

How to Do Page 49 Example 1a) Using TI-83/84

Use TI-83/84 to calculate the sum of the first ten terms of the geometric sequence $t_n = 4(3)^{n-1}$.

1. Move to the home screen, press **CLEAR** and then press **2nd** **STAT**.
You are now in the LIST screen.

2. Move the cursor to OPS and press **ENTER**. See Figure 1.

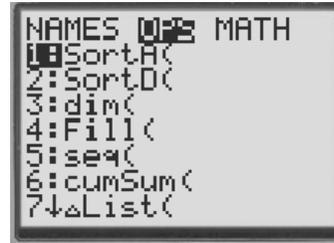


Figure 1

3. To use the sequence function, select 5: seq(and press **ENTER**.
4. You are now at the home screen and can enter information about the sequence using the following syntax:
seq(expression, variable, starting value of variable, ending value of variable, increment of variable)

Note: X is usually chosen for the variable.

- Press **4** **×** **3** **^** **(** **X,T,θ,n** **-** **1** **)** **,** **X,T,θ,n** **,** **1** **,** **10** **,** **1** **ENTER** as shown in Figure 2.

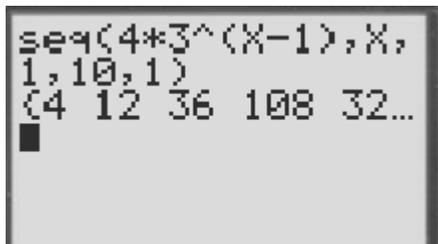


Figure 2

5. Press **2nd** **STAT**. Move the cursor to MATH, and then move the cursor to 5:sum(and press **ENTER**. See Figure 3.



Figure 3



Name: _____

Date: _____

TM 1-6
(continued)

6. You are now at the home screen and can sum the sequence entered by pressing $\boxed{2^{\text{nd}}}$ $\boxed{\text{ANS}}$. See Figure 4.



Figure 4

Note: If you wish to do the SUM and SEQ all at once, start with the SUM function first as shown in Figure 5.

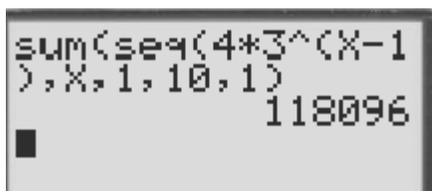


Figure 5

