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SESSION	**: 7**
CLASS	**: IV**
SUBJECT	**: MATHEMATICS**
CHAPTER NUMBER	**: 6**
CHAPTER NAME	**: MULTIPLICATION**
SUBTOPIC	**: Exercise-6 A &**
	PROPERTIES OF MULTIPLICATION

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Sishu Vihar, Infocity Road, Patia, Bhubaneswar- 751024

MULTIPLICATION

Let us revise multiplication by 2-digit numbers.

Example - 1 98 by 98

ANSWER

	Th	H	T	O	
			9	8	
			×	8	
			7	8	→ 98 × 8
	①				
+		8	8	0	→ 98 × 90
	9,	2	6	0	4

EXERCISE – 6(A)

Multiply in your Notebook.

(a) 64 × 45

ANSWER

	Th	H	T	O	
			6	4	
×			4	5	
			3	2	→ 64 × 5
+		2	5	6	→ 64 × 40
	2,	8	8	0	

EXERCISE – 6(A)

Multiply in your Notebook.

(b) 58 × 72

ANSWER

	Th	H	T	O	
			7	2	
			×		
			5	8	
	①				⟶ 72 × 8
+		3	7	6	⟶ 72 × 50
	4,	0	1	7	0 6

EXERCISE – 6(A)

Multiply in your Notebook.

(c) 49 × 36

ANSWER

	Th	H	T	O	
			4	9	
			×	3	
				6	
		①			
			2	9	→ 49 × 6
+		1	4		→ 49 × 30
	1,	7	7	6	0 4

EXERCISE – 6(A)

Multiply in your Notebook.

(d) 82 × 27

ANSWER

	Th	H	T	O	
			8	2	
			×	2	
			7	7	
		①			
	①				
			5	4	→ 82 × 7
+		1	6	4	→ 82 × 20
	2,	4	2	1	0 4

EXERCISE – 6(A)

Multiply in your Notebook.

(e) 94 × 89

ANSWER

	Th	H	T	O	
			9	4	
			×		
			8	9	
		①			→ 94 × 9
+		7	4	5	→ 94 × 80
	8,	2	3	6	6

PROPERTIES OF MULTIPLICATION

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1. When a number is multiplied by 1, then the product is always the number itself.

EXAMPLE

$$9{,}784 \times 1 = 9{,}784$$

$$24{,}623 \times 1 = 24{,}623$$

PROPERTIES OF MULTIPLICATION

ODM EDUCATIONAL GROUP
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2. When a number is multiplied by 0, then the product is always 0.

EXAMPLE

$$867 \times 0 = 0$$

$$98{,}999 \times 0 = 0$$

PROPERTIES OF MULTIPLICATION

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3. Commutative property of multiplication : when two numbers are multiplied, the product of these numbers will not change even when the order of the numbers is changed.

EXAMPLE

3,113 × 26 = 80,938

26 × 31,13 = 80,938

3,113 × 26 = 26 × 3,113

PROPERTIES OF MULTIPLICATION

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4. Associative property of multiplication : when two or more numbers are grouped and multiplied, the product does not change even if we change the groupings.

EXAMPLE

$$(15 \times 321) \times 27 = 4{,}815 \times 27$$

$$15 \times (321 \times 27) = 15 \times 8{,}667$$

$$(15 \times 321) \times 27 = 15 \times (321 \times 27) = 1{,}30{,}005$$

PROPERTIES OF MULTIPLICATION

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5. Distributive property of multiplication : when multiplying a sum of two or more numbers by a number, we can first add the numbers and then multiply or we can multiply each added first with the number and then add the products. The answer remain the same.

EXAMPLE

$$(15 + 11 + 3) \times 100$$
$$= 29 \times 100$$
$$= 2{,}900$$

$$(15 + 11 + 3) \times 100$$
$$= (15 \times 100) + (11 \times 100) + (3 \times 100)$$
$$= 1{,}500 + 1{,}100 + 300$$
$$= 2{,}900$$

HOME ASSIGNMENT:

- **Complete Exercise – 6 A in the notebook.**

LEARNING OUTCOME:

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Students are able to recall multiplication by 2-digit numbers and understand the properties of multiplication.

