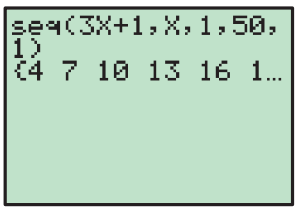
CHAPTER 6 - EVALUATING SERIES

TI-84 Plus

We can write the series $4 + 7 + 10 + \ldots.$ to 50 terms as $\sum_{k=1}^{50} (3k + 1)$.



To evaluate $\sum_{k=1}^{50} (3k + 1)$, press [2nd] [STAT] **(LIST)** [▶] **5:seq(**, then press 3 [X,T,θ,n] [+] 1 [,] [X,T,θ,n] [,] 1 [,] 50 [,] 1 [)] [ENTER] . This generates the sequence of numbers of the form $3x + 1$, where x is from 1 to 50 with a step size of 1.

To find the sum of these values, press [2nd] [STAT] **(LIST)** [◀] **5:sum(** [2nd] [(−)] **(ANS)** [)] [ENTER] .

So, $\sum_{k=1}^{50} (3k + 1) = 3875$.