THREE DIGIT MULTIPLICATION

Multiplying three-digit numbers by one digit numbers:

245 x 3 = ?

Step #1:

Place one number above the other so that the ones' place digits are lined up. Draw a line under the bottom number.

```
  245
x   3
```

Step #2:

Multiply the two numbers in the ones' place (3 x 5 = 15). This answer is larger than 9, so place the 1 above the tens' place column and place the 5 below the line in the ones' place column.

```
  1
  245
x   3
    5
```

Step #3:

Next, mult[...]). 3 x 4 = 12. Add [...] 2 + 1 = 13). Place the 1 above the hundreds' place column and place the 3 below the line in the tens' place column.

```
1 +1
  245
x   3
   35
```

Step #4 (Final Step):

Now, multiply the 3 and the number in the hundred' place column (2). 3 x 2 = 6. Add the 1 you carried to the hundreds column to the 6 (6 + 1 = 7) and place the answer below the line in the hundreds place column.

```
+1 1
  245
x   3
  735
```

Multiplying three-digit numbers by two digit numbers:

245 x 13 = ?

In order to multiply these two numbers you would first follow the 4 steps listed above:

Step #1

```
  245
x 13
```

Step #2

```
   1
  245
x 13
    5
```

Step #3

```
 1 +1
  245
x 13
   35
```

Step #4

```
+1 1
  245
x 13
  735
```

Now there are a few more steps to complete in order to get the answer:

Step #5

```
  245
x 13
  735
    5
```
Multiply the 1 in the tens place of the number 13 by the number 5 in 245. 1 x 5 = 5. Place the 5 under the 3 *(under the line in the tens column)*

Step #6

```
  245
x 13

  735
 45
```
Multiply the 1 in the tens place of the number 13 by the number 4 in 245. 1 x 4 = 4. Place the 4 under the 7 *(under the line in the hundreds column)*

Step #7

```
 245  Multiply the 1 in the tens place of the number 13 by the
x 13  number 2 in 245.  1 x 2 = 2.  (Place the 2 under the line
 735  in the thousands column)
245
```

Step #8

```
       245
      x 13
       735   Add 735 and 245 together the way they are lined up.
      245
     3,185
```

245 x 13 = 3,185