

Multiplication Walkthrough - Shown on One Side

Last Updated: 11/27/16

Multiply 3-Digit and 3-Digit Numbers

	Column	C1	C2	C3	C4	C5	C6
Row							
R1					+4	+5	
R2					+1	+1	
R3					+2	+3	
R4					7	4	6
R5				x	9	3	5
R6					+1	+1	
R7				3	7	3	0
R8			2	2	3	8	0
R9	+	6	7	1	4	0	0
R10		6	9	7	5	1	0

Numbers carried over.

5 STEP PROCESS
Use color-match and Row/Cell references.

STEP 1: Multiply 746 x 5.
 a) $5 \times 6 = 30$. Put 0 at R7C6.
 Carry **3** to R3C5.
 b) $5 \times 4 = 20$. Add carried **3** to $20 = 23$.
 Put 3 at R7C5. Carry **2** to R3C4.
 c) $5 \times 7 = 35$. Add carried **2** to $35 = 37$.
 Put 7 at R7C4 and put 3 at R7C3.
 d) Answer to $746 \times 5 = 3730$ goes in R7.

STEP 2: Multiply 746 x 3.
 a) $3 \times 6 = 18$. Put 8 at R8C5.
 Carry **1** to R2C5.
 b) $3 \times 4 = 12$. Add carried **1** to $12 = 13$.
 Put 3 at R8C4. Carry **1** to R2C4.
 c) $3 \times 7 = 21$. Add carried **1** to $21 = 22$.
 Put 2 at R8C3 and put 2 at R8C2.
 d) Answer to $746 \times 3 = 2238$ goes in R8.

STEP 3: Multiply 746 x 9.
 a) $9 \times 6 = 54$. Put 4 at R9C4.
 Carry **5** to R1C5.
 b) $9 \times 4 = 36$. Add carried **5** to $36 = 41$.
 Put 1 at R9C3. Carry **4** to R1C4.
 c) $9 \times 7 = 63$. Add carried **4** to $63 = 67$.
 Put 7 at R9C2 and put 6 at R9C1.
 d) Answer to $746 \times 9 = 6714$ goes in R9.

STEP 4: Fill blanks with 0's.
 Put 0's in R8C6, R9C6, and R9C5 as placeholders.

STEP 5: Add the numbers.
 a) Carry as needed and put carries in R6.
 b) Put answer of sum, **697510**, in R10.