

Adding Squared Numbers In The Form: $a^2 + (10a)^2$

A. This method is very easy since from algebra we know:

$$a^2 + (10a)^2 = 101a^2$$

B. Therefore, you square the smaller number, then multiply by 101 for the answer.

Ex [1] $14^2 + 140^2 =$ _____.

- a) $14^2 = 196$.
- b) $196 \times 101 = 19796$.
- c) The answer is 19796.

Ex [2] $31^2 + 310^2 =$ _____.

- a) $31^2 = 961$. See [Squaring Numbers](#).
- b) $961 \times 101 = 97061$.
- c) The answer is 97061.