

A. Find an expression for the  $n$ th term of the following sequence.

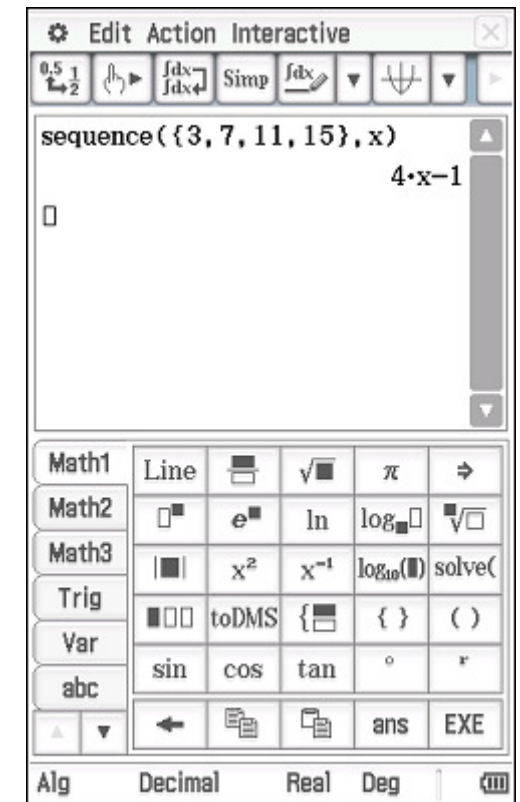
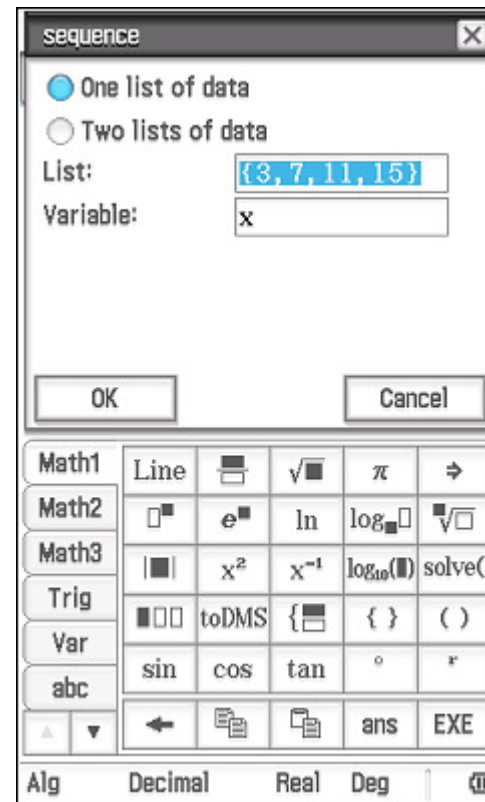
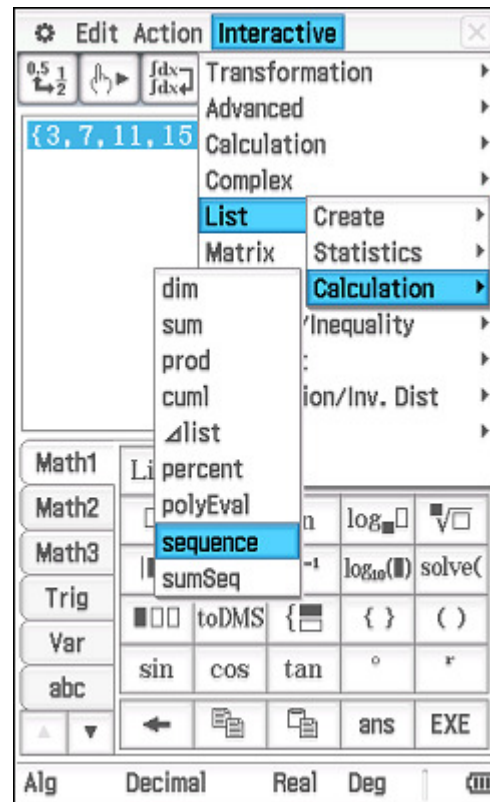
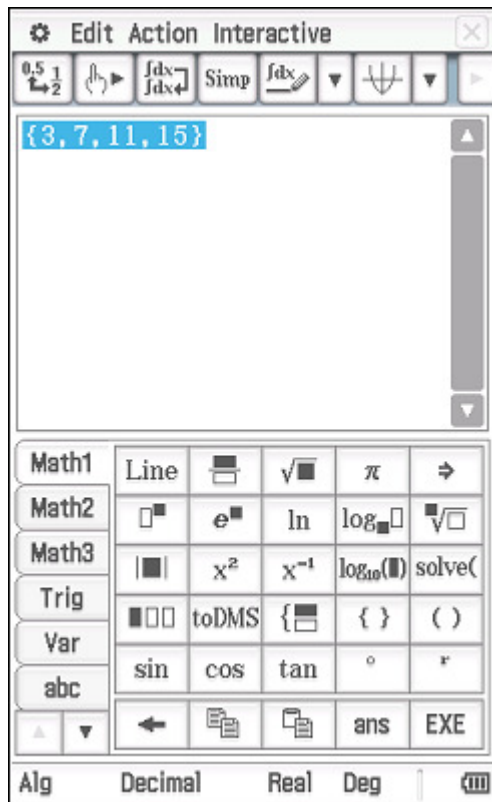
3, 7, 11, 15, ...

Use the curly braces { } from the **Math1** to enter the sequence, and then select the list.

Tap **Interactive**, **List**, **Calculation**, **sequence**.

If required, edit the variable and then tap OK.

The rule for this sequence is displayed.



B. Find the equation for the parabola that passes through the points  $(-2, 3)$ ,  $(1, 0)$  and  $(3, 18)$ .

Tap **Interactive**, **List**, **Calculation**, **sequence**.

Tap the radio button next to 'Two lists of data'.

In the top box enter the x-coordinates as a list surrounded by curly braces.

Repeat for the y-coordinates in the Map to {} box.

*NB: The **sequence** command will find the lowest order polynomial to fit a sequence of points.*

