

Recursive Formulas- Type 2(a)

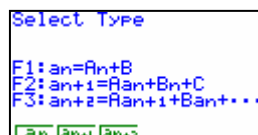
This resource was written by Derek Smith with the support of CASIO New Zealand. It may be freely distributed but remains the intellectual property of the author and CASIO.

Select RECUR mode from the main menu by using the arrow keys to highlight the RECUR icon or pressing 8.



Can be used for arithmetic or geometric sequences.

Note: There are 3 different settings for recursive formulas. There is one worksheet for each type.



Type 1



Type 2



Type 3

This worksheet deals with Type 2

Example: The sequence $\langle a_{n+1} \rangle = \langle a_n \times 2.1, a_1 = 3 \rangle$,
List the first 10 terms of this sequence and draw the sequence.

Answer: Enter in the equation of the sequence
Press **EXE** to store it.



Then press **F5** to set up the calculator for the first 10 members of the sequence. Then **EXIT**



Then **F6** for the **TABLE**, to reveal the sequence shown below.

n+1	an+1
1	6.3
2	13.23
3	27.783
4	58.344

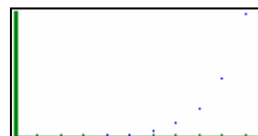
n+1	an+1
5	122.52
6	257.29
7	540.32
8	1134.6

n+1	an+1
9	2382.0
10	5003.9

To draw the sequence make sure that you have set up the V-Window (x and y axes) to adequately draw the sequence. **SHIFT F3** to get the V-Window.



EXIT then **F6** to get the table again and **F6** for the plotted sequence values.



For further tips, more helpful information and software support visit our website www.monacocorp.co.nz/casio