## Pre-calculus Lesson Plan

Week of:	Lesson	Objective	Activities, Methods, or	Homework
May 15			Procedures	
Monday	Review for semester exam	•	•	•
Tuesday	Semester exams	•	•	•
Wednesday	Semester exams	•	•	•
Thursday		•	•	•
Friday		•	•	•

	Lesson	Objective	Activities, Methods, or	Homework
May 8			Procedures	
Monday	12.4 Derivatives	<ul> <li>Find instantaneous rates of change by calculating derivatives</li> <li>Use the product and quotient rules to calculate derivatives</li> </ul>	<ul> <li>Teacher led examples</li> <li>Student practice</li> </ul>	<ul> <li>Per homework guide</li> </ul>
Tuesday	12.4 Derivatives	<ul> <li>Find instantaneous rates of change by calculating derivatives</li> <li>Use the product and quotient rules to calculate derivatives</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
	12.5 Area under a curve and integration	<ul> <li>Approximate the area under a curve using rectangles</li> <li>Approximate the area under a curve using definite integrals and integration</li> </ul>	<ul> <li>Teacher led examples</li> <li>Student practice</li> </ul>	Per homework guide
	12.5 Area under a curve and integration	<ul> <li>Approximate the area under a curve using rectangles</li> <li>Approximate the area under a curve using definite integrals and integration</li> </ul>	<ul> <li>Teacher led examples</li> <li>Student practice</li> </ul>	Per homework guide
Friday	Quiz 12.4-12.5	•	•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
May 1			Procedures	
Monday	Quiz 12.1-12.2	•	•	•
Tuesday	12.3 Tangent lines and velocity	<ul> <li>Find instantaneous rates of change by calculating slopes of tangent lines</li> <li>Find average and instantaneous velocity</li> </ul>	<ul> <li>Teacher led         examples</li> <li>Student practice</li> </ul>	Per homework     guide
Wednesday	12.3 Tangent lines and velocity	<ul> <li>Find instantaneous rates of change by calculating slopes of tangent lines</li> <li>Find average and instantaneous velocity</li> </ul>	<ul> <li>Teacher led         examples</li> <li>Student practice</li> </ul>	Per homework     guide
Thursday	Test 12.1-12.3	•	•	•
Friday	12.4 Derivatives	<ul> <li>Find instantaneous rates of change by calculating derivatives</li> <li>Use the product and quotient rules to calculate derivatives</li> </ul>	<ul> <li>Teacher led         examples</li> <li>Student practice</li> </ul>	Per homework     guide

Week of:	Lesson	Objective	Activities, Methods, or	Homework
April 24			Procedures	
Monday	Chapter 7 test	•	•	•
Tuesday	12.1 estimating limits graphically	<ul> <li>Estimate limits of functions at fixed values</li> <li>Estimate limits of functions at infinity</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework guide
Wednesday	12.1 estimating limits graphically	<ul> <li>Estimate limits of functions at fixed values</li> <li>Estimate limits of functions at infinity</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework guide
Thursday	12.2 evaluating limits algebraically	<ul> <li>Evaluate limits of polynomial functions at selected points</li> <li>Evaluate limits of polynomial functions at infinity</li> </ul>	<ul> <li>Teacher led         examples</li> <li>Student practice</li> </ul>	Per homework guide
Friday	12.2 evaluating limits algebraically	<ul> <li>Evaluate limits of polynomial functions at selected points</li> <li>Evaluate limits of polynomial functions at infinity</li> </ul>	<ul> <li>Teacher led         examples</li> <li>Student practice</li> </ul>	Per homework guide

Week of:	Lesson	Objective	Activities, Methods, or	Homework
April 17			Procedures	
Monday	No School	•	•	•
Tuesday	7.5 Parametric Equations	<ul> <li>Graph parametric equations.</li> <li>Solve problems related to the motion of projectiles.</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
Wednesday	7.5 Parametric Equations	<ul> <li>Graph parametric equations.</li> <li>Solve problems related to the motion of projectiles.</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework guide
Thursday	Review	•	•	•
Friday	Chapter 7 test		•	•

