

Multiplying Two Numbers Greater Than 1000, But Close To 1000:

A. From algebra we learn:

$$(1000 + a)(1000 + b) = 1000[1000 + a + b] + ab$$

B. Using numbers instead of variables we get the following:

1. Multiply the one's digits together. Write this number down (make sure that it takes up 3 place values).
2. Add the one's digits together. Write this number down (make sure that it takes up 3 place values).
3. Write 1.

Ex [1] $1007 \times 1004 =$ _____.

- a) $7 \times 4 = 28$. Write 028 to take up 3 place values.
- b) $7 + 4 = 11$. Write 011 to take up 3 place values.
- c) Write 1.
- d) The answer is 1011028.

Ex [2] $1013^2 =$ _____.

- a) $13 \times 13 = 169$. Write 169.
- b) $13 + 13 = 26$. Write 026 to take up 3 place values.
- c) Write 1.
- d) The answer is 1026169.