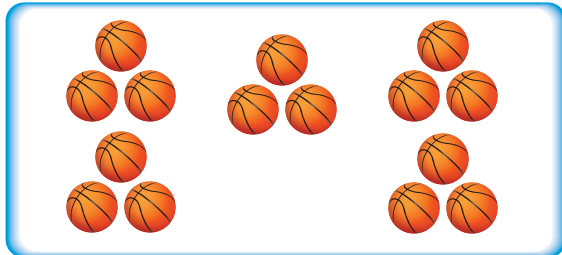


Let us study the following:



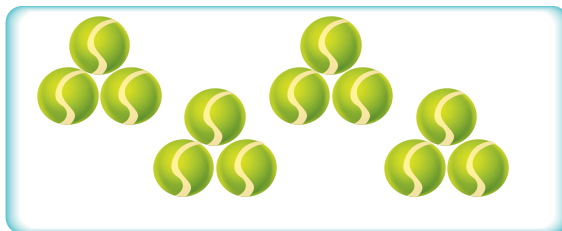
4 groups of
2 make 8.

or $2 \times 4 = 8$



5 groups of
3 make 15.

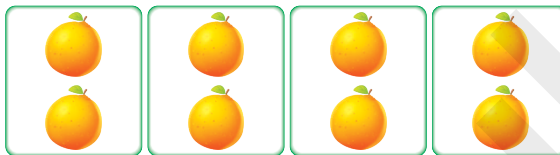
or $3 \times 5 = 15$



4 groups of
3 make 12.

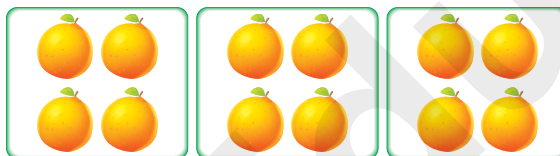
or $3 \times 4 = 12$

Let us try.



4 groups of
2 make ____.

or $2 \times 4 = \underline{\quad}$

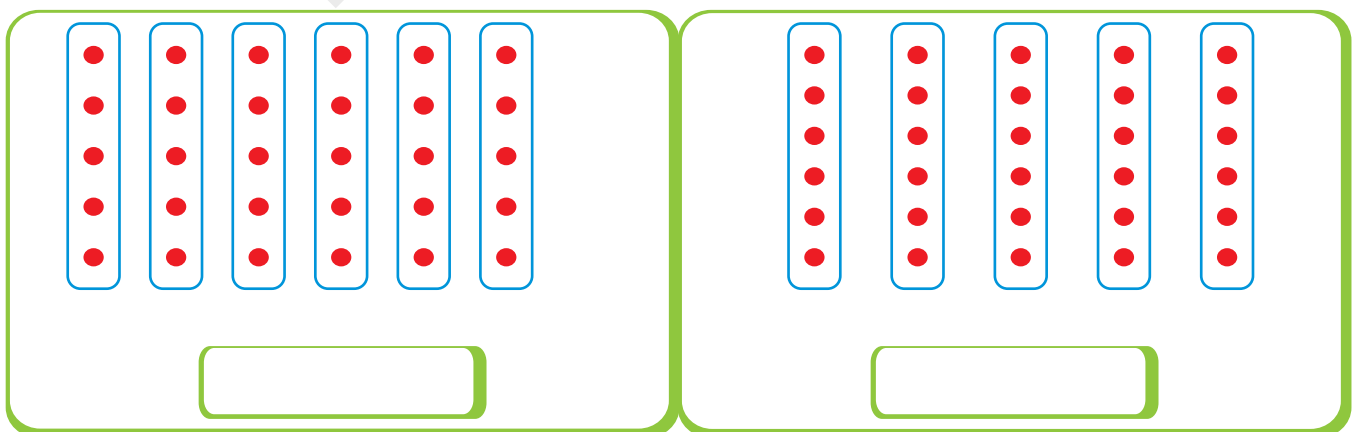


3 groups of
4 make ____.

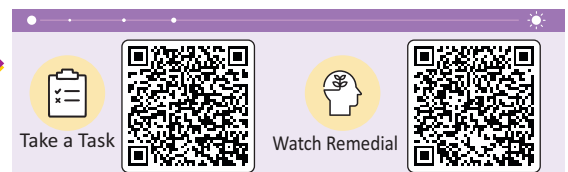
or $4 \times 3 = \underline{\quad}$

Properties of Multiplication

1. When we change the order of the factors, the product remains same. Example:



In both the cases, $5 \times 6 = 30$ and $6 \times 5 = 30$.