Week of: April 10	Lesson	Objective	Activities, Methods, or Procedures	Homework
Monday	7.4 Rotations and Conic Sections	<ul> <li>Find rotation of axes to write equations of rotated conic sections</li> <li>Graph rotated conic sections</li> </ul>	<ul> <li>Teacher led         examples</li> <li>Student practice</li> </ul>	Per homework     guide
Tuesday	7.5 Parametric Equations	<ul> <li>Graph parametric equations.</li> <li>Solve problems related to the motion of projectiles.</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
Wednesday	7.5 Parametric Equations	<ul> <li>Graph parametric equations.</li> <li>Solve problems related to the motion of projectiles.</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework guide
Thursday	Chapter 7 test	•	•	•
Friday	No School		•	•

Week of: April 3	Lesson	Objective	Activities, Methods, or Procedures	Homework
Monday	Students out for track	•	•	•
Tuesday	Homework day (7.1-7.3)	•	•	•
Wednesday	7.4 Rotations and Conic Sections	<ul> <li>Find rotation of axes to write equations of rotated conic sections</li> <li>Graph rotated conic sections</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework guide
Thursday	7.4 Rotations and Conic Sections	•	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
Friday	No School		•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
March 27			Procedures	
Monday	7.2 Ellipse	•	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework
Tuesday	Quiz 7.1-7.2	•	•	•
Wednesday	7.3 Hyperbola	<ul> <li>Analyze and graph equations of hyperbolas.</li> <li>Use equations to identify types of conic sections.</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework
Thursday		•	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework
Friday	Test 7.1-7.3		•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
March 20			Procedures	
Monday	7.1 Parabolas	<ul> <li>Analyze and graph equations of parabolas</li> <li>Write equations of parabolas</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
Tuesday	7.1 Parabolas	•	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
Wednesday	7.2 Ellipses and Circles	<ul> <li>Analyze and graph equations of ellipses and circles.</li> <li>Use equations to identify ellipses and circles.</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework guide
Thursday	7.2 Ellipses and Circles	•	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
Friday	Homework day		•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
March 13			Procedures	
Monday	Review/homework day	•	•	•
Tuesday	Test (6.4-6.5)	•	•	Chapter 6     homework due
Wednesday	7.1 Parabolas	<ul> <li>Analyze and graph equations of parabolas</li> <li>Write equations of parabolas</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework guide
Thursday	7.1 Parabolas	•	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
Friday	No School	•	•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
March 6			Procedures	
Monday	6.4 partial Fractions	<ul> <li>Write partial fraction decompositions of rational expressions with linear factors in the denominator.</li> <li>Write partial fraction decompositions of rational expressions with prime quadratic factors in the denominator.</li> </ul>	<ul> <li>Teacher led examples</li> <li>Student practice</li> </ul>	Per homework guide
Tuesday	6.4 Partial Fractions	•	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework guide
Wednesday	6.5 Linear Optimization	<ul> <li>Use linear programming to solve applications.</li> <li>Recognize situations in which there are no solutions or more than one solution of a linear programming application.</li> </ul>	<ul> <li>Teacher led examples</li> <li>Student practice</li> </ul>	Per homework guide
Thursday	6.5 Linear Optimization	•	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
Friday	No School	•	•	•

Week of: February 27	Lesson	Objective	Activities, Methods, or Procedures	Homework
Monday	Quiz 6.1-6.2	•	<ul><li>Review homework</li><li>6.1 and 6.2</li><li>quiz</li></ul>	•
Tuesday	6.3 Solving Linear Systems Using Inverses and Cramer's Rule	<ul> <li>Solve systems of linear equations using inverse matrices.</li> <li>Solve systems of linear equations using Cramer's Rule.</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework guide
Wednesday	6.3 Solving Linear Systems Using Inverses and Cramer's Rule	•	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework guide
Thursday	6.4 partial Fractions	<ul> <li>Write partial fraction decompositions of rational expressions with linear factors in the denominator.</li> <li>Write partial fraction decompositions of rational expressions with prime quadratic factors in the denominator.</li> </ul>	<ul> <li>Teacher led examples</li> <li>Student practice</li> </ul>	Per homework guide
Friday	6.4 Partial Fractions	•	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide

