Adding Squared Numbers In The Form: $a^2 + (7a)^2$

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

$$a^2 + (7a)^2 = 50a^2$$

B. Therefore, you square the smaller number, then *multiply by 50* for the answer.

Ex [1] $6^2 + 42^2 =$_____.

a) $6^2 = 36$.

b) 36 x 50 = 1800.

c) The answer is 1800.

Ex [2] $15^2 + 105^2 =$_____.

a) $15^2 = 225$. See *Squaring a Number Ending in 5*.

b) 225 x 50 = 11250.

c) The answer is 11250.