2. When a number is multiplied by 0, the product becomes 0.

For examples :

$$16 \times 0 = 0$$

$$251 \times 0 = 0$$

$$348 \times 0 = 0$$

3. When a number is multiplied by 1, the product becomes the number itself.

For examples :

$$9 \times 1 = 9$$

$$135 \times 1 = 135$$

$$492 \times 1 = 492$$



Exercise 5.1

1. Fill in the boxes.

- (a) $2 + 2 + 2 + 2 =$ \rightarrow 4 times 2 is \rightarrow $2 \times 4 =$
- (b) $5 + 5 + 5 =$ \rightarrow 3 times 5 is \rightarrow $3 \times 5 =$
- (c) $7 + 7 + 7 + 7 =$ \rightarrow 4 times 7 is \rightarrow $4 \times 7 =$
- (d) $8 + 8 + 8 + 8 + 8 + 8 =$ \rightarrow 6 times 8 is \rightarrow $6 \times 8 =$

2. Match the columns.

Column A

- (a) $5 + 5 + 5 + 5$
(b) $8 + 8 + 8 + 8 + 8$
(c) $3 + 3 + 3 + 3$
(d) $6 + 6 + 6 + 6$
(e) $2 + 2 + 2 + 2 + 2$

Column B

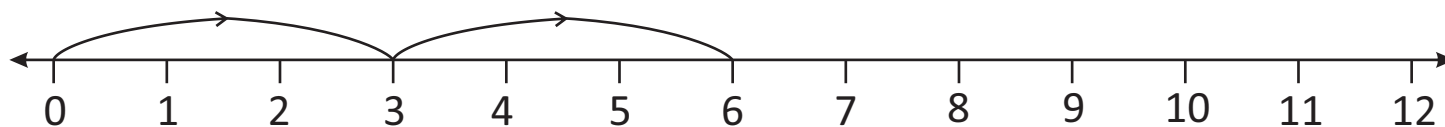
- (i) $8 \times 5 = 40$
(ii) $2 \times 5 = 10$
(iii) $5 \times 4 = 20$
(iv) $3 \times 4 = 12$
(v) $6 \times 4 = 24$

3. Solve the following:

- (a) $16 \times 1 = 16$
(c) $1 \times 97 =$
(e) $0 \times 938 =$
(g) $128 \times 0 =$
(i) $0 \times 157 =$
- (b) $8 \times 0 =$
(d) $399 \times 1 =$
(f) $\times 1 = 588$
(h) $17 \times 1 =$
(j) $125 \times 0 =$

Multiplication on the Number line

With the help of number line, Let us find 3×2 .



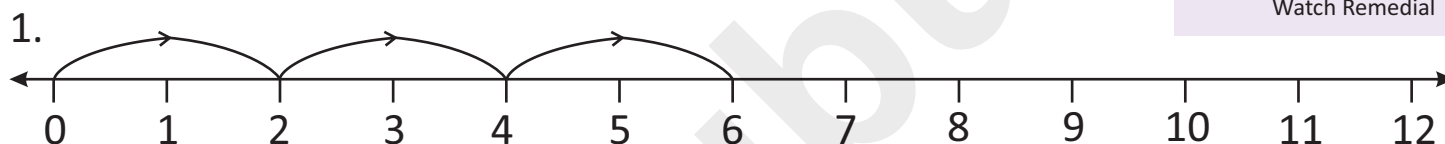
For multiplication, start from 0 and mark 2 groups of 3's to the right of 0. We will reach at the point 6.

We get 2 jumps of 3 equal steps (2 times 3)

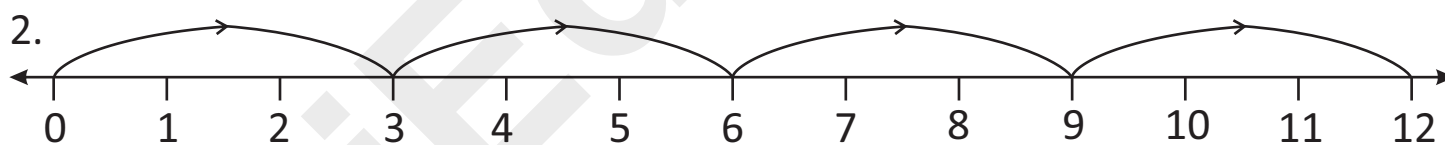
$$3 + 3 = 6 \quad \text{or} \quad 3 \times 2 = 6$$

Try it.

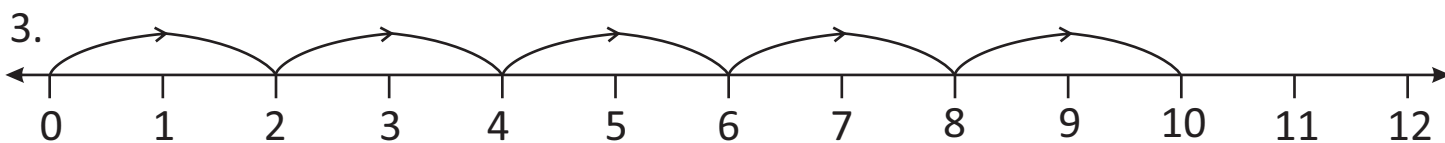
Fill in the boxes. One has been done for you.