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SESSION	**: 8**
CLASS	**: IV**
SUBJECT	**: MATHEMATICS**
CHAPTER NUMBER	**: 6**
CHAPTER NAME	**: MULTIPLICATION**
SUBTOPIC	**: PROPERTIES OF MULTIPLICATION & MULTIPLYING BY 10,100,1000**

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PROPERTIES OF MULTIPLICATION

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EXAMPLE

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PROPERTIES OF MULTIPLICATION

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PROPERTIES OF MULTIPLICATION

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EXAMPLE

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PROPERTIES OF MULTIPLICATION

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PROPERTIES OF MULTIPLICATION

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EXAMPLE

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$$= 29 \times 100$$
$$= 2{,}900$$

$$(15 + 11 + 3) \times 100$$
$$= (15 \times 100) + (11 \times 100) + (3 \times 100)$$
$$= 1{,}500 + 1{,}100 + 300$$
$$= 2{,}900$$

MULTIPLYING A NUMBER BY 10, 100, 1000, ETC.

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This method explains the shortcuts for multiplying any number by 10, 100 or 1000.

1. If we multiply any number by 10, then add one zero at the right side of the number.

EXAMPLE **251 × 10 = 2,510**

Here, 0 is added on the right side of 251.

MULTIPLYING A NUMBER BY 10, 100, 1000, ETC.

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2. If we multiply any number by 100, then add two zeroes at the end of the number.

EXAMPLE $364 \times 100 = 36,400$

$93,201 \times 100 = 93,20,100$

MULTIPLYING A NUMBER BY 10, 100, 1000, ETC.

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3. If we multiply any number by 1,000, then add three zeroes at the end of the number.

EXAMPLE $212 \times 1000 =$ **2,12,000**

$7,646 \times 1000 =$ **76,46,000**

EXERCISE – 6(B)

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1. Multiply each given number by 10.

ANSWER

a) 408 = 408 × 10 = 4,080

b) 128 = 128 × 10 = 1,280

c) 89 = 89 × 10 = 890

d) 930 = 930 × 10 = 9,300

EXERCISE – 6(B)

2. Multiply each given number by 100.

ANSWER

a) 47 = 47 × 100 = 4,700

b) 708 = 708 × 100 = 70,800

c) 568 = 568 × 100 = 56,800

d) 7540 = 7540 × 100 = 7,54,000

EXERCISE – 6(B)

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3. Multiply each given number by 1000.

ANSWER

a) 64 = 64 × 1000 = 64,000

b) 2310 = 2310 × 1000 = 23,10,000

c) 464 = 464 × 1000 = 4,64,000

d) 625 = 625 × 1000 = 6,25,000

HOME ASSIGNMENT:

- **Complete Exercise – 6 B in your note book.**

LEARNING OUTCOME:

Students are able to understand the properties of multiplication and multiplying any number by 10,100 or 1000.

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SESSION	**: 9**
CLASS	**: IV**
SUBJECT	**: MATHEMATICS**
CHAPTER NUMBER	**: 6**
CHAPTER NAME	**: MULTIPLICATION**
SUBTOPIC	**: MULTIPLYING LARGER NUMBERS BY A 2-DIGIT NUMBER, EX-6 C**

MULTIPLYING LARGER NUMBERS BY A 2-DIGIT NUMBER

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EXAMPLE **Multiply 6,748 by 27**

L	TTh	Th	H
	T	O	
	4	8	×
	2	7	
	4	7	2
	3	6	
+ 1	3	4	9
	6	0	
1,	8	2,	1
	9	6	

Step 1 : Multiply 6,748 by 7 and write the product as shown.

Step 2 : Before multiplying with the tens digit of the multiplier, the ones write **0** in place as shown.

Step 3 : Multiply 6,748 by 2 and write the product as shown.

Step 4 : Add the products to get the final answer.

EXERCISE – 6(C)

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Multiply in your notebook.

a) 4,142 × 16

ANSWER

4,142	
× 16	
①	
24,852	→ 4,142 × 6
+ 41,420	→ 4,142 × 10
66,272	

EXERCISE – 6(C)

Multiply in your notebook.

b) 8,148 × 19

ANSWER

$$
\begin{array}{rrrrrrr}
 & 8, & 1 & 4 & 8 & & \\
 & & & \times & 1 & 9 & \\
\hline
 & & & \textcircled{1} & & & \\
 & 7 & 3 & 3 & 2 & \longrightarrow & 8{,}148 \times 9 \\
+ & 8 & 1 & 4 & 8 & \longrightarrow & 8{,}148 \times 10 \\
\hline
1, & 5 & 4, & 8 & 1 & 2 & \\
\hline
 & & & 0 & & &
\end{array}
$$

EXERCISE – 6(C)

Multiply in your notebook.

