January 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18 *Determine whether a function is a relation	19 M L King Day	20	21	22-<u>Day 1</u> **Home room reduced period by 30 minutes** ***Went over rules** ***Began talking about characteristics of Functions**	23 ***Identify if a relation is a function.** ***Evaluate a function for specific values using an equation and a graph**	24
25-Week 1 *Determine domain and range of functions *Identify Parent Graphs	26 ***Identifying intervals of increasing, decreasing and constant** ***Identify Domain and range from an equation and a graph** ***Interval and set notation**	27 ***Define Domain and range** ***Identify Domain and range from an equation and a graph** ***Interval and set notation**	28 ***Define Domain and range** ***Identify Domain and range from an equation and a graph** ***Interval and set notation**	29 *Determine Parent Functions ***Transform Graphs of Parent functions** ***Shifts and reflections** ***changes in graphs and coordinates**	30 *Determine Parent Functions ***Transform Graphs of Parent functions** ***Shifts, reflections and stretches/compression** ***changes in graphs and coordinates**	31

February 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Week 2 *Determine Parent Functions *Transform Graphs of Parent functions	**2-Training** ***Sub Plans** **Domain and Transformations**	**3-Training** ***Sub Plans** **Domain and Transformations**	**4-Training** ***Sub Plans** **Domain and Transformations**	**5** *Determine Parent Functions ***Transform Graphs of Parent functions**	**6** *Determine Parent Functions ***Transform Graphs of Parent functions**	7
8-Week 3 * Form Sum, difference, product, and quotient functions. * Identify their Domains	**9** *Determine Parent Functions ***Transform Graphs of Parent functions**	**10** ***Took Quiz on Transformations**	**11** ***Begin adding, subtracting, multiplying, and dividing functions**	**12** ***Home room reduced period by 30 Minutes** ***Finished group activity with combinations and compositions** ***Began individual assignment on combinations**	**13** ***Went over Combinations Homework.** ***Reviewed over Two Quiz questions from Tuesday**	14 Valentine's Day
15-Week 4 *Form compositions of functions and identify their domains. *Determine if a function is even, odd, or neither *Inverse relations and functions	**16** **Presidents' Day** ***Review questions from transformations quiz** ***Identify Domain of a compositions** ***Determine if a function is even, odd, or neither**	**17** ***Retake Quiz on transformations** * **Continue practice one combinations, compositions along with their domains.** ***Even, odd, neither** * **Define inverse relations**	**18** * **Define inverse relations and functions** * **Find inverse relations from tables, graphs, and equations**	**19** ***Sub Plans** ***Determine if an inverse relation is a function** ***Use graphing calculator to verify inverse functions and relations**	**20** **No School** **required staff development**	21
22-Week 5 *Inverse relations and functions *Introduce Polynomials	**23 Interim** ***Review for Test on Parent functions, Combinations, Compositions, and Inverses**	**24-Training** ***Sub Plans** ***Extra Practice for review**	**25-Training** ***Sub Plans** **Test on unit 1**	**26** ***Define and divide polynomials** ***Apply Remainder and factor theorems** ***Determine the maximum number of zeros**	**27** ***recognize and describe graphs of various polynomials** ***identify properties of general polynomial function** ***End Behavior**	28

March 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 6 *Polynomial Functions *Rational Functions	**2-Quiz** *Quiz on Polynomials *Find all zeros of a polynomial	**3** *Give complete factorization of a polynomial	**4** *Identify Domain of a rational function *Find intercepts, asymptotes, and holes	**5** *Review Polynomial and Rational Functions	**6-Unit 2 Test** *Test on Polynomial and Rational Functions	7
Week 7	**9** *Solve Exponential Equations *Solve Logarithmic Equations	**10** *Solve Exponential Equations *Solve Logarithmic Equations	**11-Quiz** Quiz-Solve Exponential Equations and Solve Logarithmic Equations *Application Problems	**12** *Review Logarithmic and exponential problems	**13-Unit 3 Test** *Test on Exponentials and Logarithms	14
Week 8	**16** *Define and use 6 trig functions in terms of a right triangle *Evaluate 6 trig functions using triangle and calculators	**17** *Application Problems with right triangles *Introduce Unit Circle and reference angles *Covert radians and degrees and define radian	**18-Quiz** *Quiz-Solve right triangle and memorize unit circle *Define trig ratios in coordinate plane and in terms of unit circle	**19** *Practice finding trig values *Develop basic Identities Quotient, Reciprocal, Pythagorean, Periodicity, Negative Angle	**20** *Practice finding trig values *Develop basic Identities Quotient, Reciprocal, Pythagorean, Periodicity, Negative Angle	21
Week 9	**23** *Review Unit 4	**24-Unit 4 Test** *Test on right triangle trig, ratios, and identities	**25** *Graph Cosine and Sine using the unit Circle & amplitude and period *State the domain and range of each *Identify symmetry *Even/Odd	**26** *Graph Secant and Cosecant functions using the unit circle &amplitude and period *State the domain and range *Identify symmetry *Even/Odd	**27** **Optional Workday**	28
Week 10	**30-Quiz** *Quiz-graphing 4 basic trig functions *Graph Tangent and Cotangent functions *Identify domain and range	**31** *State vertical and phase shift for all trig functions *Practice transformations *Application Problems				

