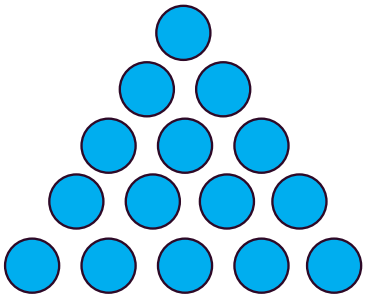
He Tau Tapatoru



Ko te 15 te tau tapatoru tuarima, nā te mea 15 ngā porotiti hei hanga i te tapatoru e rima ngā porotiti o ia taha.

Ko ēhea o ēnei whārite hei tātai i te tau tapatoru T(n)?

(1) $T(n) = 1 + 2 + 3 + 4 + \ldots + (n - 3) + (n - 2) + (n - 1) + n$

(2) $T(n) = \frac{1}{2}n(n + 1)$

(3) $T(n) = 1 + 3 + 5 + \ldots + (2n - 5) + (2n - 3) + (2n - 1)$

(4) $T(n) = n2 - (n - 1)2 + (n - 2)2 - (n - 3)2 + \ldots + 42 - 32 + 22 - 12$

(5) $T(n) = [(n + 1)2 + n2 + (n - 1)2 + \ldots + 12] - [(n2 + 2) + ((n - 1)2 + 2) + ((n - 2)2 + 2) + \ldots + (12 + 2) + 2]$

(6) $T(n) = T(n -1) + n$ and $T(1) = 1$