Name: _____

Chapter 13 – Section 13.3 Finite Geometric 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 Geometric Series**:

Check your understanding:

1. If you were to fill out a pedigree chart, the first column would have one name (yours), the second column would have two names (your parents), the third column would have 4 names (your grandparents), etc. How many names would be on the chart if there were 8 columns total?

2. To save for their child's college education, parents put $200 at the beginning of each month into an account that pays 4.5% annual interest, compounded monthly. How much will they have saved if they do this for 18 years? Round to the nearest cent.

3. Write the sum 32 – 16 + 8 - 4 + 2 – 1 in **sigma notation**.

4. Find $\sum_{n=0}^{7} 5\left(\frac{1}{7}\right)^n$ to 3 decimal places.

5. Does $\sum_{i=1}^{14} i^2 - \sum_{j=1}^{15} j^2 = -29$? Explain.