

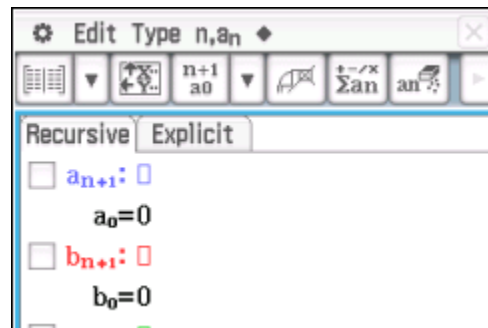
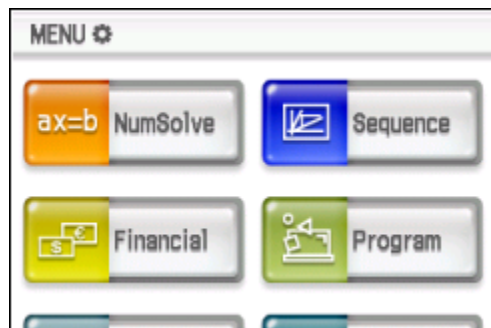
Recurrence Relations on the Classpad

Consider a sequence which is generated by the recurrence relation

$$V_0 = 300 \quad V_{n+1} = 0.5 V_n - 9$$

How many terms of the sequence are positive?

On the **second** page of the Classpad Menu select the **Sequence** app. And the **Recursive Tab**

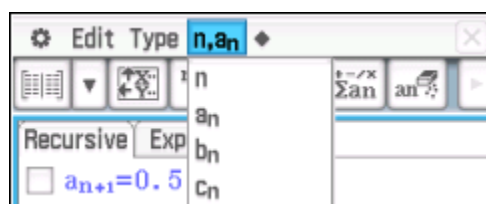


The Classpad uses a, b, c to represent different sequences.

Thus for our example we wish to enter $a_{n+1} = 0.5 a_n - 9$ and $a_0 = 300$

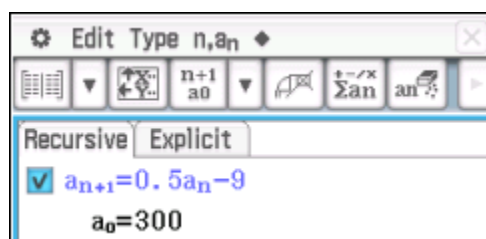
Put your cursor next to a_{n+1} : and type $0.5 a_n - 9$

The a_n is found in **the n, a_n menu**



Change the value of a_0 to 300

Tick the check box on the **left**.



Now **Click** on the **Table icon**



The sequence will now be displayed.

n	a_n
1	141
2	61.5
3	21.75
4	1.875
5	-8.063

We can see that when $n = 4$ the sequence has its last positive term.

Since we started with a_0 the sequence has 5 positive terms.