

Help! I can't do my kid's math.

Not Your Mother's Multiplication
Multiplication in the Everyday Math Program

Partial Products Method

In partial products multiplication, each factor is thought of as a sum of ones, tens, hundreds, and so on. For example, in 67×53 , 67 can be thought of as $60 + 7$ and 53 as $50 + 3$. Each part of one factor is then multiplied by each part of the other factor, and finally, all of the resulting partial products are added together.

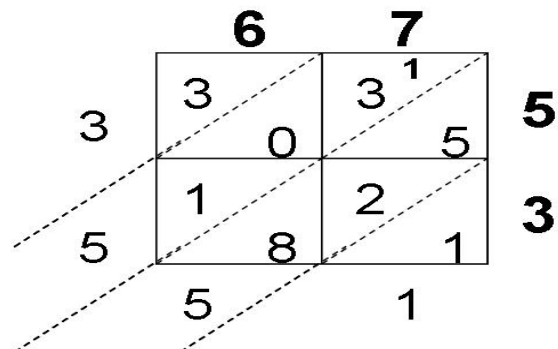
$$\begin{array}{r} 67 \\ \times 53 \\ \hline 3000 \\ 350 \\ 180 \\ + 21 \\ \hline 3,551 \end{array} \quad \begin{array}{l} = 60 + 7 \\ = 50 + 3 \\ = 50 \times 60 \\ = 50 \times 7 \\ = 3 \times 60 \\ = 3 \times 7 \end{array}$$

Lattice Method

Everyday Mathematics initially included lattice for recreational and historical interest, and because it provided practice with multiplying basic facts. It was a surprise that the method became so popular. Children have become very efficient with this method much to adults' dismay. It is unfamiliar to most adults. The following link gives a history of Lattice Multiplication and another demonstration of the method.
<http://www.ualr.edu/lasmoller/medievalmult.html>

To multiply $67 \times 53 = 3,551$

1. Draw a 2 by 2 lattice.
2. Write one factor along the top of the lattice and the other along the right, one digit for each row or column.
3. Multiply each digit in one factor by each digit in the other factor. Write the products in the cells where the corresponding rows and columns meet.
4. Add the numbers along side the diagonals to find the product.



--from the *Everyday Mathematics Series*
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