Topic 10 Outline - ALGEBRA 1/ HONORS

**QUADRATIC FUNCTIONS**

**2/20 – 2/21 – Tues/Wed – Section 19.1 – Understanding Quadratic Functions (MAFS.912.F-BF.2.3)**

**Essential Question:** What is the effect of the constant a on the graph of f(x) = ax2?

**Vocabulary:** quadratic function, parabola, vertex, axis of symmetry, minimum value, maximum value

**Classwork:** Evaluate pg. 897-900 # 2-18 all Online book

**Home Learning:** Complete online assignment 19.1

**2/22 & 2/26 – Thur/Mon – Section 19.2 – Transforming Quadratic Functions (MAFS.912.F-BF.2.3)**

**Essential Questions:** How can you obtain the graph of g(x) = a(x - h)2 + k from the graph of

f(x) = x2?

**Vocabulary:** vertical translation, horizontal translation, vertex form of a quadratic function,

**Classwork:** Evaluate pg. 910-912 # 1-12 all Online book

**Home Learning:** Complete online assignment 19.2

**2/23 – Friday – Long Term Review (Week #5)**

**2/27 – 2/29 – Tue/Wed/Thur – Section 19.3 – Interpreting Vertex and Standard Form (MAFS.912.F-IF.2.4)**

**Essential Questions:** How can you change the vertex form of a quadratic function to

standard form?

**Vocabulary:** standard form of quadratic equation, vertex form of a quadratic equation

**Classwork:** Evaluate pg. 925-927 # 2-20 evens Online book

**Home Learning:** Complete online assignment 19.3

**3/2 – Friday – Long Term Review (Week #6)**

**3/5-3/6 - Mon/Tue – Section 20.1 - Connecting Intercepts and Zeros (MAFS.912.F-IF.3.7a)**

**Essential Questions**: How can you use the graph of a quadratic function to solve its related

quadratic equation?

**Vocabulary:** Zero of a function

**Classwork:** Evaluate pg. 945-948 # 1-20 all Online book

**Home Learning:** Complete online assignment 20.1

**3/7-3/8 - Wed/Thu – Section 20.2 - Connecting Intercepts and Linear Factors (MAFS.912.F-IF.3.7a)**

**Essential Questions**: How are x-intercepts of a quadratic function and its linear factors related?

**Vocabulary:** Factored Form

**Classwork:** Evaluate pg. 957-959 # 1-16 all Online book

**Home Learning:** Complete online assignment 20.2

**3/9 – Friday – Long Term Review (Week #7)**

**3/12-3/13 - Mon/Tue – Section 20.3 - Applying the Zero Product Property to solve equations (MAFS.912.A-REI.2.4,** **SSE.2.3 )**

**Essential Questions**: **How can you use the Zero Product Property to solve quadratic equations**

**in factored form?**

**Vocabulary:** Zero Product Property

**Classwork:** Evaluate pg. 966-968 # 1-18 all Online book

**Home Learning:** Complete online assignment 20.3