

# Traditional Math vs. Common Core/New Math

The standard algorithm for multiplication is a traditional way to multiply numbers, honed over the years. It involves learning to carry, and it takes seconds once learned. One of its beautiful attributes is that it grows rather slowly in complexity when the arguments grow in size.

The partial products method and the lattice method for multiplication take many more steps, are laborious, and often confusing. Further, their complexity quickly explodes when the operands grow in size. *Common Core* promotes lots of practice with non-standard algorithms such as partial products and lattice method, rather than focus on the efficient standard algorithm.

**STANDARD  
ALGORITHM  
METHOD**

$$\begin{array}{r} 164 \\ \times 72 \\ \hline 328 \\ 11480 \\ \hline 11808 \end{array}$$

**LATTICE  
METHOD**

	1	6	4	
1	0	4	2	7
0	2	1	0	2
8	0	8		

**PARTIAL PRODUCTS  
METHOD**

	164	164	64	64	64	64
$\times 72$	$\times 72$	$\times 72$	$\times 72$	$\times 72$	$\times 72$	$\times 72$
		8	8	8	8	8
			120	120	120	120
				200	200	200
				280	280	280
					4200	4200
					<u>+7000</u>	<u>+7000</u>
						11,808

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