Week of:	Lesson	Objective	Activities, Methods, or	Homework
February 20			Procedures	
Monday	No School – President's Day		•	•

Tuesday	6.2 Matrix Multiplication, Inverses, and Determinants	<ul> <li>Multiply matrices.</li> <li>Find determinants and inverses of 2 × 2 and 3 × 3 matrices.</li> </ul>	<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
Wednesday	6.2 Matrix Multiplication, Inverses, and Determinants		<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
Thursday	6.3 Solving Linear Systems Using Inverses and Cramer's Rule	<ul> <li>Solve systems of linear equations using inverse matrices.</li> <li>Solve systems of linear equations using Cramer's Rule.</li> </ul>	<ul> <li>Teacher led examples</li> <li>Student practice</li> </ul>	Per homework     guide
Friday	6.3 Solving Linear Systems Using Inverses and Cramer's Rule	•	<ul><li>Teacher led examples</li><li>Student practice</li><li>Quiz next class</li></ul>	Per homework     guide

Week of:	Lesson	Objective	Activities, Methods, or	Homework
February 13			Procedures	
Monday	Blog Project Workday	•	•	• Find an example of sine, cosine, or tangent function in your life and use do a trig regression to determine its equation. Use your knowledge of trig functions to explain how the different components of the equation affect its position on the graph.
Tuesday	6.1 Multivariable Linear Systems and row operations	<ul> <li>Solve systems of linear equations using matrices and Gaussian elimination</li> <li>Solve systems of linear equations using matrices and Gauss-Jordan elimination</li> </ul>	<ul> <li>Teacher led         examples</li> <li>Student practice</li> </ul>	Per homework guide
Wednesday	6.1 Multivariable Linear Systems and row operations		<ul><li>Teacher led examples</li><li>Student practice</li></ul>	Per homework     guide
Thursday	6.1 Multivariable Linear Systems and row operations	•	Teacher led examples Student practice	Per homework     guide
Friday	No School	•	•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
February 6			Procedures	
Monday	4.7 Laws of Sine and Cosine	<ul> <li>Understand and apply the Law of sine</li> <li>Understand and apply the Law of cosine</li> </ul>	Examples and student practice	Book practice
Tuesday	4.7 Laws of Sine and Cosine	•	•	•
Wednesday	review			•
Thursday	Test 4.5-4.7	•	•	•
Friday	Blog project			• Find an example of sine, cosine, or tangent function in your life and use do a trig regression to determine it's equation. Use your knowledge of trig functions to explain how the different components of the equation affect its position on the graph.

Week of:	Lesson	Objective	Activities, Methods, or	Homework
January 30			Procedures	
Monday	4.5 Graphing other trig functions	<ul> <li>Graph tangent and reciprocal trigonometric functions.</li> <li>Graph damped trigonometric functions.</li> </ul>	<ul> <li>PPT with examples</li> <li>Student solved problems</li> </ul>	Per homework     guide
Tuesday	4.5 Graphing other trig functions	•	•	•
Wednesday	4.6 Inverse Trig functions	<ul> <li>Evaluate and graph inverse trigonometric functions.</li> <li>Find compositions of trigonometric functions.</li> </ul>	PPT with examples Student solved problems	Per homework     guide
Thursday	4.6 Inverse Trig functions	•	•	•
Friday	Homework/question day			•

