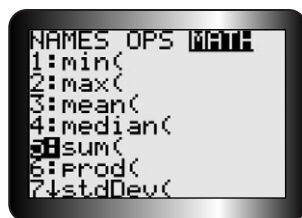
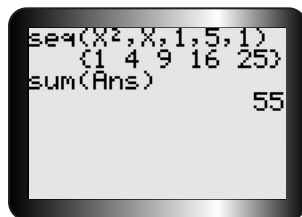


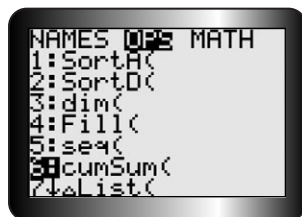
step 1



step 2



step 3



step 2

B-18 Finding the Sum and Cumulative Sum of a Series

Find the sum and the cumulative sum of the first five terms of the sequence defined by $t_n = n^2$.

Part 1: Finding the Sum of the Terms of a Series

1. Generate the first five terms of the sequence.

- a) Select sequence from the List OPS menu. Press **2nd** **STAT** **▶**.

Scroll down to **5:seq** and press **ENTER**.

- b) Enter the expression of the general term, the variable, the starting value of the variable, the ending value of the variable, and the increment, 1.

Press **ENTER** to generate the first five terms, as shown.

2. Select sum from the List MATH menu.

Press **2nd** **STAT** **▶▶** and scroll down to **5:sum**.

Press **ENTER**.

3. Find the sum of the series.

Use **Ans**, last answer, to insert the terms in **sum**.

Press **2nd** **-** **)** **ENTER**. The sum is displayed.

Part 2: Finding the Cumulative Sum of the Terms of a Series

The cumulative sum displays the progression of sums of the terms of a series.

1. Generate the terms of the sequence again.

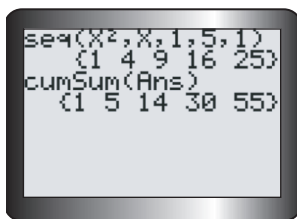
Follow step 1 of Part 1.

2. Select cumulative sum from the LIST OPS menu.

Press **2nd** **STAT** **▶** and scroll down to **6:cumSum**. Press **ENTER**.

3. Find the cumulative sums of the terms of the sequence.

Press **2nd** **-** **)** **ENTER**. The cumulative sums are displayed.



step 3

$$\begin{aligned}
 &\leftarrow 1 = 1 \\
 &5 = 1 + 4 \\
 &14 = 1 + 4 + 9 \\
 &30 = 1 + 4 + 9 + 16 \\
 &55 = 1 + 4 + 9 + 16 + 25
 \end{aligned}$$