c) $3{,}163 \times 98$

ANSWER

$$
\begin{array}{rrrrrrr}
 & & 3, & 1 & 6 & 3 & \\
 & & & & \times & 9 & 8 \\
\hline
 & & 2 & 5 & 3 & 0 & \longrightarrow 3{,}163 \times 8 \\
+ & 2 & 3 & 8 & 0 & 4 & \longrightarrow 3{,}163 \times 90 \\
\hline
 & 3, & 6 & 0 & 9, & 7 & 9 \quad 4 \\
\hline
\end{array}
$$

EXERCISE – 6(C)

Multiply in your notebook.

d) $9{,}076 \times 63$

ANSWER

$$
\begin{array}{rrrrrrrr}
 & & 9, & 0 & 7 & 6 & & \\
 & & & & \times & 6 & 3 & \\
\hline
 & & ① & & & 6 & & \\
 & & & 2 & & 7 & 3 & \longrightarrow 9{,}076 \times 3 \\
+ & & 5 & 2 & 4 & 2 & 4 & \longrightarrow 9{,}076 \times 60 \\
\hline
 & 5, & 5 & 7 & 1, & 6 & 7 & 8 & 8
\end{array}
$$

EXERCISE – 6(C)

Multiply in your notebook.

e) 7,805 × 82

ANSWER

7, 8 0 5
× 8 2

(1) (1)

1 5, 6 1 0 → 7,805 × 2
+ 6 4 2 0 4 0 → 7,805 × 80

6, 4 0, 0 1 0

EXERCISE – 6(C)

Multiply in your notebook.

f) $67{,}368 \times 12$

ANSWER

	6	7,	3	8	
		6	8	4	
	①	①	①	1	
	1	3	4	4	→ $67{,}368 \times 2$
+	6	7	3	6	→ $67{,}368 \times 10$
	8,	0	8,	4	8	1	6	0

HOME ASSIGNMENT:

- **Complete Exercise – 6 C in your note book.**

LEARNING OUTCOME:

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Students are able to understand how to multiply larger numbers by a 2-digit number.

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SESSION	**: 10**
CLASS	**: IV**
SUBJECT	**: MATHEMATICS**
CHAPTER NUMBER	**: 6**
CHAPTER NAME	**: MULTIPLICATION**
SUBTOPIC	**: MULTIPLYING BIGGER NUMBERS BY A 3-DIGIT NUMBER, EX-6 D Q.NO.1**

MULTIPLICATION TABLE

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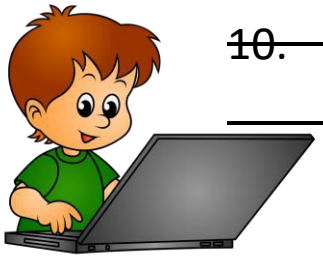
1. 25 × 9 = _____.
2. ~~19 × 3 = _____.~~
3. ~~13 × 8 = _____.~~
4. ~~30 × 4 = _____.~~
5. ~~27 × 2 = _____.~~
6. ~~22 × 6 = _____.~~
7. ~~30 × 5 = _____.~~
8. ~~10 × 4 = _____.~~
9. ~~11 × 7 = _____.~~
10. ~~36 × 1 = _____.~~



10	333	96	457	99	236	112	123
201	221	225	369	458	50	316	336
252	122	364	121	57	60	70	120
15	25	300	332	66	96	78	29
54	121	150	122	39	911	101	109
119	80	93	150	776	741	346	409
601	83	189	230	135	33	77	98
333	393	92	104	66	60	70	27
133	36	501	525	252	30	91	55
321	325	226	40	224	42	45	132

MULTIPLYING BIGGER NUMBERS BY A 3-DIGIT NUMBER

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EXAMPLE - 1 Multiply 742 by 132.

$$\begin{array}{r} 7\ 4\ 2 \\ \times\ 1\ 3\ 2 \\ \hline 1\ 4\ 8\ 4 \end{array} \longrightarrow \mathbf{742 \times 2 = 1{,}484}$$

Step-1 : Multiply 742 by 2 and write the product bellow as shown.

MULTIPLYING BIGGER NUMBERS BY A 3-DIGIT NUMBER

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EXAMPLE - 1 Multiply 742 by 132.

Step-2 : put a **0** at ones' place and then multiply 742 by 3 as usual.

Write the product as shown.

		7	4	2
	×	1	3	2
	1	4	8	4
2	2	2	6	0

→ **742 × 30 = 22,260**

MULTIPLYING BIGGER NUMBERS BY A 3-DIGIT NUMBER

EXAMPLE - 1 Multiply 742 by 132.