Week of: January 23	Lesson	Objective	Activities, Methods, or Procedures	Homework
Monday	Homework Day/Review	•	<ul> <li>Go over 4.3 &amp; 4.4 homework</li> <li>Answer concept questions for 4.1-4.4</li> </ul>	•
Tuesday	Test 4.1-4.4	•	•	•
Wednesday	4.5 Graphing other trig functions	<ul> <li>Graph tangent and reciprocal trigonometric functions.</li> <li>Graph damped trigonometric functions.</li> </ul>	<ul> <li>PPT with examples</li> <li>Student solved problems</li> </ul>	Per homework     guide
Thursday	4.5 Graphing other trig functions	<ul> <li>Graph tangent and reciprocal trigonometric functions.</li> <li>Graph damped trigonometric functions.</li> </ul>	<ul> <li>PPT with examples</li> <li>Student solved problems</li> </ul>	<ul> <li>Per homework guide</li> </ul>
Friday	4.6 Inverse Trig functions	<ul> <li>Evaluate and graph inverse trigonometric functions.</li> <li>Find compositions of trigonometric functions.</li> </ul>	PPT with examples Student solved problems	Per homework guide

Week of:	Lesson	Objective	Activities, Methods, or	Homework
January 16			Procedures	
Monday	No school	•	•	•
Tuesday	4.3 Trigonometric functions on the unit circle	<ul> <li>Find values of trigonometric functions for any angles</li> <li>Find values of trigonometric functions using the unit circle</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>Student work</li> </ul>	Per homework     guide
Wednesday	4.4 Graphing Sine and Cosine Functions	<ul> <li>Graph         transformations of         the sine and cosine         functions.</li> <li>Use sinusoidal         functions to solve         problems.</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>Student work</li> </ul>	Per homework guide
Thursday	4.4 Graphng Sine and Cosine Functions	<ul> <li>Graph         transformations of         the sine and cosine         functions.</li> <li>Use sinusoidal         functions to solve         problems.</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>Student work</li> </ul>	Per homework guide
Friday	Graphing the sine function parametrically	<ul> <li>Use a graphing calculator and parametric equations to graph the sine function and its inverse</li> </ul>	Graphing lab	Per homework guide

Week of:	Lesson	Objective	Activities, Methods, or	Homework
January 9			Procedures	
Monday	4.2 Degrees and Radians	<ul> <li>Convert degree         measures of angles         to radian measures         and vice versa</li> <li>Use angle measures         to solve real-world         problems</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>Student work</li> </ul>	Per homework guide
Tuesday	4.3 Trigonometric functions on the unit circle	<ul> <li>Find values of trigonometric functions for any angles</li> <li>Find values of trigonometric functions using the unit circle</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>Student work</li> </ul>	Per homework     guide
Wednesday	4.3 Trigonometric functions on the unit circle	<ul> <li>Find values of trigonometric functions for any angles</li> <li>Find values of trigonometric functions using the unit circle</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>Student work</li> </ul>	Per homework     guide
Thursday	Graphing the sine function parametrically	<ul> <li>Use a graphing calculator and parametric equations to graph the sine function and its inverse</li> </ul>	<ul><li>Graphing lab</li><li>Friday homework questions</li></ul>	Per homework guide
Friday	No School	•	•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
January 2			Procedures	
Monday	No School Winter break	•	•	•
Tuesday	4.1Right Triangle Trigonometry	<ul> <li>Find values of trigonometric functions for acute angles of right triangles.</li> <li>Solve right triangles</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>Student work</li> </ul>	Per homework guide
Wednesday	4.1Right Triangle Trigonometry	•	<ul><li>Ppt</li><li>Teacher led examples</li><li>Student work</li></ul>	Per homework guide
Thursday	4.1Right Triangle Trigonometry	•	<ul><li>Ppt</li><li>Teacher led examples</li><li>Student work</li></ul>	<ul> <li>Per homework guide</li> </ul>
Friday	4.2 Degrees and Radians	<ul> <li>Convert degree         measures of angles         to radian measures         and vice versa</li> <li>Use angle measures         to solve real-world         problems</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>Student work</li> </ul>	Per homework guide

