

**Squaring A Number In The Range (90 – 99):**

A. This method comes from algebra:

$$(100 - a)^2 = 100 \times [(100 - a) - a] + a^2$$

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

1. Find the difference between the number and 100.
2. Square the result of step 1 and write it down (make sure it takes up 2 place values).
3. Subtract the result of step 1 from the original number and write it down.

Ex [1]  $97^2 =$  \_\_\_\_\_.

- a)  $100 - 97 = 3$ .
- b)  $3^2 = 9$ . Write 09 to take up 2 place values.
- c)  $97 - 3 = 94$ . Write 94.
- d) The answer is 9409.

Ex [2]  $92^2 =$  \_\_\_\_\_.

- a)  $100 - 92 = 8$ .
- b)  $8^2 = 64$ . Write 64.
- c)  $92 - 8 = 84$ . Write 84.
- d) The answer is 8464.