

Learning Goal:

By the end of this lesson I should be able to MULTIPLY double and triple digit positive numbers together using a COLUMN MODEL, WITHOUT the use of a calculator (technology).

Example Strategies: Find the PRODUCT of 125×24

Column Model One	Column Model Two
$\begin{array}{r} 125 \\ \times 24 \\ \hline 20 \\ 80 \\ 400 \\ 100 \\ 400 \\ + 2000 \\ \hline 3000 \end{array}$	$\begin{array}{r} 12 \\ 125 \\ \times 24 \\ \hline 500 \\ 2500 \\ \hline 3000 \end{array}$

The image shows two column models for 125×24 . Column Model One shows the standard column multiplication with partial products (20, 80, 400, 100, 400, 2000) and a final sum of 3000. Column Model Two shows the same multiplication using a distributive property approach, with partial products (500, 2500) and a final sum of 3000. Handwritten arrows and brackets connect the partial products in both models to show their equivalence.

Skills Practice: Find the Product of the following using the Column Model:

(a)
$$\begin{array}{r} 75 \\ \times 16 \\ \hline \end{array}$$

(b)
$$\begin{array}{r} 88 \\ \times 27 \\ \hline \end{array}$$

(c)
$$\begin{array}{r} 275 \\ \times 14 \\ \hline \end{array}$$

(d)
$$\begin{array}{r} 315 \\ \times 216 \\ \hline \end{array}$$