Week of:	Lesson	Objective	Activities, Methods, or	Homework
December 19			Procedures	
Monday	Semester Exam Review	•	•	•
Tuesday	Semester Exam Review	•	•	•
Wednesday	Semester Exams	•	•	•
Thursday	Semester Exams	•	•	•
Friday	Winter Break	•	•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
December 12			Procedures	
Monday	Review	•	<ul><li>Clarify homework</li><li>Review/clarify topics</li></ul>	<ul> <li>3.4 and 3.5 homework due today</li> <li>study</li> </ul>
Tuesday	Test 3.4-3.5	•	•	•
Wednesday	Blog Project Research Day	<ul> <li>Apply exponential growth and decay to create models for real world situations.</li> </ul>	•	•
Thursday	Blog Project	•	•	•
Friday	Blog Project (If needed)	•	•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
December 5			Procedures	
Monday	3.4 Exponential and Logarithmic Equations	<ul> <li>Apply the One-to-One Property of Exponential Functions to solve equations.</li> <li>Apply the One-to-One Property of Logarithmic Functions to solve equations.</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>In class student practice</li> </ul>	Homework per chapter 3 assignments
Tuesday	3.4 Exponential and Logarithmic Equations	<ul> <li>Apply the One-to- One Property of Exponential Functions to solve equations.</li> <li>Apply the One-to- One Property of Logarithmic Functions to solve equations.</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>In class student practice</li> </ul>	Homework per chapter 3 assignments
Wednesday	3.4 Solve exponential and logarithmic inequalities	<ul> <li>Use tables and graphs to solve inequalities</li> </ul>	Graphing calculator activity	worksheet
Thursday	3.5 Model with Nonlinear Regression	<ul> <li>Model data using exponential, logarithmic, and logistic functions.</li> <li>Linearize and analyze data.</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>In class student practice</li> </ul>	Homework per chapter 3 assignments
Friday	3.5 Model with Nonlinear Regression	•	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>In class student practice</li> </ul>	Homework per chapter 3 assignments

Week of:	Lesson	Objective	Activities, Methods, or	Homework
November 28			Procedures	
Monday	3.3 Properties of Logarithms	<ul> <li>Apply properties of logarithms</li> <li>Apply the Change of Base Formula</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>In class student practice</li> </ul>	
Tuesday	3.3 Properties of Logarithms	•		3.3 pg 183 # 3, 18, 21, 26, 37, 43, 54, 60, 112
Wednesday	Review 3.1-3.3	•		
Thursday	Test 3.1-3.3	•		Homework due for 3.1-3.3
Friday	3.4 Exponential and Logarithmic Equations	<ul> <li>Apply the One-to-One Property of Exponential Functions to solve equations.</li> <li>Apply the One-to-One Property of Logarithmic Functions to solve equations.</li> </ul>	<ul> <li>Ppt</li> <li>Teacher led examples</li> <li>In class student practice</li> </ul>	Homework per chapter 3 assignments

Week of: November 21	Lesson	Objective	Activities, Methods, or Procedures	Homework
Monday	3.2 Logarithmic Functions	<ul> <li>Evaluate         expressions         involving logarithms</li> <li>Sketch and analyze         graphs of         logarithmic         functions</li> </ul>	<ul><li>Powerpoint</li><li>Teacher lead examples</li></ul>	As assigned
Tuesday	Quiz 3.1-3.2	•	•	•
Wednesday		•		
Thursday		•		
Friday		•	•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
November 14			Procedures	
Monday	3.1 Exponential Functions	<ul> <li>Evaluate, analyze, and graph exponential functions.</li> <li>Solve problems involving exponential growth and decay.</li> </ul>	<ul> <li>Powerpoint</li> <li>Teacher lead         examples</li> <li>Graphing activity</li> </ul>	• As assigned
Tuesday	3.1 Exponential Functions	•	<ul><li>Powerpoint</li><li>Teacher lead examples</li><li>Graphing activity</li></ul>	As assigned
Wednesday	3.2 Logarithmic Functions	<ul> <li>Evaluate         expressions         involving logarithms</li> <li>Sketch and analyze         graphs of         logarithmic         functions</li> </ul>	<ul><li>Powerpoint</li><li>Teacher lead examples</li></ul>	As assigned
Thursday	3.2 Logarithmic Functions	•	<ul><li>Powerpoint</li><li>Teacher lead examples</li></ul>	As assigned
Friday	review Quiz 3.1-3.2	•	•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
November 7			Procedures	
Monday	Math of the Presidential Election	<ul> <li>Understand how polynomial equations are used to predict election outcomes</li> </ul>	Research data on past elections to predict how swing states will vote in this election	•
Tuesday	Math of the Presidential Election	<ul> <li>Understand how polynomial equations are used to predict election outcomes</li> </ul>	<ul> <li>Research data on past elections to predict how swing states will vote in this election</li> </ul>	•
Wednesday	Project Work Day	•	<ul><li>Finalize blog post #2</li><li>Submit project</li></ul>	•
Thursday	Football finals	•	•	•
Friday	Look over chapter 3 Determine assessment schedule	•	•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
October 31			Procedures	
Monday	2.6 Nonlinear inequities	<ul><li>solve polynomial inequalities</li><li>solve rational inequalities</li></ul>	<ul><li>Ppt</li><li>Examples</li></ul>	<ul> <li>problems from online book</li> </ul>
Tuesday	Homework questions	•	•	•
Wednesday	review	•	•	<ul> <li>Study guide</li> </ul>
Thursday	Chapter 2 test	•	•	•
Friday	Area under a curve	Approximate the area between a curve and the x-axis	Exploration/connection	•

