Name: _____

Chapter 13 – Section 13.2 Defining Functions Using Sums: Arithmetic Series

TICKET-IN-THE-DOOR

In order to be prepared for class you must watch the module and complete the following activity. This is due first thing when you get to class.

Define a **Finite Arithmetic Series**

Check your understanding:

1. A person decides to walk for 11 minutes one day, and then increases his walks by 3 minutes each day for a month. Let $a_1, a_2, \cdots, a_n$ be the sequence showing the length of time he walks each day, where a_n is the length of time he walks on day n, and let $S_1, S_2, \cdots, S_n$ be the sequence of partial sums. What is S_{23}?

2. A child building a tower with blocks places 29 blocks in the first row, 26 blocks in the second row, 23 blocks in the third row, and so forth. How many blocks are in the tower if it has 8 rows total?

3. Find the **sum** of the first 400 odd integers.

4. What is $\sum_{k=1}^{25}(2k+4)$?

5. Write $12+17+22+\ldots+57$ using **sigma notation**.