

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

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE

- **Enable the students to recall multiplication by 2-digit numbers and to understand the properties of multiplication.**

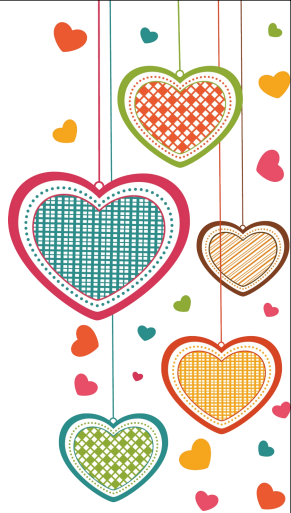
MULTIPLICATION

Let us revise multiplication by 2-digit numbers.

Example - 1 98 by 98

ANSWER

	Th	H	T	O	
			9	8	
			×	9	8
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	①	7	8	4	→ 98 × 8
+	8	8	2	0	→ 98 × 90
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	9,	6	0	4	
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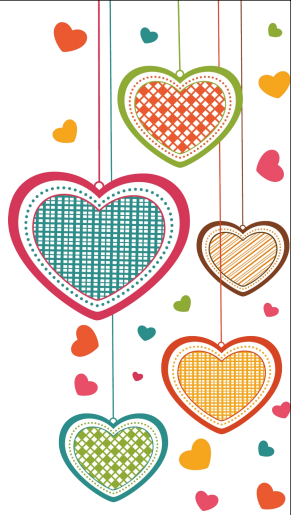
EXERCISE – 6(A)

Multiply in your notebook.

(a) 64×45

ANSWER

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



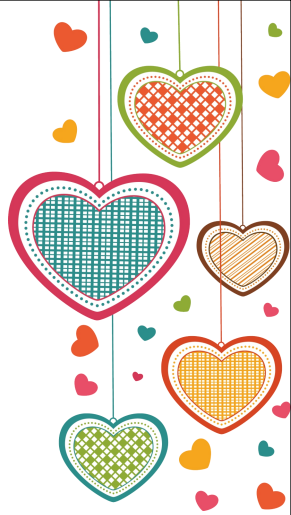
EXERCISE – 6(A)

Multiply in your notebook.

(b) 58×72

ANSWER

	Th	H	T	O	
			7	2	
		×	5	8	
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	①	5	7	6	→ 72×8
+	3	6	0	0	→ 72×50
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	4,	1	7	6	
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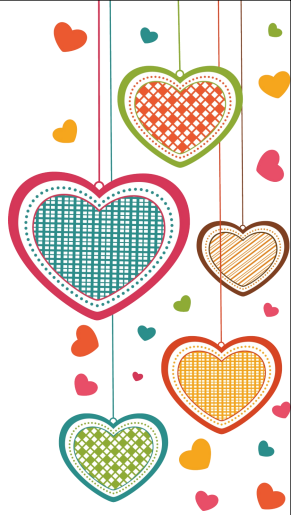
EXERCISE – 6(A)

Multiply in your notebook.

(c) 49×36

ANSWER

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



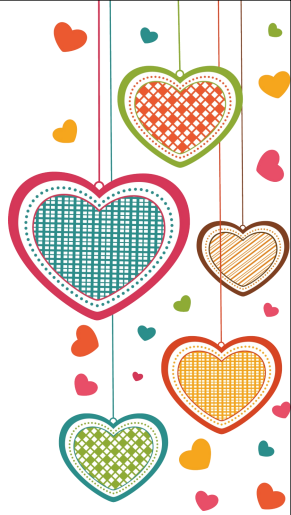
EXERCISE – 6(A)

Multiply in your notebook.

(d) 82×27

ANSWER

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



EXERCISE – 6(A)

Multiply in your notebook.

(e) 94×89

ANSWER

	Th	H	T	O	
			9	4	
		×	8	9	
<hr/>					
	①	8	4	6	→ 94×9
+	7	5	2	0	→ 94×80
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	8,	3	6	6	
<hr/>					



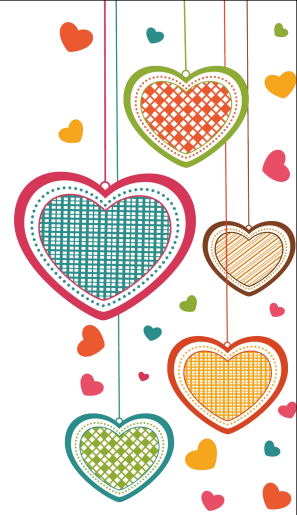
PROPERTIES OF MULTIPLICATION

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

EXAMPLE

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

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



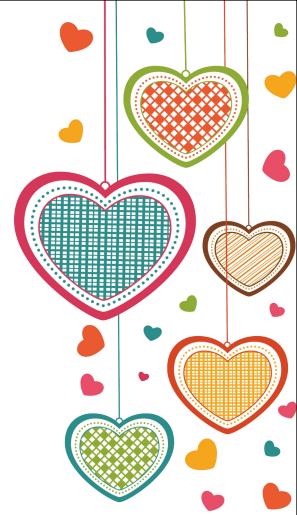
PROPERTIES OF MULTIPLICATION

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

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

$$3,113 \times 26 = 80,938$$

$$26 \times 31,13 = 80,938$$

$$3,113 \times 26 = 26 \times 3,113$$



PROPERTIES OF MULTIPLICATION

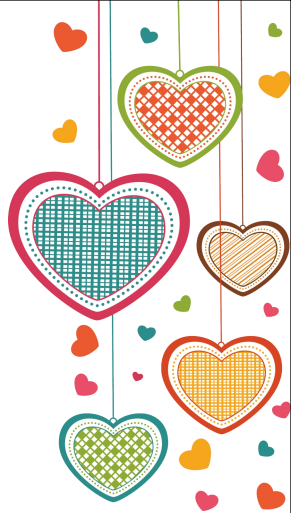
4. **Associative property of multiplication** : when two or more numbers are grouped and multiplied, the product does not change even if we change the groupings.

EXAMPLE

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

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

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



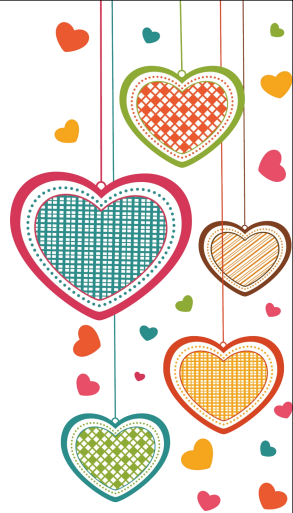
PROPERTIES OF MULTIPLICATION

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

$$\begin{aligned}(15 + 11 + 3) \times 100 \\ &= 29 \times 100 \\ &= \mathbf{2,900}\end{aligned}$$

$$\begin{aligned}(15 + 11 + 3) \times 100 \\ &= (15 \times 100) + (11 \times 100) + (3 \times 100) \\ &= 1,500 + 1,100 + 300 \\ &= \mathbf{2,900}\end{aligned}$$



HOME ASSIGNMENT:

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

LEARNING OUTCOME:

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

THANKING YOU
ODM EDUCATIONAL GROUP