April 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 10			**1** *Use graph to determine if equations could be an identity *Review for test on graphing trig functions	**2-Test Unit 5** *Test on graphing trig functions	**3 Good Friday** **Optional Workday**	4
5 Easter Sunday **Spring Break**	**6** **Spring Break**	**7** **Spring Break**	**8** **Spring Break**	**9** **Spring Break**	**10** **Spring Break**	11 **Spring Break**
12-Week 11	**13** *Solve a trig equation graphically *State the complete solution	**14** *Define Domain and range of inverse trig functions *Use inverse trig notation	**15 Early Release RC** **Quiz** *Quiz-Solve trig equations graphically, inverse domain and range	**16** *Solve trig equations algebraically *Work with a variety of methods to solve trig equations	**17** *Review Unit 6 *Solve trig equations algebraically *Work with a variety of methods to solve trig equations	18
19-Week 12	**20-Test Unit 6** *Solving trig equations *Identifying inverse trig function domain and ranges	**21** *Use different strategies to prove identities	**22** *Use different strategies to prove identities *Use addition and subtraction identities *Use cofunction Identities	**23-Quiz** *Quiz-proving trig identities *Use double angle identity * Use half angle identity	**24** *Use power reducing identity *Use power to sum and sum to power identities *Use appropriate rule to solve trig identities	25
26-Week 13	**27** *Review unit 7 *Use various trig identities to prove and solve trig identities	**28-Test Unit 7**	**29** *Law of Sines *Ambiguous case *Oblique, Law of Cosines	**30** *Find area using formulas *Solve real world problems		

May 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 13					**1-Quiz** *Quiz-Law of sines and Cosines *Define the complex plane *Graph complex numbers in the complex plane *Find absolute value of a complex number	2
Week 14	**4** *Express a complex number in polar form *Perform polar multiplication and division	**5** *Calculate power and roots to complex numbers *find and graph roots of unity	**6-Quiz** *Quiz- Complex operations and polar form *Find components and magnitude of a vector *Perform scalar mult., vector addition and subtr.	**7 Interim** *Perform Operations with linear combinations *Determine direction angle of a vector *Determine resultant forces in physical Applications	**8** *Find the dot product of two vectors and the angle between two vectors. *Determine projection and component vectors and use them in physical applications	9
Week 15 Mother's Day	**11-Test Review** *Law of sines and Cosines *Vectors *Operations with complex and polar	**12-Test Unit 8** *Law of sines and Cosines *Vectors *Operations with complex and polar	**13** *Define and write equation for Ellipse *Identify important characteristics and graph ellipses	**14** *Define and write equation for hyperbola *Identify important characteristics and graph hyperbolas	**15-Quiz** *Quiz-Hyperbolas and Ellipses *Define ad write equations for parabolas *Identify important characteristics and graph	16
Week 16	**18** *More practice with parabolas *Determine the shape of a translated conic without graphing	**19** *Locate points in the polar coordinate system *Convert between polar and rectangular coordinate systems	**20** *create graphs of equations in polar coordinates *Recognize the equations of a cardioid, rose, circle, lemniscates, ad limacon	**21** *Define eccentricity of a ellipse, parabola, and a hyperbola *Develop and use the general polar equation of a conic section	**22-Quiz** *Conic Sections *Review before quiz	23
Week 17	**25 Memorial Day** **No Students**	**26-Test Review** * Ellipse, parabola, and hyperbola * Polar coordinates	**27-Test Unit 9** * Ellipse, parabola, and hyperbola * Polar coordinates	**28** *Parametric Equations	**29** **Review**	30
31						

June 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 18	**1** **Review**	**2** **Review**	**3** **Review**	**4** **Final Exams**	**5** **Final Exams**	6
7	**8** **Final Exams**	**9** **Last Day** **Final Exams**	**10** **Required Staff Development**	**11** **Optional Workday**	**12** **Optional Workday**	13 **Graduation Day!!**
14	**15** **Optional Workday**	**16**	**17**	**18**	**19**	20
21 Father's Day	**22**	**23**	**24**	**25**	**26**	27
28	**29**	**30**				