$$2 + 2 + 2 = 6 \quad \text{or} \quad 2 \times 3 = 6$$



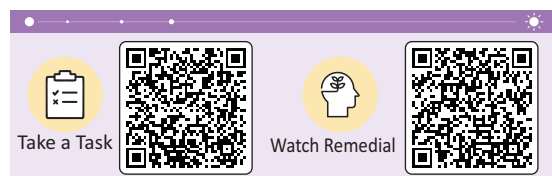
$$\square + \square + \square + \square = \square \quad \text{or} \quad \square \times \square = \square$$













$$\square + \square + \square + \square + \square = \square \quad \text{or} \quad \square \times \square = \square$$




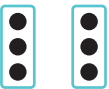

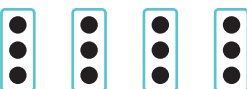






Multiplication Tables

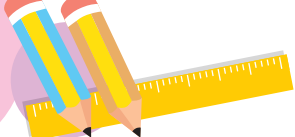


Multiplication Table of 2.





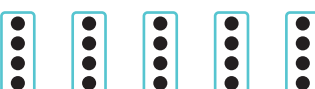





 2	one time two is 2	$2 \times 1 = 2$
 $2 + 2$	two times two is 4	$2 \times 2 = 4$
 $2 + 2 + 2$	three times two is 6	$2 \times 3 = 6$
 $2 + 2 + 2 + 2$	four times two is 8	$2 \times 4 = 8$
 $2 + 2 + 2 + 2 + 2$	five times two is 10	$2 \times 5 = 10$
 $2 + 2 + 2 + 2 + 2 + 2$	six times two is 12	$2 \times 6 = 12$
 $2 + 2 + 2 + 2 + 2 + 2 + 2$	seven times two is 14	$2 \times 7 = 14$
 $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$	eight times two is 16	$2 \times 8 = 16$
 $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$	nine times two is 18	$2 \times 9 = 18$
 $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$	ten times two is 20	$2 \times 10 = 20$

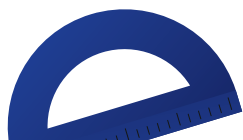
Multiplication Table of 3.

 3	one time three is 3	$3 \times 1 = 3$
 3 + 3	two times three is 6	$3 \times 2 = 6$
 3 + 3 + 3	three times three is 9	$3 \times 3 = 9$
 3 + 3 + 3 + 3	four times three is 12	$3 \times 4 = 12$
 3 + 3 + 3 + 3 + 3	five times three is 15	$3 \times 5 = 15$
 3 + 3 + 3 + 3 + 3 + 3	six times three is 18	$3 \times 6 = 18$
 3 + 3 + 3 + 3 + 3 + 3 + 3	seven times three is 21	$3 \times 7 = 21$
 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3	eight times three is 24	$3 \times 8 = 24$
 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3	nine times three is 27	$3 \times 9 = 27$
 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3	ten times three is 30	$3 \times 10 = 30$



Multiplication Table of 4.

 4	one time four is 4	$4 \times 1 = 4$
 $4 + 4$	two times four is 8	$4 \times 2 = 8$
 $4 + 4 + 4$	three times four is 12	$4 \times 3 = 12$
 $4 + 4 + 4 + 4$	four times four is 16	$4 \times 4 = 16$
 $4 + 4 + 4 + 4 + 4$	five times four is 20	$4 \times 5 = 20$
 $4 + 4 + 4 + 4 + 4 + 4$	six times four is 24	$4 \times 6 = 24$
 $4 + 4 + 4 + 4 + 4 + 4 + 4$	seven times four is 28	$4 \times 7 = 28$
 $4 + 4 + 4 + 4 + 4 + 4 + 4 + 4$	eight times four is 32	$4 \times 8 = 32$
 $4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4$	nine times four is 36	$4 \times 9 = 36$
 $4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4$	ten times four is 40	$4 \times 10 = 40$



Multiplication Table of 5 and 6.

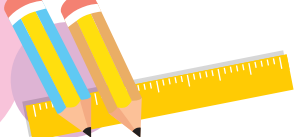
$5 \times 1 = 5$	one time five is 5
$5 \times 2 = 10$	two times five is 10
$5 \times 3 = 15$	three times five is 15
$5 \times 4 = 20$	four times five is 20
$5 \times 5 = 25$	five times five is 25
$5 \times 6 = 30$	six times five is 30
$5 \times 7 = 35$	seven times five is 35
$5 \times 8 = 40$	eight times five is 40
$5 \times 9 = 45$	nine times five is 45
$5 \times 10 = 50$	ten times five is 50

$6 \times 1 = 6$	one time six is 6
$6 \times 2 = 12$	two times six is 12
$6 \times 3 = 18$	three times six is 18
$6 \times 4 = 24$	four times six is 24
$6 \times 5 = 30$	five times six is 30
$6 \times 6 = 36$	six times six is 36
$6 \times 7 = 42$	seven times six is 42
$6 \times 8 = 48$	eight times six is 48
$6 \times 9 = 54$	nine times six is 54
$6 \times 10 = 60$	ten times six is 60

Multiplication Table of 7 and 8.

