MA 182 **SEQUENCES AND SERIES ON YOUR CALCULATOR**

TI-83+

MODE: Put your calculator into sequence mode.

- **To generate a list of terms in a sequence** $\{a_n\} = \{f(n)\}$

Method 1: On the Y = menu:
nMin = 1
u(n) = f(n)
u(nMin) = value of term a_1

On the Tblset menu:
TblStart = 1
ΔTbl = 1
Auto
Auto

Go to TABLE to view the terms of the sequence

Method 2: On the home screen, type seq(f(n),n,1,k,1) (where k is the number of terms you want to see) then press <ENTER>
Note: seq can be found in LIST OPS or in catalog

- **To graph the terms of a sequence**

On the Y = menu
nMin = 1
u(n) = f(n)
u(nMin) = value of term a_1

Set an appropriate window, have your calculator in dot mode; press GRAPH

- **To generate and graph a sequence of partial sums for the series** $\sum_{n=1}^{\infty} a_n$

On the Y = menu, enter
nMin = 1
u(n) = sum(seq(f(n),n,1,n,1))
u(nMin) = value of term a_1

Note: sum can be found in LIST MATH or in catalog

On the Tblset menu:
TblStart = 1
ΔTbl = 1
Auto
Auto

Go to TABLE to view the terms of the sequence of partial sums; press GRAPH to see the sequence of partial sums graphed. You can also use the TRACE key to read out the values of the partial sums.

TI-86

- **To generate a list of terms in a sequence** $\{a_n\} = \{f(n)\}$

On the home screen, enter seq(f(n),n,1,k,1) and press enter to generate the first k terms.

Note: seq can be found in MATH MISC

- **To generate and graph a sequence of partial sums for the series** $\sum_{n=1}^{\infty} a_n$

On the Y = menu, enter y1 = sum seq (f(x),1,x,1) and press GRAPH.
If you set Xmin = 0 and Xmax = 126 on the WINDOW menu, you can TRACE on the graph to read the values of the partial sums.