PreCalculus – MATH 1110
Unit 2: Polynomial and Rational Functions

Unit Goals
- o I can get quadratic equations into vertex form or standard form, graph them, and use them in application problems
- o I can describe the attributes of polynomial functions
- o I can use long division and synthetic division with polynomials to find a quotient or to describe zeros of polynomials
- o I can describe zeros, real or imaginary, of polynomials
- o I can graph rational functions and describe their asymptotes, holes, domain, and range

September/PreCalculus

23	24	25 Conferences 4-7p 26 Conferences 4-7p	27 End of 1st six weeks
Chapter 7 Review	**Chapter 7 Review**	**Chapter 7 Test – 60 minutes** After test: *Factoring Practice WS* *2.1a note sheet*	**2.1 Completing the Square, Vertex Form** HW #13

October/PreCalculus

Mon	Tue	Wed/Thurs	Fri
30 *2.1b note sheet* **2.1 Quadratic Applications**	1 **2.2 Graphs of Polynomial Functions** HW #14	2/3 **2.3 Long Division and Synthetic Division** HW #15	4 *2.3 note sheet* **2.3 Factor/Remainder Thm Graphically, Finding Zeros, End Behavior**
7 *2.4 note sheet* **2.4 Complex Conjugates** HW #16	8 **2.5 Finding All Zeros** HW #17	9/10 **2.3-2.5 Quiz** **2.6 Vertical Asymptotes** HW #18 Curve Sketching WS #1	11 **NO SCHOOL**
14 **2.6 Horizontal Asymptotes and Holes** *2.6 note sheet*	15 **2.7 Slant Asymptotes** HW #19 Curve Sketching WS #2	16/17 **2.7 Graphing Practice** Graph Mix & Match Activity	18 **2.8 Quadratic Models** HW #20
21 **Chapter 2 Review**	22 **Chapter 2 Review**	23/24 **Chapter 2 Test** *3.1 note sheet: Graph exponential with shifts, compound interest*	**25 Fall Break NO SCHOOL** Go over 3.1 note sheet **3.1 Exponential Functions and Graphs** HW #21

Chapter 2 Homework Sheet
Polynomial and Rational Functions

Date and Homework		
Date: 9/26/19 **Preview Chapter 2: Factoring Worksheet**		**Monday** **Sept. 30**
Date: 9/30-10/3 **Section 2.1 Quadratic Functions** **HW #13** pg96 #5, 7, 17-23 odd, 31-41 odd, 45, 47, 65, 67, 75		**Friday** **Oct. 5**
Date: 10/4 **Section 2.2 Polynomial Functions of Higher Degree** **HW #14** pg109 #1, 3, 5, 9-21o, 29-45o, 49-55o, 59, 61, 65, 67, 69, 75, 77, 109, 120		**Monday** **Oct. 7**
Date: 10/5-10/7 **Section 2.3 Real Zeros of Polynomial Functions** **HW #15** pg124 #9-35 odd, 43, 47, 51, 53, 55, 87-97 odd		**Thursday** **Oct. 10**
Date: 10/10 **Section 2.4 Complex Numbers** **HW #16** pg133 #1-6, 7-59 odd, 73-77 odd		**Thursday** **Oct. 10**
Date: 10/11 **Section 2.5 The Fundamental Theorem of Algebra** **HW #17** pg140 #5-8, 13-27 odd, 45, 47, 59, 61		**Monday** **Oct. 14**
Date: 10/12 **Section 2.6 Rational Functions and Asymptotes** **HW #18** Curve Sketching WS #1		**Friday** **Oct. 18**
Date: 10/18 **Section 2.7 Graphs of Rational Functions** **HW #19** Curve Sketching WS #2		**Monday** **Oct. 21**
Date: 10/21 **Section 2.8 Quadratic Models** **HW #20** pg165 #1-9 odd, 17, 19, 27, 29		**Monday** **Oct. 21**
Date: 10/24 **Chapter 2 Review**		**Thursday** **Oct. 24**
Date: 10/26 **Chapter 2 Test**		**Thursday** **Oct. 24**

Some worked-out solutions and help available at www.calcchat.com

Video Instruction and Examples: http://mathispower4u.yolasite.com/