	7	4	2
×	1	3	2
1	4	8	4
2	2	2	6	0
7	4	2	0	0

→ **742 × 100 = 74,200**

Step-3 : Put **two zeroes** at the ones' and tens' place before multiplying 742 by 1. write the product as shown.

MULTIPLYING BIGGER NUMBERS BY A 3-DIGIT NUMBER

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EXAMPLE - 1 Multiply 742 by 132.

Step-4 : Add the three products and write the answer below as shown.

		7	4	2
	×	1	3	2
	1	4	8	4
2	2	2	6	0
7	4	2	0	0
9	7	9	4	4

MULTIPLYING BIGGER NUMBERS BY A 3-DIGIT NUMBER

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EXAMPLE - 2 Multiply 6,378 by 315.

Multiply 6,378 × 5.

	1	3	4	
	6	3	7	8
	×	3	1	5
3	1	8	9	0

→

Multiply 6,378 × 10.

	6	3	7	8
	×	3	1	5
3	1	8	9	0
6	3	7	8	0

→

Multiply 6,378 × 300.

			1	2	2	
			6	3	7	8
			×	3	1	5
		3	1	8	9	0
		6	3	7	8	0
1	9	1	3	4	0	0

→

Add the products.

				6	3	7	8
				×	3	1	5
			3	1	8	9	0
			6	3	7	8	0
+	1	9	1	3	4	0	0
	2	0	0	9	0	7	0

EXERCISE – 6(D)

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1. Multiply.

a) Four hundred ninety six by two hundred sixty two.

ANSWER

$$
\begin{array}{rrrr}
 & & & 4\,9\,6 \\
 & & \times & 2\,6\,2 \\
\hline
 & & \textcircled{1} & \\
 & \textcircled{1}\ \ \textcircled{1} & 9 & 9\,2 \\
 & 2 & 9 & 7\,6 \\
 & + & 9 & 9\,6\,0 \\
\hline
1, & 2 & 9, \quad 9 & 5\,2\,0
\end{array}
$$

$\longrightarrow 496 \times 2$

$\longrightarrow 496 \times 60$

$\longrightarrow 496 \times 200$

EXERCISE – 6(D)

ODM EDUCATIONAL GROUP
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1. Multiply.

b) Seven thousand eighteen by one hundred twenty.

ANSWER

$$
\begin{array}{rrrrrr}
 & & & 7 & 0 & 1 & 8 \\
 & & \times & & 1 & 2 & 0 \\
\hline
 & & \textcircled{1} & & & & \\
 & & & 0 & 0 & 0 & \longrightarrow 7018 \times 0 \\
 & 1 & & 4 & 0 & 3 & 6 \longrightarrow 7018 \times 20 \\
+ & 7 & & 0 & 1 & 8 & 0 \longrightarrow 7018 \times 100 \\
\hline
 & 8, & 4 & 2, & 1 & 6 & 0
\end{array}
$$

EXERCISE – 6(D)

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1. Multiply.

c) Nine thousand two hundred fifty five by three hundred ten.

ANSWER

$$
\begin{array}{rrrrrrr}
 & & & 9 & 2 & 5 & 5 \\
 & & & \times & & 3 & 1 \\
\hline
 & & & 0 & 0 & 0 & \longrightarrow 9255 \times 0 \\
 & & 9 & 2 & 5 & 5 & \longrightarrow 9255 \times 10 \\
+ & 2 & 7 & 7 & 6 & 5 & \longrightarrow 9255 \times 300 \\
\hline
 & 2 & 8, & 6 & 9, & 0 & 5 & 0
\end{array}
$$

EXERCISE – 6(D)

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1. Multiply.

d) Eight hundred twenty five by four hundred eighty six.

ANSWER

$$
\begin{array}{rrrrrrr}
 & & & & 8 & 2 & 5 \\
 & & & & \times & 4 & 8 & 6 \\
\hline
 & & & & 4 & 9 & 5 & 0 & \longrightarrow 825 \times 6 \\
 & & & 6 & 5 & 6 & 0 & 0 & \longrightarrow 825 \times 80 \\
+ & 3 & 3 & 0 & 0 & 0 & 0 & 0 & \longrightarrow 825 \times 400 \\
\hline
 & 4, & 0 & 0, & 9 & 5 & 0 \\
\end{array}
$$

EXERCISE – 6(D)

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1. Multiply.

e) Seventy thousand five hundred sixteen by one hundred eighteen.