$7 \times 1 = 7$	one time seven is 7
$7 \times 2 = 14$	two times seven is 14
$7 \times 3 = 21$	three times seven is 21
$7 \times 4 = 28$	four times seven is 28
$7 \times 5 = 35$	five times seven is 35
$7 \times 6 = 42$	six times seven is 42
$7 \times 7 = 49$	seven times seven is 49
$7 \times 8 = 56$	eight times seven is 56
$7 \times 9 = 63$	nine times seven is 63
$7 \times 10 = 70$	ten times seven is 70

$8 \times 1 = 8$	one time eight is 8
$8 \times 2 = 16$	two times eight is 16
$8 \times 3 = 24$	three times eight is 24
$8 \times 4 = 32$	four times eight is 32
$8 \times 5 = 40$	five times eight is 40
$8 \times 6 = 48$	six times eight is 48
$8 \times 7 = 56$	seven times eight is 56
$8 \times 8 = 64$	eight times eight is 64
$8 \times 9 = 72$	nine times eight is 72
$8 \times 10 = 80$	ten times eight is 80



Multiplication Table of 9 and 10.

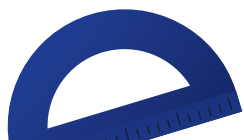
$9 \times 1 = 9$	one time nine is 9
$9 \times 2 = 18$	two times nine is 18
$9 \times 3 = 27$	three times nine is 27
$9 \times 4 = 36$	four times nine is 36
$9 \times 5 = 45$	five times nine is 45
$9 \times 6 = 54$	six times nine is 54
$9 \times 7 = 63$	seven times nine is 63
$9 \times 8 = 72$	eight times nine is 72
$9 \times 9 = 81$	nine times nine is 81
$9 \times 10 = 90$	ten times nine is 90

$10 \times 1 = 10$	one time ten is 10
$10 \times 2 = 20$	two times ten is 20
$10 \times 3 = 30$	three times ten is 30
$10 \times 4 = 40$	four times ten is 40
$10 \times 5 = 50$	five times ten is 50
$10 \times 6 = 60$	six times ten is 60
$10 \times 7 = 70$	seven times ten is 70
$10 \times 8 = 80$	eight times ten is 80
$10 \times 9 = 90$	nine times ten is 90
$10 \times 10 = 100$	ten times ten is 100

Multiplication Table of 11 and 12.

$11 \times 1 = 11$	one time eleven is 11
$11 \times 2 = 22$	two times eleven is 22
$11 \times 3 = 33$	three times eleven is 33
$11 \times 4 = 44$	four times eleven is 44
$11 \times 5 = 55$	five times eleven is 55
$11 \times 6 = 66$	six times eleven is 66
$11 \times 7 = 77$	seven times eleven is 77
$11 \times 8 = 88$	eight times eleven is 88
$11 \times 9 = 99$	nine times eleven is 99
$11 \times 10 = 110$	ten times eleven is 110

$12 \times 1 = 12$	one time twelve is 12
$12 \times 2 = 24$	two times twelve is 24
$12 \times 3 = 36$	three times twelve is 36
$12 \times 4 = 48$	four times twelve is 48
$12 \times 5 = 60$	five times twelve is 60
$12 \times 6 = 72$	six times twelve is 72
$12 \times 7 = 84$	seven times twelve is 84
$12 \times 8 = 96$	eight times twelve is 96
$12 \times 9 = 108$	nine times twelve is 108
$12 \times 10 = 120$	ten times twelve is 120



Combined Multiplication Tables.

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100



Exercise 5.2

1. Fill in the blanks.

- | | | |
|---|---|--|
| (a) $2 \times 8 =$ <input type="text"/> | (b) $8 \times 5 =$ <input type="text"/> | (c) $9 \times 3 =$ <input type="text"/> |
| (d) $3 \times 4 =$ <input type="text"/> | (e) $4 \times 2 =$ <input type="text"/> | (f) $10 \times 9 =$ <input type="text"/> |
| (g) $7 \times 8 =$ <input type="text"/> | (h) $9 \times 6 =$ <input type="text"/> | (i) $12 \times 2 =$ <input type="text"/> |
| (j) $9 \times 5 =$ <input type="text"/> | (k) $4 \times 7 =$ <input type="text"/> | (l) $11 \times 3 =$ <input type="text"/> |
| (m) $6 \times 3 =$ <input type="text"/> | (n) $5 \times 3 =$ <input type="text"/> | (o) $10 \times 5 =$ <input type="text"/> |
| (p) $7 \times 5 =$ <input type="text"/> | (q) $9 \times 4 =$ <input type="text"/> | (r) $7 \times 4 =$ <input type="text"/> |

2. Match the following columns:

Column A

- (a) 6×7
- (b) 9×4
- (c) 7×9
- (d) 8×8
- (e) 10×6

Column B

- (i) 36
- (ii) 63
- (iii) 42
- (iv) 64
- (v) 60



Mental Math

Fill in the boxes.

