

VD 8.1.1

Following sequence a_n is defined recursively. Find the function of $a_n = f(a_1, n) = f(n)$, $n \geq 1$ verify with mathematical induction.

a_1	a_k	a_n
-3	$\frac{3}{2}a_{k-1}$	$-3\left(\frac{3}{2}\right)^{n-1}$
0	$a_{k-1} + \frac{1}{2}$	$\frac{n-1}{2}$
5	$a_{k-1} - 3$	$8 - 3n$
10	$a_{k-1} - 2$	$12 - 2n$
1	$4a_{k-1}$	4^{n-1}
2	$3a_{k-1}$	$2 \cdot 3^{n-1}$
3	$a_{k-1} + 3$	$3n$