

Name: Woods		Grading Quarter:1	Week Beginning: 8/7/23
School Year: 23-24		Subject: Precalculus	
Monday	Notes:	<p>Objective: Students will be able to identify how changes in a function result in changes to a graph.</p> <p>Lesson Overview:</p> <p>Notes: Shifts, stretches, and reflections using positive and negative integers. Graph examples by hand and with technology. Use Desmos.com to investigate and “polygraph” activity to practice in pairs.</p>	<p>Academic Standards:</p> <p>A2.F-BF.B.3 Identify the effect on the graph of replacing <math>f(x)</math> by <math>f(x) + k</math>, <math>k \cdot f(x)</math>, <math>f(kx)</math>, and <math>f(x + k)</math> for specified values of <math>k</math> (both positive and negative); find the values of <math>k</math> given the graphs. Experiment with cases and illustrate an explanation of the effects on the graphs using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. Functions include linear, quadratic, exponential, polynomial, logarithmic, rational, sine, cosine, tangent, square root, cube root, and piecewise-defined functions.</p>
Tuesday	Notes:	<p>Objective: Students will be able to determine the end behavior of an even or odd function.</p> <p>Lesson Overview:</p> <p>Notes: Define the terms even, odd, and neither in terms of a graph’s shape with graph examples. Discuss symmetry of graphs across an axis or the origin. Discuss infinity as a concept, rather than a number.</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>

Wednesday	Notes:	<p>Objective: Students will be able to identify the key features of a rational function's graph without the use of technology.</p> <p>Lesson Overview:</p> <p>Notes on key features including: zero, intercept, vertical and horizontal asymptote, hole, removable discontinuity Draw examples by hand and investigate how these appear on graphing technology</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: Students will be able to identify the key features of a rational function's graph without the use of technology.</p> <p>Lesson Overview:</p> <p>Continuation of previous day's lesson with examples on Khan Academy. Use formative assessment techniques to determine where misconceptions exist. Practice in groups on big whiteboards.</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>
Friday	Notes:	NO SCHOOL	<p>Academic Standards:</p>