1. 4 groups of 6 oranges make groups of 3 oranges.
2. 7 groups of 4 mangoes make 14 groups of mangoes.
3. 3 groups of ice-creams make 9 groups of 3 ice-creams.
4. groups of 2 dogs make 5 groups of 4 dogs.



Critical Thinking

Multiplication by 1-digit Number (Without Carrying)

Example 1 : Multiply 24 by 2.

Solution : Expanded Form

T O

24 \rightarrow 2 tens + 4 ones

$\times 2$

$\times 2$

4 tens + 8 ones

2 tens $\times 2 = 4$ tens
i.e. $20 \times 2 = 40$

4 ones $\times 2 = 8$ ones
i.e. $4 \times 2 = 8$

Thus, 4 tens + 8 ones = $40 + 8 = 48$

Hence, $24 \times 2 = 48$.



Short Form

T	O
2	4
×	2
4	8

→ 4 ones \times 2 = 8 ones

→ 2 tens \times 2 = 4 tens

Thus, 4 tens + 8 ones = 48

Hence, $24 \times 2 = 48$.

Example 2 : Multiply 234 by 2.

Solution : Expanded Form

H	T	O
2	3	4
	×	2
4	6	8

Steps :

4 ones \times 2 = 8 ones

3 tens \times 2 = 6 tens

2 hundreds \times 2 = 4 hundreds

Hence, $234 \times 2 = 468$.

Example 3 : Multiply 231 by 3.

Solution :

Step 1 : Multiply the ones digit by 3.

1 ones \times 3 = 3 ones

Write 3 in the ones place.

Step 2 : Multiply the tens digit by 3.

3 tens \times 3 = 9 tens

Write 9 in the tens place.

Step 3 : Multiply the hundreds digit by 3.

2 hundreds \times 3 = 6 hundreds

Write 6 in the hundreds place.

Thus, $231 \times 3 = 693$.

H	T	O
2	3	1
	×	3
6	9	3



Exercise 5.3

1. Multiply.

(a)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 4 \quad 2 \quad 2 \\ \times 2 \\ \hline \end{array}$$

(b)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 2 \quad 2 \\ \times 2 \\ \hline \end{array}$$

(c)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 2 \quad 1 \quad 3 \\ \times 3 \\ \hline \end{array}$$

(d)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 2 \quad 1 \quad 2 \\ \times 1 \\ \hline \end{array}$$

(e)
$$\begin{array}{r} 2 \quad 1 \quad 3 \\ \times 2 \\ \hline \end{array}$$

(f)
$$\begin{array}{r} 2 \quad 1 \quad 4 \\ \times 2 \\ \hline \end{array}$$

(g)
$$\begin{array}{r} 3 \quad 2 \quad 4 \\ \times 2 \\ \hline \end{array}$$

(h)
$$\begin{array}{r} 2 \quad 0 \quad 5 \\ \times 1 \\ \hline \end{array}$$

(i)
$$\begin{array}{r} 3 \quad 1 \quad 2 \\ \times 2 \\ \hline \end{array}$$

(j)
$$\begin{array}{r} 1 \quad 2 \quad 2 \\ \times 3 \\ \hline \end{array}$$

(k)
$$\begin{array}{r} 4 \quad 2 \quad 1 \\ \times 2 \\ \hline \end{array}$$

(l)
$$\begin{array}{r} 3 \quad 4 \quad 1 \\ \times 2 \\ \hline \end{array}$$

2. Write T for true and F for false.

(a) $519 \times 1 = 519$

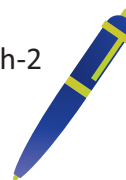
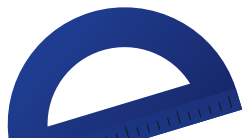
(b) $128 \times 0 = 0$

(c) $312 \times 2 = 312$

(d) $423 \times 2 = 846$

(e) $989 \times 2 = 988$

(f) $675 \times 0 = 675$



Multiplication (With Carry over)

Multiplication by 1 – digit number with carrying

Example 1 : Multiply 36 by 2.

Solution : Expanded Form

T	O
---	---

$$\begin{array}{r} 36 \\ \times 2 \\ \hline \end{array} \rightarrow \begin{array}{r} 3 \text{ tens} + 6 \text{ ones} \\ \times 2 \\ \hline 6 \text{ tens} + 12 \text{ ones} \end{array}$$

$$3 \text{ tens} \times 2 = 6 \text{ tens}$$

$$6 \text{ ones} \times 2 = 12 \text{ ones}$$

$$\begin{aligned} &= 6 \text{ tens} + 12 \text{ ones} = 6 \text{ tens} + 1 \text{ ten} + 2 \text{ ones} \\ &= 7 \text{ tens} + 2 \text{ ones} = 7 \times 10 + 2 \times 1 = 70 + 2 = 72 \\ &\text{Thus, } 36 \times 2 = 72. \end{aligned}$$



Short Form

T	O
1	
3	6
\times	2
7	12

Steps :

$$\begin{aligned} 6 \text{ ones} \times 2 &= 12 \text{ ones} \\ &= 1 \text{ ten} + 2 \text{ ones} \end{aligned}$$

Now, carry 1 ten to tens column and write 2 under ones column.

$$\begin{aligned} 3 \text{ tens} \times 2 &= 6 \text{ tens} \\ 1 \text{ ten} + 6 \text{ tens} &= 7 \text{ tens} \end{aligned}$$

Write 7 under tens column.

$$\text{Thus, } 36 \times 2 = 72.$$

Example 2 : Find the product of 286 and 3.

