Answer on Question#38457 – Math - Other

Let the A. P. be $a, a+d, a+2d, \ldots$. By the given condition, $S_n = 3n^2$.

We have $T_n = S_n - S_{n-1}$:

$$T_n = 3n^2 - 3(n-1)^2 = 3n^2 - 3(n^2 - 2n + 1) = 6n - 3$$

Then

$$T_1 = 6 \cdot 1 - 3 = 3, \;\; T_2 = 6 \cdot 2 - 3 = 9, \;\; T_3 = 6 \cdot 3 - 3 = 15, \ldots.$$

Answer: the A. P. is $3, 9, 15, \ldots$.