

Squaring A Number Ending In 5:

A. Squaring a number ending in 5 is very easy. The method comes from algebra:

$$(10a + 5)^2 = 100(a)(a + 1) + 25$$

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

1. Write down 25.
2. Multiply the number in the ten's digit by that number plus 1. Write this number down.

Ex [1] $35^2 =$ _____.

- a) Write 25.
- b) $3 \times (3 + 1) = 3 \times 4 = 12$. Write 12.
- c) The answer is 1225.

Ex [2] $115^2 =$ _____.

- a) Think of 11 as being the number in the ten's digit.
- b) Write 25.
- c) $11 \times (11 + 1) = 11 \times 12 = 132$. Write 132. See [Multiplying by 11](#).
- d) The answer is 13225.