Week of: October 24	Lesson	Objective	Activities, Methods, or Procedures	Homework
Monday	2.4 Zeros of Polynomial Functions	<ul> <li>Find real zeros of polynomial functions.</li> <li>Find complex zeros of polynomial functions.</li> </ul>	Ppt     examples	problems from online book
Tuesday	2.4 Zeros of Polynomial Functions	<ul> <li>Find real zeros of polynomial functions.</li> <li>Find complex zeros of polynomial functions.</li> </ul>	<ul><li>Ppt</li><li>Examples</li><li>Next blog post</li></ul>	problems from online book
Wednesday	2.5 Rational Functions	<ul> <li>analyze and graph rational functions</li> <li>solve rational functions</li> </ul>	<ul><li>Ppt</li><li>Examples</li><li>exploration</li></ul>	problems from online book
Thursday	2.5 Rational Functions	<ul> <li>analyze and graph rational functions</li> <li>solve rational functions</li> </ul>	<ul><li>Ppt</li><li>Examples</li><li>exploration</li></ul>	problems from online book
Friday	2.6 Nonlinear inequities	<ul> <li>solve polynomial inequalities</li> <li>solve rational inequalities</li> </ul>	<ul><li>Ppt</li><li>Examples</li><li>Graphing activity</li></ul>	problems from online book

Week of:	Lesson	Objective	Activities, Methods, or	Homework
October 17			Procedures	
Monday	No School	•	•	•
Tuesday	2.3 The Remainder and Factor Theorems	<ul> <li>Divide polynomials using long division and synthetic division.</li> <li>Use the Remainder and Factor Theorems.</li> </ul>	<ul><li>Ppt</li><li>examples</li></ul>	problems from online book
Wednesday	2.3 The Remainder and Factor Theorems	<ul> <li>Divide polynomials using long division and synthetic division.</li> <li>Use the Remainder and Factor Theorems.</li> </ul>	<ul><li>Ppt</li><li>examples</li></ul>	problems from online book
Thursday	2.1-2.3 Quiz	•	•	•
Friday	2.4 Zeros of Polynomial Functions	<ul> <li>Find real zeros of polynomial functions.</li> <li>Find complex zeros of polynomial functions.</li> </ul>	<ul><li>Ppt</li><li>examples</li></ul>	problems from online book

Week of:	Lesson	Objective	Activities, Methods, or	Homework
October 10			Procedures	
Monday	Native American Day – No School	•	•	•
Tuesday	2.1 Power and Radical Functions	<ul> <li>Graph and analyze power functions.</li> <li>Graph and analyze radical functions, and solve radical equations.</li> </ul>	Ppt with examples	Online book
Wednesday	2.1 Power and Radical Functions	<ul> <li>Graph and analyze power functions.</li> <li>Graph and analyze radical functions, and solve radical equations.</li> </ul>	Ppt with examples	Online book
Thursday	2.2 Polynomial Functions	<ul> <li>Graph polynomial functions.</li> <li>Model real-world data with polynomial functions.</li> </ul>	Ppt with examples	Online book
Friday	2.2 Polynomial Functions	<ul> <li>Graph polynomial functions.</li> <li>Model real-world data with polynomial functions.</li> </ul>	<ul><li>Ppt with examples</li><li>Time to go over homework</li></ul>	Online book