Solution : Expanded Form

$$\begin{array}{r} 286 \\ \times 3 \\ \hline \end{array} \rightarrow \begin{array}{r} 2 \text{ hundreds} + 8 \text{ tens} + 6 \text{ ones} \\ \times 3 \\ \hline 6 \text{ hundreds} + 24 \text{ tens} + 18 \text{ ones} \end{array}$$

$$2 \text{ hundreds} \times 3 = 6 \text{ hundreds}$$

$$8 \text{ tens} \times 3 = 24 \text{ tens}$$

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

$= 6 \text{ hundreds} + 24 \text{ tens} + 18 \text{ ones}$
 $= 6 \text{ hundreds} + (20 \text{ tens} + 4 \text{ tens}) + (10 \text{ ones} + 8 \text{ ones})$
 $= 6 \text{ hundreds} + 2 \text{ hundreds} + 4 \text{ tens} + 1 \text{ ten} + 8 \text{ ones}$
 $= 8 \text{ hundreds} + 5 \text{ tens} + 8 \text{ ones}$
 $= 8 \times 100 + 5 \times 10 + 8 \times 1 = 858$
 Thus, $286 \times 3 = 858$.

Short Form

H	T	O
<u>2</u>	<u>1</u>	
2	8	6
	\times	3
8	5	8

Steps

1. $6 \text{ ones} \times 3 = 18 \text{ ones} = 1 \text{ ten} + 8 \text{ ones}$
2. Carry 1 over to the tens column and write 8 under ones column.
3. $8 \text{ tens} \times 3 = 24 \text{ tens} + 1 \text{ ten} = 25 \text{ tens} = 2 \text{ hundreds} + 5 \text{ tens}$
4. Carry 2 over to the hundreds column and write 5 under tens column.
5. $2 \text{ hundreds} \times 3 = 6 \text{ hundreds} + 2 \text{ hundreds (carried over)} = 6 + 2 = 8 \text{ hundreds}$.
Write 8 under hundreds columns.

Thus, $286 \times 3 = 858$.



Exercise 5.4

1. Find the product. One has been done for you.

(a)

T	O
3	9
\times	3
<u>117</u>	

(b)

T	O
4	5
\times	7

(c)

T	O
5	3
\times	7

(d)

T	O
6	4
\times	8

(e)

T	O
6	3
\times	2

(f)

5	8
\times	3

(g)

8	2
\times	4

(h)

7	5
\times	2

(i)

4	7
\times	4

(j)

9	6
\times	2

(k)

3	9
\times	2

(l)

4	8
\times	2

(m)

7	3
\times	3

(n)

6	3
\times	8

(o)

9	3
\times	4

2. Multiply the following:

- (a) $\begin{array}{r} 205 \\ \times 3 \\ \hline \end{array}$ (b) $\begin{array}{r} 228 \\ \times 4 \\ \hline \end{array}$ (c) $\begin{array}{r} 245 \\ \times 4 \\ \hline \end{array}$ (d) $\begin{array}{r} 251 \\ \times 3 \\ \hline \end{array}$
- (e) $\begin{array}{r} 305 \\ \times 2 \\ \hline \end{array}$ (f) $\begin{array}{r} 231 \\ \times 4 \\ \hline \end{array}$ (g) $\begin{array}{r} 128 \\ \times 4 \\ \hline \end{array}$ (h) $\begin{array}{r} 150 \\ \times 8 \\ \hline \end{array}$
- (i) $\begin{array}{r} 108 \\ \times 3 \\ \hline \end{array}$ (j) $\begin{array}{r} 608 \\ \times 4 \\ \hline \end{array}$ (k) $\begin{array}{r} 460 \\ \times 3 \\ \hline \end{array}$ (l) $\begin{array}{r} 235 \\ \times 5 \\ \hline \end{array}$

3. Problems on multiplication. One has been done for you.

- (a) There are 46 pencils in a bundle. How many pencils are there in 2 bundles?

Solution: $\begin{array}{r} 46 \\ \times 2 \\ \hline \end{array}$ pencils

$$\begin{array}{r} 46 \\ \times 2 \\ \hline 92 \end{array}$$

92 pencils

$$\begin{array}{r} \text{T} \quad \text{O} \\ 46 \\ \times 2 \\ \hline 92 \end{array}$$

- (b) 68 peoples can travel in a bus. How many peoples can travel in 3 buses?