ANSWER

$$
\begin{array}{rrrrrr}
 & & & 7 & 0 & \\
 & & \times & 5 & 1 & \\
\hline
 & \textcircled{1} & \textcircled{1} & & & \\
 & & & 5 & 6 & 4 \longrightarrow 70516 \times 8 \\
 & & & 3 & 8 & 0 \longrightarrow 70516 \times 10 \\
\textcircled{1} & & & & & \\
+ & 7 & & 0 & 5 & 1 \longrightarrow 70516 \times 100 \\
\hline
 & 8 & 3, & 2 & 0, & 8 & 8 & 8
\end{array}
$$

LEARNING OUTCOME:

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Students are able to understand how to multiply bigger numbers by a 3-digit number.

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SESSION	**: 11**
CLASS	**: IV**
SUBJECT	**: MATHEMATICS**
CHAPTER NUMBER	**: 6**
CHAPTER NAME	**: MULTIPLICATION**
SUBTOPIC	**: MULTIPLYING BIGGER NUMBERS BY A 3-DIGIT NUMBER, EX-6 D Q.NO.2**

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EXERCISE – 6(D)

2. **Find the product.**

a) 729 × 341

ANSWER

				7	2	9
			×	3	4	1
		①	①			
				7	2	9
		2	9	1	6	0
+	2	1	8	7	0	0
	2,	4	8,	5	8	9

729 × 1

729 × 40

729 × 300

EXERCISE – 6(D)

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2. **Find the product.**

b) **565 × 525**

ANSWER

		5	6	5			
			×	5			
				2			
		①		8	→	565 × 5	
			2	5			
		1	1	3	→	565 × 20	
			3	0			
	+	2	8	2	→	565 × 500	
		5	0	0			
	2,	9	6,	6	2	5	

EXERCISE – 6(D)

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2. **Find the product.**

c) **902 × 436**

ANSWER

		9	0	2			
			×	4	3	6	
					①		
			5	4	1	2	→ 902 × 6
		①					
		2	7	6	0	0	→ 902 × 30
	+	3	6	0	0	0	→ 902 × 400
	3,	9	3,	2	7	2	

EXERCISE – 6(D)

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2. **Find the product.**

d) **783 × 298**

ANSWER

$$
\begin{array}{rrrr}
 & 7 & 8 & 3 \\
 & & \times & 2 \\
\hline
 & & \textcircled{1}\ \textcircled{1} & 9 \\
 & \textcircled{1} & 6 & 2 \\
\textcircled{1} & 7 & 0 & 4 \\
+ & 1 & 5 & 6 \\
\hline
 & 6 & 0 & 0 \\
\hline
2, & 3 & 3, & 3 & 3 & 4
\end{array}
$$

783×8 → 783×90 → 783×200

EXERCISE – 6(D)

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2. **Find the product.**

e) **524 × 421**

ANSWER

$$
\begin{array}{rrrr}
 & 5 & 2 & 4 \\
 & & \times & 4 \\
\hline
 & & 2 & 1 \\
 & 1 & 0 & 8 \\
2 & 0 & 9 & 6 \\
\hline
2, & 2 & 0, & 6 & 0 & 4
\end{array}
$$

524×1

524×20

524×400

EXERCISE – 6(D)

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2. **Find the product.**

f) **9,307 × 678**

ANSWER

			9	3	0	7	
				×		6	
		①	①	①		7	
			7	4	4	8	→ 9307 × 8
	②		6	5	1	6	→ 9307 × 70
①				5	4	9	
+	5		5	8	4	2	→ 9307 × 600
			2	0	0	0	
	6	3,	1	0,	1	4	6

EXERCISE – 6(D)

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2. **Find the product.**

g) **2,892 × 209**

ANSWER

			2	8	9	2		
				×		2		
						0		
		①						
			2	6	3	0	→	2892 × 9
			0	0	0	0	→	2892 × 0
	①							
+	5		7	8	0	4	→	2892 × 200
	6,	0	4,	4	2	8		

EXERCISE – 6(D)

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2. **Find the product.**

h) **8,098 × 789**

ANSWER

			8	0	9	8	
				×	7	8	9
		①	②	①			
			7	2	8	2	→ 8098 × 9
	①		6	4	7	4	→ 8098 × 80
①							
+	5		6	6	8	0	→ 8098 × 700
6	3,	8	9,	3	2	2	

EXERCISE – 6(D)

