D. Graphing Sequences

Before running, you should set the range variables. The x-range should be \([0,N_{\text{max}}]\) if you want to plot the first \(N_{\text{max}}\) terms of the sequence. (The program will adjust the x-setting slightly.) The y-range should be chosen so as to get a good view of the graph. The program will prompt for the sequence. Enter in terms of \(N\). After running, you can trace on the graph. For non-integral values of \(x\), no y value is displayed.

**PROGRAM: GRSEQ**

```
:FnOff
:xMax-xMin-W
:round(126/W,0)~N
:round(xMax*N,0)~M
:M/N-xMax
:xMax-(126/N)~xMin
:Disp "ENTER SEQ A(N)"
:InpSt S
:St*Eq(S,y98)
:y99=(fPart N==0)^(-1)*y98
:FnOff 98
:N=x
:DispG
```

If you want to plot the line \(y=L\) where \(L\) is the limit, you will have to modify the program slightly. Insert a command line after the first command (use the INSc command). On that line enter the command **FnOn 1**. Before running, enter \(L\) in \(y1\).