Squaring A Number Ending In 6:

A. From algebra we can also use:

$$(10a - 4)^2 = 100(a)(a-1) + 10(2a + 1) + 6$$

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

1. Write down 6.
2. Add 1 to the ten's digit, multiply by 2, then add 1. Write this number down. Carry if necessary.
3. Multiply the number in the ten's digit by that number plus 1. Write this result.

Ex [1] 66^2 =_____.

a) Write down 6.

b) 2 x (6 + 1) + 1 = 15. Write 5, carry *1.

c) 6 x (6 + 1) = 42 + *1 = 43. Write 43.

d) The answer is 4356.

Ex [2] 86^2 =_____.

a) Write down 6.

b) 2 x (8 + 1) + 1 = 19. Write 9, carry *1.

c) 8 x (8 + 1) = 72 + *1 = 73. Write 73.

d) The answer is 7396.