

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

A. This method is very similar to [Multiplying Two Numbers Less Than 100](#) and comes from the algebra:

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

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

1. Find the difference between both the numbers and 1000.
2. Multiply these two values together and write it down. Make sure the answer takes up 3 place values.
3. Subtract the difference found in step 1 of one of the numbers with the remaining number. Write the result.

Ex [1] $994 \times 989 =$ _____.

- a) $1000 - 994 = 6$.
- b) $1000 - 989 = 11$.
- c) $6 \times 11 = 66$. Write 066 to take up 3 place values.
- d) $994 - 11 = 983$. Write 983. (You can also use $989 - 6 = 983$)
- e) The answer is 983066.

Ex [2] $988^2 =$ _____.

- a) $1000 - 988 = 12$.
- b) $12 \times 12 = 144$. Write 144.
- c) $988 - 12 = 976$. Write 976.
- d) The answer is 976144.