

Multiplication by 2 -Digit Number

We can understand the multiplication of two digits numbers with the help of some examples.



Example 1 : Multiply 22 by 23.

Step 1: Multiply 22 by the ones of 23, it means by 3.

$$\begin{array}{r} 22 \times 3 = 66 \\ \begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 2 \quad 2 \\ \times 2 \quad 3 \\ \hline 6 \quad 6 \end{array} \end{array}$$

Step 2: Multiply 22 by the tens of 23, it means by 20.

$$\begin{array}{r} 22 \times 20 = 440 \\ \begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 2 \quad 2 \\ \times 2 \quad 3 \\ \hline 6 \quad 6 \\ 4 \quad 4 \quad 0 \end{array} \end{array}$$

Step 3: Add both the products.

$$\begin{array}{r} \begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 2 \quad 2 \\ \times 2 \quad 3 \\ \hline 6 \quad 6 \end{array} \\ + \begin{array}{r} 4 \quad 4 \quad 0 \\ \hline 5 \quad 0 \quad 6 \end{array} \end{array}$$

Hence, the product of 22×23 is 506.



Example 2 : Multiply 36 by 26.

Step 1: Multiply 36 by the ones of 26, it means by 6.

$$36 \times 6 = 216$$

	H	T	O
		¹ 3	6
\times	2	6	
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	2	1	6
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Step 2: Multiply 36 by the tens of 26, it means by 20.

$$36 \times 20 = 720$$

	H	T	O
		¹ 3	6
\times	2	6	
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	2	1	6
	7	2	0
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Step 3: Add both the products.

	H	T	O
		¹ 3	6
\times	2	6	
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	2	1	6
$+$	7	2	0
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	9	3	6
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Hence, the product of 36×26 is 936.