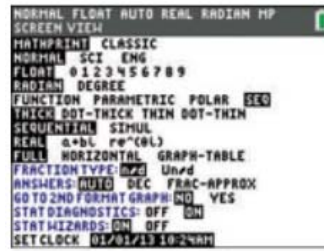


Generating Values of a Sequence

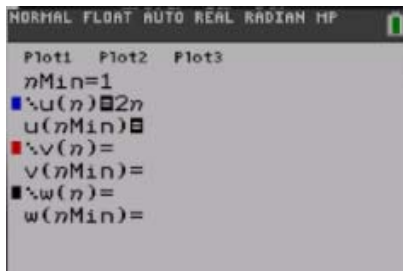
1. Press [MODE] and put the calculator in SEQ mode.



2. There are two ways to view a sequence. Below, the sequence $f(n) = 2n$ will be generated.

Using [Y=]

- a. Press [Y=] to access the Y= editor.
- b. Enter values into the Y= editor.



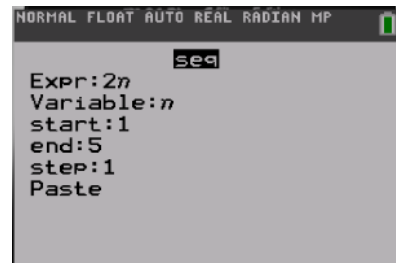
- nMin: Where n starts counting (usually 1)
- $u(n)$: The function that generates the sequence (use the [X,T,Θ,n] key)
- $u(nMin)$: The value of the initial term (generally for recursive sequences)

- c. Press [2nd] [GRAPH] to view the table

NORMAL FLOAT AUTO REAL RADIAN MP				
PRESS + FOR Δ Tbl				
77	u(n)			
0	ERROR			
1	2			
2	4			
3	6			
4	8			
5	10			
6	12			
7	14			
8	16			
9	18			
10	20			
n=0				

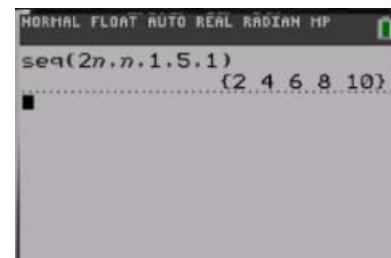
Using the Sequence Function

- a. Press [2nd] [STAT] and arrow right to OPS.
- b. Arrow down to 5: seq(and hit [ENTER]
- c. Enter values into the seq editor.



- Expr: The function that generates the sequence (use the [X,T,Θ,n] key)
- Variable: Use the [X,T,Θ,n] key
- start: Where n starts counting
- end: Where n ends counting
- Step: Use 1

- d. Press [ENTER]. The information will be pasted onto your home screen. Press [ENTER] again for your sequence.



Generating Values of a Series

1. Press [MODE] and put the calculator in SEQ mode.

→ To evaluate a single summation, such as

$$\sum_{n=1}^{10} 2n$$

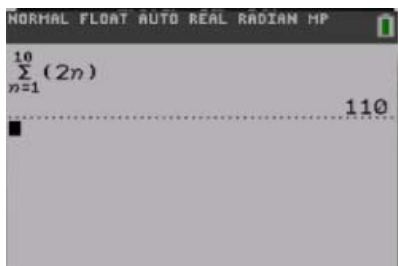


Method 1

- Press [ALPHA] [WINDOW] to access the shortcut. Arrow down to 2: summation Σ (key.



- Enter the values for the summation and hit [ENTER].



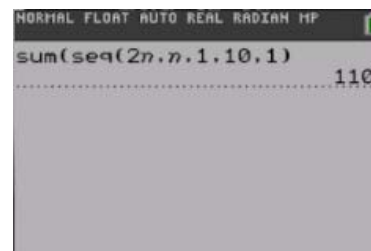
Method 2

- Press [2nd] [STAT] and arrow to MATH. Arrow down to 5: sum(and hit [ENTER].
- Press [2nd] [STAT] and arrow right to OPS. Arrow down to 5: seq(and hit [ENTER]. Enter values into the seq editor.



- Expr: The function that generates the sequence (use the [X,T,θ,n] key)
- Variable: Use the [X,T,θ,n] key
- start: Where n starts counting
- end: Where n ends counting
- Step: Use 1

- Press [ENTER]. The information will be pasted onto your home screen. Press [ENTER] again for your sequence.



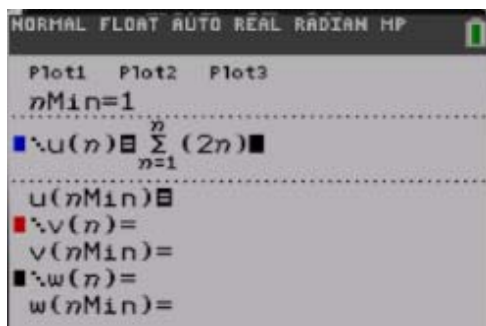
→ To generate a table or graph of partial sums for the series

$$\sum_{n=1}^{\infty} 2n$$

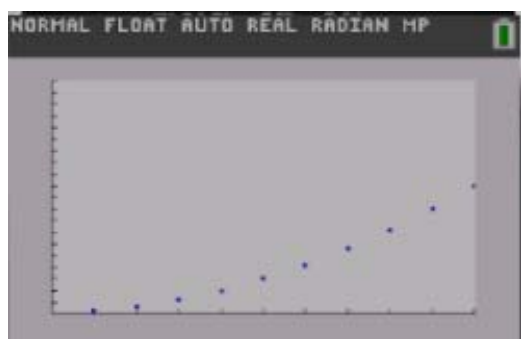
- Press [Y=] to access the Y= editor. Scroll to $u(n)$.
- Press [ALPHA] [WINDOW] to access the shortcut. Arrow down to 2: summation $\Sigma($ key.



- Enter the summation into $u(n)$. The upper bound should be n .



- Press [GRAPH] to view the graph or [2nd] [GRAPH] to view the table. Adjustments to the graph window may be necessary.



NORMAL FLOAT AUTO REAL RADIAN HP					
PRESS + FOR ΔTb1					
n	$u(n)$				
0	ERROR				
1	2				
2	6				
3	12				
4	20				
5	30				
6	42				
7	56				
8	72				
9	90				
10	110				
$n=0$					