

Long Multiplication

** Its' so important to understand that when we multiply by a number like the example below '12', the '1' represents **10**. ($40 = 4 \text{ sets of ten or } 4 \times 10$) First we multiply by 2, (Una units – ladies first) then by 1. Hence the rule 'put down your magic zero' on the second line before multiplying by the 1.

** (remember to be careful of your **carry overs**)

$$\begin{array}{r} 43 \\ \times 12 \\ \hline 86 \\ + 430 \\ \hline 1 \\ \hline 516 \\ \text{Answer} \end{array}$$

Step 1: Multiply 2×3

Step 2: multiply 2×4

Step 3: Because the number is 10 not 1, we put down the zero.

Step 4: Multiply each digit (4 and 3) by 1

Step 5: Addition

- $6+0=6$
- $8+3=11$ (put down 1 and carry 1)
- $4+1=5$

Answer: 516