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2. **Find the product.**

i) **5,793 × 423**

ANSWER

$$
\begin{array}{rrrrrrr}
 & & 5 & 7 & 9 & 3 & \\
 & & & \times & & 4 & \\
\hline
 & & ② & ① & ① & 2 & \\
 & & 1 & 7 & 3 & 7 & \longrightarrow 5793 \times 3 \\
 & & 1 & 1 & 5 & 8 & \longrightarrow 5793 \times 20 \\
+ & 2 & 3 & 1 & 7 & 6 & \longrightarrow 5793 \times 400 \\
\hline
 & 2 & 4, & 5 & 0, & 4 & 3 & 9
\end{array}
$$

EXERCISE – 6(D)

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2. **Find the product.**

j) **6,974 × 542**

ANSWER

			6	9	7	4	
				×	5	4	2
		①	①	①			
			1	3	9	4	8 → 6974 × 2
	①		2	7	8	9	6 → 6974 × 40
+	3		4	8	7	0	0 → 6974 × 500
	3	7,	7	9,	9	0	8

HOME ASSIGNMENT:

- **Complete Exercise – 6 D Q.NO. 2 in your note book.**

LEARNING OUTCOME:

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Students are able to understand how to multiply bigger numbers by a 3-digit number.

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SESSION	**: 12**
CLASS	**: IV**
SUBJECT	**: MATHEMATICS**
CHAPTER NUMBER	**: 6**
CHAPTER NAME	**: MULTIPLICATION**
SUBTOPIC	**: WORD PROBLEMS ON MULTIPLICATION, Q.NO. 1 TO 4**

WORD PROBLEMS

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1. The cost of a toaster is Rs.1,750. a shop keeper bought 50 toasters for selling. How much did he pay for 50 toasters?

ANSWER The cost of a toaster = **1,750**

The cost of **50** toasters =

$$\begin{array}{r} 1\,7\,5\,0 \\ \times \quad 5\,0 \\ \hline 0\,0\,0\,0 \quad \longrightarrow 1750 \times 0 \\ +\ 8\,7\,5\,0\,\,\,\, \quad \longrightarrow 1750 \times 50 \\ \hline 8\,7,\,5\,0\,0 \end{array}$$

Thus, he paid Rs.**87,500** for 50 toasters.

WORD PROBLEMS

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2. A man bought 120 bags of apples. Each bag contains 2,121 apples. How many apples are there in all?

ANSWER Number of apples each bag contains = **2,121**

Number of apples in 120 bags =

$$
\begin{array}{rrrrrr}
 & & & 2 & 1 & 2 \\
 & & \times & & 1 & 1 \\
\hline
 & & & 0 & 0 & 0 \\
 & & 4 & 2 & 4 & 0 \\
+ & & 2 & 1 & 2 & 0 \\
\hline
2, & 5 & 4, & 5 & 2 & 0
\end{array}
$$

2121 × 0

2121 × 20

2121 × 100

So, **2,54,520** apples are there in all.

WORD PROBLEMS

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3. A shopkeeper sells 16,520 packets of milk. Each packet costs Rs.25. how much money did he get at the end?

ANSWER Cost of each milk packet =Rs.**25**

The cost of 16,520 packets of milk =

$$
\begin{array}{rrrrrr}
 & 1 & 6 & 5 & 2 & 0 \\
 & & & \times & 2 & 5 \\
\hline
 & & & & 5 & \\
 & & (1) & & & \\
 & & 8 & 2 & 6 & \longrightarrow 16520 \times 5 \\
 & (1) & & & & \\
+ & & 3 & 3 & 0 & \longrightarrow 16520 \times 20 \\
\hline
 & 4, & 1 & 3, & 0 & 0 \quad 0
\end{array}
$$

Hence, he got Rs.**4,13,000** at the end.

WORD PROBLEMS

4. Mohan distributed toffees on his birthday. There were 8,552 students and 25 teachers whom he distributed 4 toffees each. How many toffees did he distributed?

ANSWER Total number of students = **8,552**

Total number of teachers = **25**

Total number of persons = **8552 + 25 =**

$$\begin{array}{r} 8\,5\,5\,2 \\ +\quad\;\; 2\,5 \\ \hline 8,\,5\,7\,7 \end{array}$$

WORD PROBLEMS

He distributed toffees to each person = **4**

Total toffees distributed to **8,577** people

②	③	②	
8	**5**	**7**	
	×	**7**	
3	**4,**	**3**	**0**	**8**
				4

Therefore, **34,308** **total toffees distributed** by him.

HOME ASSIGNMENT:

- **Do word problems on multiplication Q.NO. 5 & 6 in your notebook.**

LEARNING OUTCOME:

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Students are able to understand how to use the process of multiplication to solve the word problems.

