

Captain Michael Gitt Papers - War Department, TM 1-900, Technical Manual, Mathematics for Air Crew Trainees, 2/26/1943

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the factors one below the other (see example below). It is usually easier to operate with the smaller number of figures in the bottom row. Multiply the factor in the top row by the right-hand figure of the factor in the bottom row, and write this partial product directly under the second factor. If there is more than one figure in the product the same "carrying over" procedure is followed as in addition. Then multiply the factor in the top row by the second figure from the right in the second factor, and write this second partial product so that its right-hand figure is directly under the figure that was used to find it, There partial products are then added together to yield the required product.

Example: Multiply 1,653 by 247.

Solution:

1653 FACTORS
247
[underline]
11571
6612 PARTIAL
3306 PRODUCTS
[underline]
408291 Answer
PRODUCT
FIGURE 5.

b. When there are decimal points, they are ignored until the product has been found. Then the decimal point is inserted in the product according the the following rule: Count off the number of figures to the right of the decimal point in each factor. Then the number of figures to the right of the decimal point in the product is equal to the sum of the number of figures after the decimal point in each factor.

Example: Multiply 16.53 by 24.7. Solution:

16.53 2 FIGURES + 24.7 1 FIGURE = [underline] 11571 3 FIGURES 6612 3306 [underline] 408.291 Answer PRODUCT Figure 6.

c. When the lower factor contains zeros, the partial products corresponding to these zeros need not all be written down. Only the right-hand zero is written down. However, care must be exercised

ARMY AIR FORCES the factors one below the other (see example below). It is usually easier to operate with the smaller number of figures in the bottom row. Multiply the factor in the top row by the right-hand figure of the factor in the bottom row, and write this partial product directly under the second factor. If there is more than one figure in the product the same "carrying over" procedure is followed as in addition. Then multiply the factor in the top row by the second figure from the right in the second factor, and write this second partial product so that its right-hand figure is directly under the figure that was used to find it. These partial products are then added together to yield the required product. Example: Multiply 1,653 by 247. Solutions 1653 FACTORS PARTIAL PRODUCTS

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Solution:

/ 6.53 2 FIGURES +
2 4.7 | FIGURE #
6 6 / 2
3 5 0 6
4 0 \$2 7 1 | GROWER
PRODUCT

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