Solution: $\begin{array}{r} \square \\ \times \square \\ \hline \end{array}$ peoples

$$\begin{array}{r} \square \\ \times \square \\ \hline \square \end{array}$$

\square peoples

$$\begin{array}{r} \text{T} \quad \text{O} \\ \square \\ \times \square \\ \hline \square \end{array}$$

- (c) There are 7 baskets of apples. If each basket contains 45 apples, how many apples are there in all?

Solution: $\begin{array}{r} \square \\ \times \square \\ \hline \end{array}$ apples

$$\begin{array}{r} \square \\ \times \square \\ \hline \square \end{array}$$

\square apples

$$\begin{array}{r} \text{T} \quad \text{O} \\ \square \\ \times \square \\ \hline \square \end{array}$$

- (d) How many days are there in 37 weeks, if each week contains 7 days?

Solution: weeks
 \times

 days

T	O
<input type="text"/>	<input type="text"/>
\times	<input type="text"/>
<hr/>	
<input type="text"/>	

- (e) There are 205 balls in a packet. How many balls are there in 6 such packets?

Solution: balls
 \times

 balls

T	O
<input type="text"/>	<input type="text"/>
\times	<input type="text"/>
<hr/>	
<input type="text"/>	

- (f) If there are 53 boys in a row, find the number of boys in 4 such rows.

Solution: boys
 \times

 boys

T	O
<input type="text"/>	<input type="text"/>
\times	<input type="text"/>
<hr/>	
<input type="text"/>	



Mental Math

1. Fill in the boxes.

(a) 3 times 8 = times 4

(b) 4 times 3 = 2 times

(c) 7 times = 8 times 7

(d) times 4 = 8 times 5

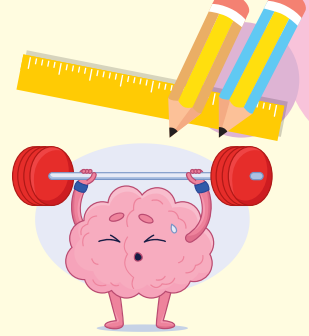
(e) $258 \times 42 = 42 \times$

(f) $45 \times 115 =$ $\times 45$

(g) $168 \times 0 =$ $\times 168$



Gap Analyzer™

**Think Tank****1. Tick (✓) the correct answer.**

(a) $3 \times 6 =$ _____.

(i) 6

☐

(ii) 18

☐

(iii) 3

☐

(b) $6 + 6 + 6 + 6 + 6 =$ _____.

(i) 6×6 ☐(ii) 6×4 ☐(iii) 6×5 ☐

(c) $0 \times 5 =$ _____.

(i) 5

☐

(ii) 0

☐

(iii) 50

☐

(d) $7 \times 6 =$ _____.

(i) 22

☐

(ii) 24

☐

(iii) 42

☐**2. Multiply the following:**

(a)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 3 \quad 1 \quad 2 \\ \times 2 \\ \hline \end{array}$$

(b)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 5 \quad 2 \quad 1 \\ \times 3 \\ \hline \end{array}$$

(c)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 0 \quad 3 \\ \times 3 \\ \hline \end{array}$$

(d)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 0 \quad 5 \\ \times 2 \\ \hline \end{array}$$

(e)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 2 \quad 0 \quad 1 \\ \times 3 \\ \hline \end{array}$$

(f)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 3 \quad 1 \quad 4 \\ \times 3 \\ \hline \end{array}$$

(g)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 1 \quad 0 \\ \times 7 \\ \hline \end{array}$$

(h)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 2 \quad 0 \quad 2 \\ \times 3 \\ \hline \end{array}$$

(i)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 5 \quad 3 \quad 0 \\ \times 3 \\ \hline \end{array}$$

(j)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 4 \quad 4 \quad 4 \\ \times 2 \\ \hline \end{array}$$

(k)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 1 \quad 1 \\ \times 6 \\ \hline \end{array}$$

(l)
$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 0 \quad 7 \\ \times 9 \\ \hline \end{array}$$

3. Fill in the blanks.

(a) $5 + 5 + 5 + 5 = \underline{\hspace{2cm}} \times 7$

(e) $\underline{\hspace{2cm}} \times 199 = 199$

(b) $43 \times 2 = \underline{\hspace{2cm}}$.

(f) $345 \times \underline{\hspace{2cm}} = 0$

(c) $0 \times 8 = \underline{\hspace{2cm}}$.

(g) $275 \times \underline{\hspace{2cm}} = 275$

(d) $3 \times 7 = \underline{\hspace{2cm}}$.