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SESSION	**: 13**
CLASS	**: IV**
SUBJECT	**: MATHEMATICS**
CHAPTER NUMBER	**: 6**
CHAPTER NAME	**: MULTIPLICATION**
SUBTOPIC	**: WORD PROBLEMS ON MULTIPLICATION, Q.NO. 7 TO 10**

WORD PROBLEMS

7. **In a park there are 31,250 flower plants and 78,178 trees in a row. Calculate the total number of trees and plants in 15 such rows.**

ANSWER Total number of flower plants = **31,250**

Total number of trees = **78,178**

Total number of flowers and trees in a row = **31,250 + 78,178 =**

		①	
	3	**1** **5**	**2** **0**
+	**7**	**8** **7**	**1** **8**
1, 0	**9,**	**4**	**2** **8**

WORD PROBLEMS

Total trees and flowers in a row = **1,09,428**

Total trees and flowers in **15** rows =

1 0 9 4 2 8
× 1 5

① ① ①

5 4 7 1 4 0 → 109428 × 5

+ 1 0 9 4 2 8 0 → 109428 × 10

1 6, 4 1, 4 2 0

Thus, **the total number of trees and flowers in 15 rows are 16,41,420** .

WORD PROBLEMS

8. What will be the cost of 25 cars if one car costs Rs.3,24,230?

ANSWER The cost of a car = **3,24,230**

The cost of **25** cars = **3 2 4 2 3 0 × 2 5**

	①	①							
		1		6		2		1	→ 3,24,230 × 5
+		6		4		8		4	→ 3,24,230 × 20
				6		0		0	
	8	1,	0	5,	7	5	0		

Thus, Rs.**81,05,750** is the cost of **25** cars.

WORD PROBLEMS

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9. A man has 10 notes of Rs.2,000 and 19 notes of Rs.500. How much money did he have?

ANSWER Number of **Rs.2,000 notes = 10**

He has total money of **2,000** notes =

$$
\begin{array}{rrrrrr}
 & & 2 & 0 & & \\
 & & \times & 1 & 0 & \\
\hline
 & & 0 & 0 & 0 & \longrightarrow 2000 \times 0 \\
+ & 2 & 0 & 0 & 0 & \longrightarrow 2000 \times 10 \\
\hline
 & 2 & 0, & 0 & 0 & 0
\end{array}
$$

WORD PROBLEMS

Number of **Rs.500 notes = 19**

He has total money of **500** notes =

$$
\begin{array}{rrrr}
 & 5 & 0 & 0 \\
 & \times & 1 & 9 \\
\hline
 & 4 & 5 & 0 \longrightarrow 500 \times 9 \\
+ & 5 & 0 & 0 \longrightarrow 500 \times 10 \\
\hline
 & 9, & 5 & 0 & 0
\end{array}
$$

WORD PROBLEMS

So, the man has total money of 2,000 notes = **20,000**

And total money of 500 notes = **9,500**

Then he has total money with him = **20,000 + 9,500 =**

$$\begin{array}{r} 2\ 0\ 0\ 0 \\ +\ 9\ 5\ 0\ 0 \\ \hline 2\ 9,5\ 0\ 0 \end{array}$$

Thus, the man has total money of **Rs.29,500**.

WORD PROBLEMS

10. A factory produces 3,500 boxes a day. How many boxes will be produced in the month of March and April (March = 31 days, April = 30 days)?

ANSWER Total number of days in March = **31**

Total number of days in April = **30**

Total number of days = **31 + 30 = 3 1**

+ 3 0

6 1

WORD PROBLEMS

The factory produces the boxes in a day = **3,500**

Then the factory will produce boxes in 61 days =

$$
\begin{array}{rrrrrrr}
 & & & 3 & & 5 & 0 & 0 \\
 & & & \times & & 6 & 1 & \\
\hline
 & & & 3 & & 5 & 0 & 0 & \longrightarrow 3500 \times 1 \\
+ & & 2 & 1 & & 0 & 0 & 0 & \longrightarrow 3500 \times 60 \\
\hline
 & 2, & 1 & 3, & 5 & 0 & 0 &
\end{array}
$$

Thus, **2,13,500** boxes will be produced in the month of March and April.

LEARNING OUTCOME:

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Students are able to understand how to use the process of multiplication in solving the story sums.

