Summer Work for Students
Entering Honors PreCalculus

If you are a student coming to Honors PreCalculus (HPC) from Honors Math 3, you should have seen all of this material in your previous Pingree math classes, with most of it covered this past year.

If you are a student coming from Math 3, you will have seen MOST of this material, but you may have a few gaps.

If there is material you feel you have not seen before, it is your responsibility as an honors level student, to search out assistance. Using your text (previous or HPC text) might be helpful, but there are also MANY resources online, including but not limited to, www.khanacademy.org.

Simply leaving the questions blank and saying, "I never saw this before" is not an acceptable excuse. Try your best on each question!

The Pre-calculus textbook (Sullivan 10th edition) is REQUIRED in order to complete this assignment.

SHOW ALL OF YOUR WORK

The first section of work comes from the BACK OF THE TEXTBOOK in the appendices.

Algebra Essentials

Read on page A6 – *Evaluate Algebraic Expressions* and Example 7 and *Determine the Doman of a Variable* and Example 8

Read on page A7 – *Using the Laws of Exponents* and Examples 10 and 11

Complete

page A11 #52, 54, 56, 70, 72, 74, 76, 84, 86, 90, 96, 100, 102, 104, 106, 110, 114, 118

Polynomials

Read on page A24 – *Know Formulas for Special Products* and Example 4. Read on page A28 – *Factor Polynomials,* and Example 8 and 9

Complete

page A30 #36, 40, 42, 44, 50, 52, 56, 78, 82, 86, 88, 92, 98, 100
page A51 #68, 70, 76, 92, 98

The following work is from Chapter 2 - Functions and Their Graphs.

IMPORTANT TERMS TO KNOW THAT ARE USED IN THE CHAPTER

function, function notation, domain, range, vertical line test, even or odd functions, increasing or decreasing functions, local maximum or minimum, absolute maximum or minimum, average rate of change.

Section 2.1 Functions

Read pages 45-56

Complete

Pg. 56 #5,6,10,14-16,19,24,27,32,40,41,52,57,94,97

Section 2.2 The Graph of a Function

Read pages 60-64

Complete

Pg. 64 #10,12,14,15,24,26,36

Section 2.3 Properties of Functions

Read pages 69-77

Complete

Pg. 78 #13-24, 26,28, 32-34,46,55,61, 66,80

Section 2.4 Library of Functions and Piecewise Defined Functions

Read pages 83-89

Complete

Pg. 90 #5,11-18,22, 28,34,35,42,43,45,48

Section 2.5 Transformations

Read pages 93-102

Complete

Pg. 102 #1-18, 20,22,24-26,29,30,32,33,35,36,64,78