(h) $\underline{\hspace{2cm}} \times 999 = 999$

4. Match the following:

(a) 6×8

(i) $3 + 3 + 3 + 3 + 3$

(b) 5×4

(ii) $6 + 6 + 6 + 6 + 6 + 6 + 6 + 6$

(c) 2×9

(iii) $5 + 5 + 5 + 5$

(d) 3×5

(iv) $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$

Custom Learning Path

Scan to Create
Your Own
Learning Path



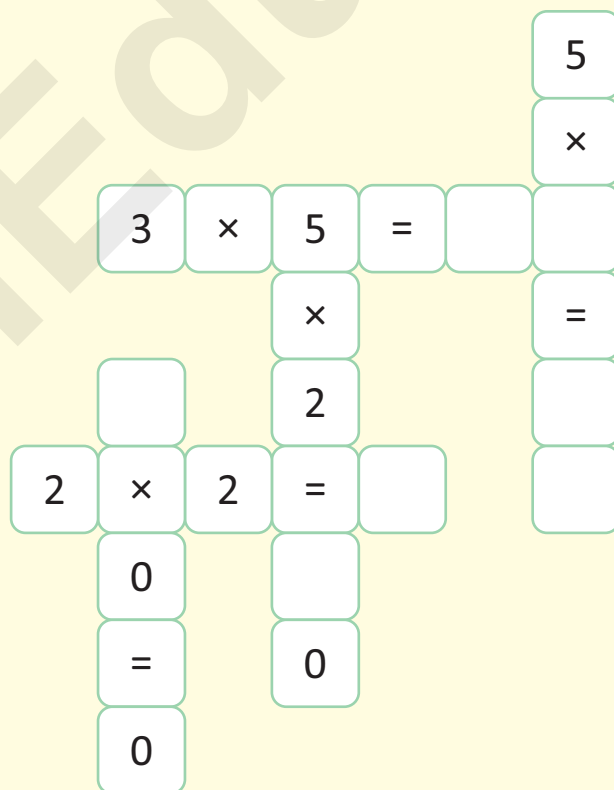
Math Puzzle



Solve the puzzle.



Critical Thinking





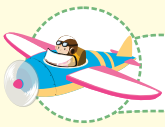
Mental Math



Experiential Learning

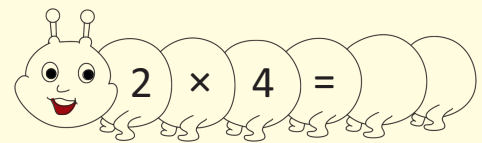
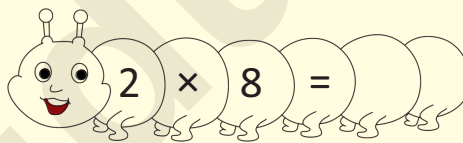
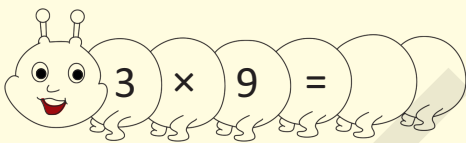
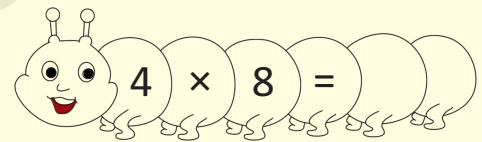
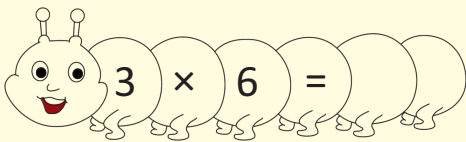
Write T for True or F for False.

1. $10 \times 10 = 110$
2. 9 multiplied by 2 is 18.
3. $2 + 2 + 2 + 2 = 10 \times 2$
4. $0 \times 2 = 2$
5. $419 \times 0 = 419$



Fun Time Activity

Multiply on Caterpillar.



Maths Lab Activity



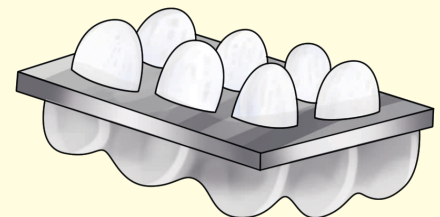
Collaboration

Objective : To exhibit the understanding of multiplication.

Materials required : egg-tray, gram seeds and multiplication fact cards
(Without the answer)

Procedure


- Make pairs of students for this activity.
- Students can work independently or in pairs with one egg-tray and a bowl of gram seeds.





- One student picks a card say 2×4 .
- The other student does the multiplication sum on the egg-tray as shown and says “4 groups of 2”.
- The first student then calls out and record the answer “ $2 \times 4 = 8$ ”.
- The students repeat the activity with the other cards.

Record the activity

1.	2×4		$2 \times 4 = 8$
2.			
3.			
4.			
5.			
6.			



Critical Thinking

Multiply and use your answer to solve the riddle.

$$5 \times 4 = \underline{\quad\quad\quad}$$

A

$$9 \times 0 = \underline{\quad\quad\quad}$$

W

$$3 \times 9 = \underline{\quad\quad\quad}$$

V

$$8 \times 5 = \underline{\quad\quad\quad}$$

E

$$1 \times 7 = \underline{\quad\quad\quad}$$

A

$$6 \times 3 = \underline{\quad\quad\quad}$$

T

$$5 \times 2 = \underline{\quad\quad\quad}$$

E

$$2 \times 6 = \underline{\quad\quad\quad}$$

S

$$4 \times 2 = \underline{\quad\quad\quad}$$

R

Turn Off The Taps For

12	7	27	40

0	20	18	10	8

