Topic 8 Outline - ALGEBRA 1/ HONORS

**EXPONENTIAL RELATIONSHIPS B**

**1/22 – Monday – Section 15.1 – Understanding Geometric Sequence (MAFS.912.F-LE.1.2** **)**

**Essential Question:** How are the terms of a geometric sequence related?

**Vocabulary:** Geometric sequence, common ratio

**Classwork:** Evaluate pg. 674-676 # 2-20 evens Online book

**Home Learning:** Complete online assignment 15.1

**1/23 - Tuesday – Section 15.2 – Constructing Geometric Sequence (MAFS.912.F-BF.1.1a)**

**Essential Question:** How do you write a geometric sequence?

**Vocabulary:**

**Classwork:** Evaluate pg. 687-690 #2-22 evens all Online book

**Home Learning:** Complete online assignment 15.2

**1/24 Wednesday – Long Term Memory skills (Review for EOC)**

**1/25 – 1/26 – Thursday/Friday – Section 15.4 – Graphing Exponential Functions (MAFS.912.F-IF.3.7e)**

**Essential Questions:** How do you graph an exponential function of the form f (x) = ab x ?

**Vocabulary:** infinity

**Classwork:** Evaluate pg. 715-718 # 2-18 evens Online book

**Home Learning:** Complete online assignment 15.4

**1/29-1/30 - Monday/Tuesday – Section 15.5 – Transforming Exponential Functions (MAFS.912.F-BF.2.3)**

**Essential Questions:** How does the graph of f (x) = a b x change when a and b are changed?

**Vocabulary:** Vertical stretch, vertical compression

**Classwork:** Evaluate pg. 727-729 # 2-16 evens Online book

**Home Learning:** Complete online assignment 15.5

**1/31 Wednesday – Section 16.1 Using Graphs and Properties to Solve Equations with Exponents (MAFS.912.A-CED.1.1, MAFS.912.A-SSE.2.3c)**

**Essential Questions:** How can you solve equations involving variable exponents?

**Vocabulary:** Equality Bases of Property

**Classwork:** Evaluate pg. 745-746 # 2-16 evens Online book

**Home Learning:** Complete online assignment 16.1

**2/1 Thursday/Friday – Long Term Memory Skills (EOC Review)**

**2/5 Monday - Section 16.2 – Modeling Exponential Growth and Decay (MAFS.912.F-IF.3.7e**

**MAFS.912.F-IF.2.5)**

**Essential Questions:** How can you use exponential functions to model the increase or

decrease of a quantity over time?

**Vocabulary:** exponential growth model and exponential decay model

**Classwork:** Evaluate pg. 759-762 # 2-20 evens Online book

**Home Learning:** Complete online assignment 16.2

**2/6 Tuesday - Section 16.3 – Using Exponential Regression Models (MAFS.912.S-ID.2.6a)**

**Essential Questions:** How can you use exponential regression to model data?

**Vocabulary:** exponential regression

**Classwork:** Evaluate pg. 770-774 # 1-12 all Online book

**Home Learning:** Complete online assignment 16.3

**2/7 Wednesday - Section 16.4 – Comparing Linear and Exponential Models (MAFS.912.F-LE.1.1c**

**MAFS.912.F-LE.1.3)**

**Essential Questions:** How can you recognize when to use a linear model or an exponential model?

**Vocabulary:**

**Classwork:** Evaluate pg. 786-790 # 2-20 evens Online book

**Home Learning:** Complete online assignment 16.4

**2/8 – Thursday – Topic Assessment**

**2/9 – Friday – Continue Topic Assessment or Long Term Memory EOC Review.**