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SESSION	**: 14**
CLASS	**: IV**
SUBJECT	**: MATHEMATICS**
CHAPTER NUMBER	**: 6**
CHAPTER NAME	**: MULTIPLICATION**
SUBTOPIC	**: DOUBT CLEARING AND CLASS TEST**

CLASS TEST

FULL MARK - 15

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A. Fill in the blanks. **(1×5=5)**

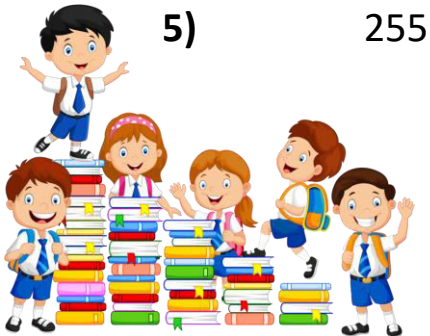
1) When a number is multiply by 1, then the product is always the .

2) When a number is multiply by 0, then the product is always the .

3) 26 × 52 = _____ × 26.

4) (16 × 320) × 15 = 16 ×(_____ × 15).

5) 255 x 100 = _____.



CLASS TEST

FULL MARK - 15

ODM EDUCATIONAL GROUP
Changing your Tomorrow

B. Do as Directed. **(2×2=4)**

6) 8344 × 24

7) 50,515 × 320

CLASS TEST

FULL MARK - 15

ODM EDUCATIONAL GROUP
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C. Word Problem. (3×2=6)

8) The cost of a radio is Rs.1,550. A shopkeeper bought 40 radios for selling. Then how much he paid for 40 radios?

9) What will be the cost of 24 cars, If 1 car cost Rs.2,25,220?

CLASS TEST

FULL MARK - 15

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ANSWER

CLASS TEST

FULL MARK - 15

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A. Fill in the blanks. **(1×5=5)**

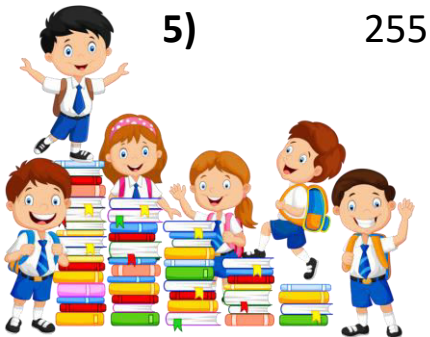
1) When a number is multiply by 1, then the product is always the **Number it self**.

2) When a number is multiply by 0, then the product is always the **0**.

3) 26 × 52 = **52** × 26.

4) (16 × 320) × 15 = 16 × (**320** × 15).

5) 255 × 100 = **25500**.



CLASS TEST

FULL MARK - 15

ODM EDUCATIONAL GROUP
Changing your Tomorrow

B. Do as Directed. **(2×2=4)**

6) 8,344 × 24

			8	3	4		
				×	2		
	①	①	①	①	4		
			3	3	3	→	8344 × 4
+	1		6	6	8	→	8344 × 20
	2,	0	0,	2	5	6	

CLASS TEST **FULL MARK - 15**

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B. Do as Directed. (2×2=4)

7) 50,515 × 320

```
          5 0 5 1 5
        ×     3 2 0
  -------------------
          0 0 0 0 0   ⟶ 50515 × 0
      1 0 1 0 3 0 0   ⟶ 50515 × 20
  + 1 5 1 5 4 5 0 0   ⟶ 50515 × 300
  -------------------
   1,6 1,6 4,8 0 0
  -------------------
```

CLASS TEST **FULL MARK - 15**

C. Word Problem. **(3×2=6)**

8) The cost of a radio is `1,550 a shopkeeper bought 40 radios for selling. Then how much he paid for 40 radios?

ANSWER The cost of a radio = `**1,550**

The cost of **40** radios =

```
      1 5 5 0
    ×     4 0
  -----------
      0 0 0 0   ⟶ 1550 × 0
+ 6 2 0 0 0     ⟶ 1550 × 40
  -----------
    6 2, 0 0 0
  -----------
```

Thus, he paid `**62,000** for 40 radios.

CLASS TEST

FULL MARK - 15

ODM EDUCATIONAL GROUP
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C. Word Problem. (3×2=6)

9) What will be the cost of 24 cars, If 1 car cost `2,25,220?

ANSWER The cost of a car = `**2,25,220**

The cost of **24** cars = **2 2 5 2 0**

$$\times \quad 2\ 4$$

	①		①				
		9	0	0	8	0	→ 2,25,220 × 4
+		4	5	0	4	0	→ 2,25,220 × 20
	5	4,	0	5,	2	8	0

Thus, `**54,05,280** is the cost of **24** cars.

LEARNING OUTCOME:

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Students are able to recall the the whole chapter of multiplication through this class test.

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