Week of:	Lesson	Objective	Activities, Methods, or	Homework
October 3			Procedures	
Monday	1.7 Inverse Relations and Functions	<ul> <li>Use the graphs of functions to determine if they have inverse functions.</li> <li>Find inverse functions algebraically and graphically.</li> </ul>	<ul> <li>Investigation</li> </ul>	From online book
Tuesday	1.7 Inverse Relations and Functions	<ul> <li>Use the graphs of functions to determine if they have inverse functions.</li> <li>Find inverse functions algebraically and graphically.</li> </ul>	•	From online book
Wednesday	1.7 Inverse Relations and Functions	•	• practice	from online book
Thursday	Overview of chapter 2	•	<ul> <li>Look through chapter 2</li> <li>Determine how chapter 2 will be assessed</li> <li>Project topic for chapter 2</li> </ul>	From online book
Friday		•	•	•

Week of:	Lesson	Objective	Activities, Methods, or	Homework
September 26			Procedures	
Monday	Composite functions	<ul> <li>Perform operations with functions.</li> <li>Find compositions of functions.</li> </ul>	<ul> <li>Finish packet</li> </ul>	From online book
Tuesday	Inverse Function Work Day: Photo Project	<ul> <li>Use the graphs of functions to determine if they have inverse functions.</li> <li>Find inverse functions algebraically and graphically.</li> </ul>	<ul> <li>Exploration activity</li> <li>Upload photo to desmos</li> </ul>	From online book
Wednesday	Inverse Functions  Photo Project Due	<ul> <li>Use the graphs of functions to determine if they have inverse functions.</li> <li>Find inverse functions algebraically and graphically.</li> </ul>	<ul><li>Notes</li><li>Practice activity</li></ul>	From online book
Thursday	Review	•	Chapter review student choice	From online book
Friday	Chapter 1 test	•	•	From online book

Week of:	Lesson	Objective	Activities, Methods, or	Homework
September 19			Procedures	
Monday	Complete 1.4 1.5 Parent Functions and Transformations	<ul> <li>Identify, graph, and describe parent functions.</li> <li>Identify and graph transformations of parent functions</li> </ul>	<ul><li>Ppt with examples and practice</li><li>desmos</li></ul>	From online book
Tuesday	1.5 Parent Functions and Transformations	<ul> <li>Identify, graph, and describe parent functions.</li> <li>Identify and graph transformations of parent functions</li> </ul>	Ppt with examples and practice	From online book
Wednesday	1.6 Function Operations and Compositions of functions	<ul> <li>Perform operations         with functions.</li> <li>Find compositions of         functions.</li> </ul>	Ppt with examples and practice	From online book
Thursday	1.6 Function Operations and Compositions of functions	<ul> <li>Perform operations         with functions.</li> <li>Find compositions of         functions.</li> </ul>	Ppt with examples and practice	From online book
Friday	1.7 Inverse Relations and Functions	<ul> <li>Use the graphs of functions to determine if they have inverse functions.</li> <li>Find inverse functions algebraically and graphically</li> </ul>	<ul> <li>Ppt with examples and practice</li> <li>desmos</li> </ul>	From online book

Week of:	Lesson	Objective	Activities, Methods, or	Homework
September 12			Procedures	
Monday	1.3 Continuity, end behavior, and limits	<ul> <li>Use limits to determine the continuity of a function, and apply the Intermediate Value thm to continuous functions</li> <li>Use limits to describe end behavior of functions</li> </ul>	Notes and examples	From online book
Tuesday	1.3 Continuity, end behavior, and limits	•	Notes and examples	From online book
Wednesday	Quiz  QFocus: Behavior of functions	•	<ul><li>Quiz 1.1-1.3</li><li>reflection</li></ul>	<ul> <li>blog: How are functions present in your daily life?</li> </ul>
Thursday	1.4 Extreme and Rates of Change	<ul> <li>determine intervals on which functions are increasing, constant, or decreasing, and determine maxima and minima of functions</li> <li>determine the average rate of change of a function</li> </ul>	notes and examples	from online book
Friday	1.4 Extreme and Rates of Change	•	•	From online book

