



UNIT 2 – ARITHMETIC AND GEOMETRIC SEQUENCES

If you would like to make sure you are fully prepared for the Unit 2 Final test, here is your opportunity. The study guide has links (which I will posted on <http://mrspowellmath.weebly.com/algebra.html>) and sample problems.

Here are some resources for you:

- Is it an Arithmetic or Geometric Sequence?

Go to http://www.algebralab.org/lessons/lesson.aspx?file=Algebra_SeqSeriesIntro.xml and read through the entire document clicking on links as necessary. Do the practice problems at the bottom of the page. Note: they use a different notation that we do, BUT at the bottom of the page, there are practice problems and notation doesn't matter.

- If you need help writing the recursive rules, go to https://learnzillion.com/lesson_plans/5940-create-a-recursive-formula/ and watch the first 3 minutes of the video. Please note they write their recursive rules a little bit differently:

$$f(0)=3; f(n+1)=f(n)\cdot 2 \text{ would look like } f(0)=3; f(n)=f(n-1)\cdot 2$$

- If you need help writing the explicit rules, this video has an explanation of writing a rule for both a linear function and exponential function. <https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:exponential-growth-decay/x2f8bb11595b61c86:exponential-functions-from-tables-graphs/v/constructing-linear-and-exponential-functions-from-data>
- Here are some practice problems writing function rules for exponential functions. (Like #4 on the quiz) <https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:exponential-growth-decay/x2f8bb11595b61c86:exponential-functions-from-tables-graphs/e/construct-basic-exponential-functions-from-table-or-graph>
- DON'T FORGET TO GO BACK THROUGH THE ASSIGNMENTS YOU HAVE IN YOUR BINDER FOR THE UNIT

Here are the Learning Targets for the Unit:

Targets : F.IF.3, F.BF.A2

- Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers.
- Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.