



Example: Find the general (explicit) formula for the sequence given by

$$T_{n+1} = 2T_n + 2, T_1 = 3$$

Enter the recursive formula as shown and then tap  to see the first few terms are 3, 8, 18, 38, 78, ...

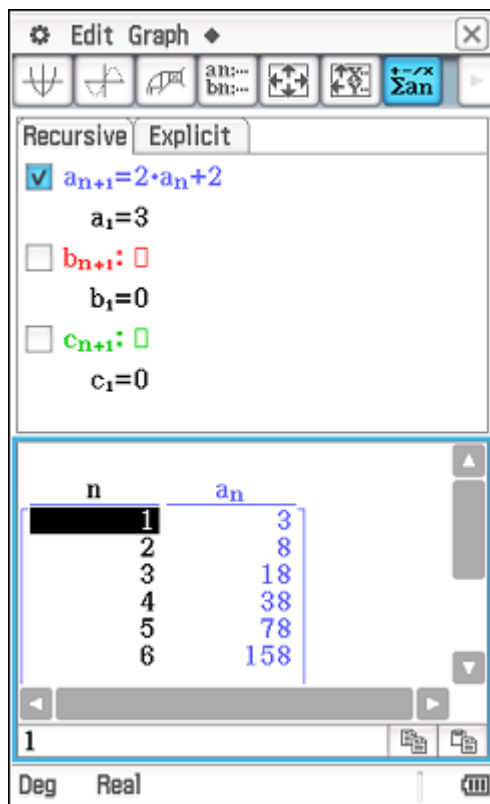
Tap  to open Sequence RUN window.

Tap Calc, **rSolve**.

Tap **EXE**.

Enter the recursive formula, as shown.

The explicit formula for the sequence is returned.



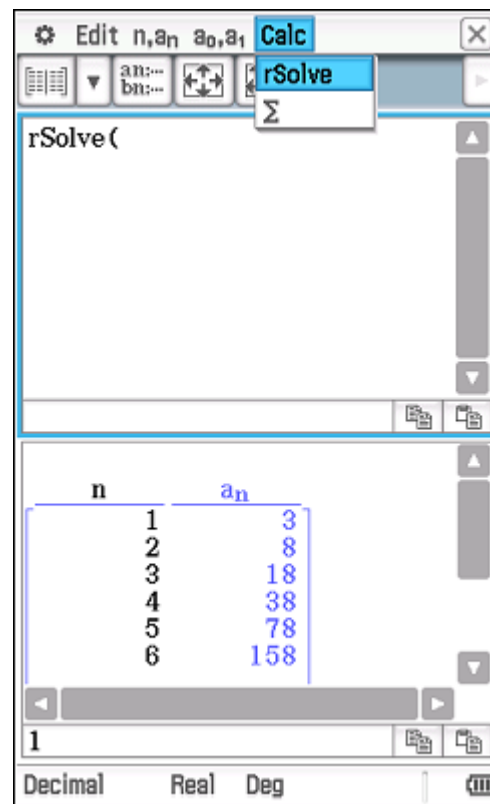
Recursive Explicit

$a_{n+1} = 2 \cdot a_n + 2$
 $a_1 = 3$
 $b_{n+1} = \square$
 $b_1 = 0$
 $c_{n+1} = \square$
 $c_1 = 0$

n	a_n
1	3
2	8
3	18
4	38
5	78
6	158

1

Deg Real



Edit n, a_n a_0, a_1 Calc

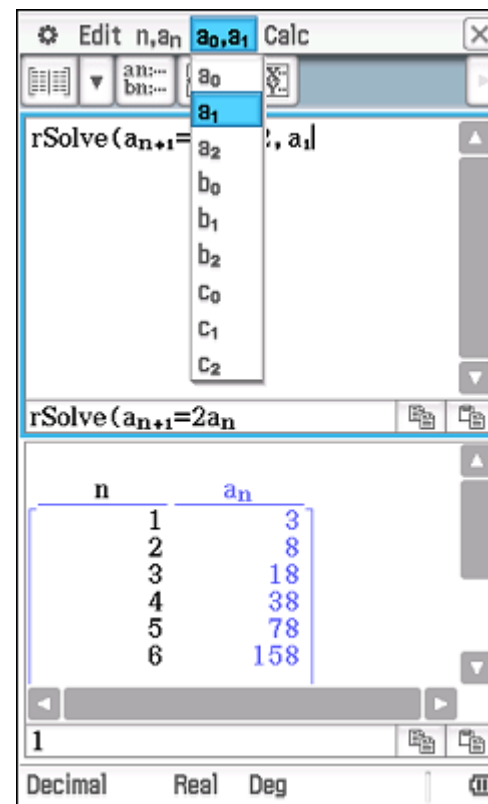
rSolve

rSolve (

n	a_n
1	3
2	8
3	18
4	38
5	78
6	158

1

Decimal Real Deg



Edit n, a_n a_0, a_1 Calc

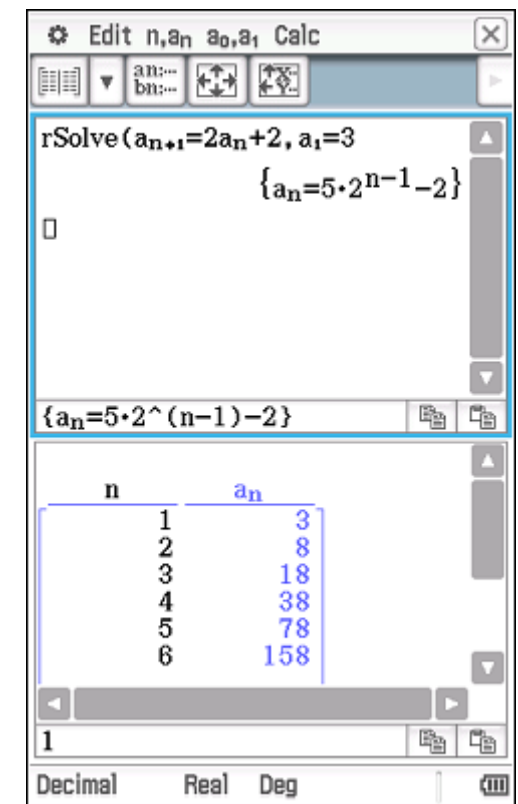
a_0
 a_1
 b_0
 b_1
 c_0
 c_1
 c_2

rSolve ($a_{n+1} = 2a_n$

n	a_n
1	3
2	8
3	18
4	38
5	78
6	158

1

Decimal Real Deg



Edit n, a_n a_0, a_1 Calc

rSolve ($a_{n+1} = 2a_n + 2, a_1 = 3$

$\{a_n = 5 \cdot 2^{n-1} - 2\}$

n	a_n
1	3
2	8
3	18
4	38
5	78
6	158

1

Decimal Real Deg