Week of: September 5	Lesson	Objective	Activities, Methods, or Procedures	Homework
Monday	Labor Day – no school		•	•
Tuesday	1.1 Functions	<ul> <li>Describe subsets of real numbers</li> <li>Identify and evaluate functions and state their domains</li> </ul>	<ul> <li>What do you know functions?</li> <li>Notes and examples</li> </ul>	From online book
Wednesday	1.2 Analyzing graphs of functions and relations	<ul> <li>Use graphs of functions to estimate values an find their domains, ranges, y-intercepts, and zeros of functions</li> <li>Explore symmetries of graphs and identify even and odd functions</li> </ul>	Notes and examples	From online book
Thursday	1.3 Continuity, end behavior, and limits	<ul> <li>Use limits to determine the continuity of a function, and apply the Intermediate Value thm to continuous functions</li> <li>Use limits to describe end behavior of functions</li> </ul>	Notes and examples	From online book
Friday	quiz	•	<ul><li>Quiz 1.1-1.3</li><li>reflection</li></ul>	<ul> <li>blog: How are functions present in your daily life?</li> </ul>

Week of:	Lesson	Objective	Activities, Methods, or	Homework
August 29			Procedures	
Monday	Complex Number Review	<ul> <li>Review solving equations and expressions with complex numbers</li> </ul>	<ul><li>Teacher led examples</li><li>puzzle</li></ul>	• #3,10, 13, 18, 28, 33, 34, 38, 45, 51
Tuesday	Quadratic equation review	<ul> <li>Analyzing the properties of parabolas</li> <li>Factoring quadratic equations</li> </ul>	<ul> <li>Teacher led         examples</li> <li>Small group activity</li> </ul>	• # 4, 10, 14, 19, 26, 34, 35, 42, 50, 51
Wednesday	nth roots and real exponents	<ul> <li>Review the process and application roots and exponents</li> </ul>	Teacher led     examples	• #3, 16, 17, 18, 22, 24, 26, 27, 29, 34
Thursday	Unpack chapter 1 Introduce photo project	<ul> <li>Determine skills needed to be successful in chapter</li> <li>Process/purpose and rubric for the photo project</li> </ul>	<ul> <li>Small group discussion</li> <li>Class discussion</li> <li>Reflection</li> <li>Parent function flipchart</li> </ul>	blog: What do you know about functions, what do you hope to learn in this chapter, and how do you think this knowledge is helpful in the real world? (approx. 350 words)
Friday	No School	•	•	•

Week of: August 22	Lesson	Objective	Activities, Methods, or Procedures	Homework
Monday				
Tuesday	First Day of School	<ul> <li>Self Introduction</li> <li>Establish Class         Expectations     </li> <li>Student         Introductions     </li> </ul>	<ul> <li>Go over syllabus</li> <li>Students complete         <i>Get to Know Me</i>         form</li> </ul>	<ul> <li>Complete Get to know me form</li> <li>Obtain needed school supplies</li> </ul>
Wednesday	QFocus	<ul> <li>Students will be able to produce, manipulate, and prioritize questions to maximize information gained</li> </ul>	<ul> <li>Powerpoint on the QFocus procedure</li> <li>QFocus practice in small groups</li> </ul>	
Thursday		<ul> <li>Determine the prior content knowledge of the students.</li> </ul>	Pre-test	
Friday	<ul> <li>Goal Setting</li> <li>Set-up Blog</li> <li>Discuss On-going Photo Project</li> </ul>	Students will be able to set academic goals and plans to reach them.	<ul> <li>Powerpoint on Setting SMART Goals</li> <li>Small group discussion</li> <li>Independent goal setting</li> <li>Set-up student page on Weebly</li> <li>Introduce Photo Project</li> </ul>	Complete Student webpage