

Name: Woods		Grading Quarter:1	Week Beginning: 8/1/23
School Year: 23-24		Subject: Precalculus	
Monday	Notes:	NO SCHOOL	Academic Standards:
Tuesday	Notes:	<p>Objective: U1 L1: Library of Functions</p> <p>Lesson Overview:            What are the key features of a function and how can I identify them in different forms (ex: table, graph)?            Take notes: sketch, domain, range, and properties for the following functions – <math>x</math>, <math>x^2</math>, <math>x^3</math>, <math>\text{abs } x</math>, <math>e^x</math>, <math>\ln x</math>, <math>\sqrt{x}</math>, and <math>1/x</math></p>	<p>Academic Standards:            A2.F-IF.B.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Include problem-solving opportunities utilizing real- world context. Key features include: intercepts, intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. Functions include linear, quadratic, exponential, polynomial, logarithmic, rational, sine, cosine, tangent, square root, cube root, and piecewise-defined functions.</p>

Wednesday	Notes:	<p>Objective: U1 L2: Piecewise Functions</p> <p>Lesson Overview:</p> <p>Take notes: how to graph a piecewise function, how to evaluate one using both the graph and algebraically The importance of understanding domain Independent practice: graphing examples by hand</p>	<p>Academic Standards:</p> <p>A2.F-IF.B.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Include problem-solving opportunities utilizing real- world context. Key features include: intercepts, intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. Functions include linear, quadratic, exponential, polynomial, logarithmic, rational, sine, cosine, tangent, square root, cube root, and piecewise-defined functions.</p>
Thursday	Notes:	<p>Objective: U1 L3: Composition of Functions</p> <p>Lesson Overview:</p> <p>Take notes: How to write a composite function as an inner and outer function Different notations Independent practice on whiteboards</p>	<p>Academic Standards:</p> <p>P.F-BF.A.1 Write a function that describes a relationship between two quantities. c. Compose functions. For example, if <math>T(y)</math> is the temperature in the atmosphere as a function of height, and <math>h(t)</math> is the height of a weather balloon as a function of time, then <math>T(h(t))</math> is the temperature at the location of the weather balloon as a function of time.</p>

Friday	Notes:	<p>Objective: Extra practice with Piecewise Functions</p> <p>Lesson Overview:</p> <p>Partner activity: matching piecewise functions to their graphs</p> <p>With extra time: independently graph examples by hand, focus on domains other than <math>x &gt; 0</math> or <math>x &lt; 0</math>. Include examples with three branches.</p>	<p>Academic Standards:</p> <p>A2.F-IF.B.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Include problem-solving opportunities utilizing real-world context. Key features include: intercepts, intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. Functions include linear, quadratic, exponential, polynomial, logarithmic, rational, sine, cosine, tangent, square root, cube root, and piecewise-defined functions.</p>
--------	--------	---	---