

## Multi-Number Multiplication - Guided Lesson Explanation

### Explanation # 1

We have to multiply the two digits.

Multiply the numbers at each place value.

If result is more than 9, then carry over the digit on ten's place of the result to the number on the subsequent place value of the question.

i)

$$\begin{array}{r} 2215 \\ 1685 \\ \times \quad 3 \\ \hline 5055 \end{array}$$

$\swarrow$     $\swarrow$     $\swarrow$     $\swarrow$     $\swarrow$   
 $3 \times 1$     $3 \times 6$     $3 \times 8$     $3 \times 5$

ii)

$$\begin{array}{r} 5435 \\ 2875 \\ \times \quad 6 \\ \hline 17250 \end{array}$$

$\swarrow$     $\swarrow$     $\swarrow$     $\swarrow$     $\swarrow$   
 $6 \times 2$     $6 \times 8$     $6 \times 7$     $6 \times 5$

iii)

$$\begin{array}{r} 1474 \\ \times \quad 2 \\ \hline 2948 \end{array}$$

$\swarrow$     $\swarrow$     $\swarrow$     $\swarrow$   
 $2 \times 1$     $2 \times 4$     $2 \times 7$     $2 \times 4$

iv)

$$\begin{array}{r} 2212 \\ 3452 \\ \times \quad 5 \\ \hline 17260 \end{array}$$

$\swarrow$     $\swarrow$     $\swarrow$     $\swarrow$   
 $5 \times 3$     $5 \times 4$     $5 \times 5$     $5 \times 2$

So, the result are

i) 5055

ii) 17250

iii) 2948

iv) 17260.



Name \_\_\_\_\_

Date \_\_\_\_\_

**Explanation # 2**

We have to calculate the multiplication of two digit numbers:

If there are two digit multipliers, add both products.

If product is more than 9, then carry over the digit on tens place of the result to the number on the subsequent place value of the question.

$$\begin{array}{r}
 \text{i)} \quad \begin{array}{r}
 2 \\
 1 \quad 3 \\
 \uparrow \quad \uparrow \\
 \times 1 \quad 6 \\
 \hline
 8 \quad 4 \\
 + 1 \quad 3 \quad 0 \\
 \hline
 2 \quad 2 \quad 4
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{ii)} \quad \begin{array}{r}
 1 \\
 1 \quad 3 \\
 \times 1 \quad 6 \\
 \hline
 0 \quad 7 \quad 8 \\
 + 1 \quad 3 \quad 0 \\
 \hline
 2 \quad 0 \quad 8
 \end{array}
 \end{array}$$

So, the result is i) 224 ii) 208

**Explanation # 3**

Step 1) In this we have to find out the missing multiplier.

Step 2) First, We have to find out how many times multiplicands should multiply to get the result. So, we have to divide the result by multiplicand.

$$\text{i)} \quad 544 \div 68 = 9$$

$$\text{ii)} \quad 10384 \div 2596 = 4$$

So, the result is i) 9 ii) 4

