Buford High School CURRICULUM CALENDAR 2015-2016

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 1	Monday, 1/4	FACULTY AND STAFF PROFESSIONAL LEARNING DAY / STUDENT HOLIDAY			
	Tuesday, 1/5	10-1: Polynomials	Identify, evaluate, add, and subtract polynomials	Warm Up: warm up given in unit introduction Key Vocabulary: degree of monomial/polynomial, leading coefficient, polynomial function - Notes on identifying the degree of monomials and polynomials - Notes on classifying polynomials by degree, terms, and name - Adding/Subtracting polynomial examples Homework: pg. 302 #1-14, 19-30	MCC9-12.A.APR.1
	Wednesday, 1/6	10-2: Multiplying Polynomials	Multiply polynomials Use binomial expansion to expand expressions raised to positive powers	Warm Up: Factoring review of quadratics - Notes/Examples of multiplying polynomials - Binomial x binomial, binomial x trinomial, & trinomial x trinomial Homework: pg. 310 #1-8, 10-13, 19-25odd	MCC9-12.A.APR.1 MCC9-12.A.CED.1
	Thursday, 1/7	10-2: Multiplying Polynomials	Multiply polynomials Use binomial expansion to expand expressions raised to positive powers	Warm Up: Factoring Review - Notes on Pascal's Triangle - Be sure to use higher powers to encourage Pascal's vs writing out solution Homework: pg. 310 #27-34 all	MCC9-12.A.APR.5(+)
	Friday, 1/8	10-3: Binomial Distributions	Use binomial theorem to expand a binomial raised to a power Find binomial probabilities and test hypotheses	Review of homework Key Vocabulary: Binomial theorem, experiment & probability - Introduce binomial theorem as correlation to Pascal's triangle - Examples on binomial probability word problems/situations Summary: Given hypothetical situation, find 3 binomial probabilities Homework: pg. 316 & 317 #2-28 even	MCC9-12.A.APR.5(+) MCC9-12.S.MD.4 MCC9-12.S.CP.1

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 2	Monday, 1/11	10-3: Binomial Distributions	Use binomial theorem to expand a binomial raised to a power Find binomial probabilities and test hypotheses	Review of homework Warm Up: problem set from Unit in TE - Students put in to collaborative pairs - Carousel Activity on 10.3 Homework: Study for Quiz	MCC9-12.A.APR.5(+) MCC9-12.S.MD.4 MCC9-12.S.CP.1
	Tuesday, 1/12	10.1-10.3	Quiz	QUIZ 10.1-10.3 Homework: Factoring Review	
	Wednesday, 1/13	10-5: Factoring Polynomials	Use the Factor Theorem to determine the factors of a polynomial. Factor the sum and difference of two cubes	Warm Up: Find problems most missed from factoring quiz and have students perform at least 2-3 as they walk in Key Vocabulary: polynomial, factor, grouping, perfect cubes - Notes on factoring by grouping - Notes on factoring the sum or difference of two cubes Homework: pg. 331 #4-15, 20-30 even	MCC9-12.A.APR.2 MCC9-12.A.APR.3 MCC9-12.A.SSE.2
	Thursday, 1/14	10-5: Factoring Polynomials	Use the Factor Theorem to determine the factors of a polynomial. Factor the sum and difference of two cubes	Warm Up: Review of Homework - Classwork Factoring Problems: pg. 331 #33-38 - Word problem examples as extension of factoring polynomials Classwork on word problems and factoring polynomials	MCC9-12.A.APR.2 MCC9-12.A.APR.3 MCC9-12.A.SSE.2
	Friday, 1/15	10-4: Dividing Polynomials	Use long division to divide polynomials	Warm Up: Factoring quadratics & multiplying polynomials - Notes/examples on using long division to divide polynomials - Classwork: pg. 324 #2-4, 13-18	MCC9-12.A.APR.6

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 3	Monday, 1/18			MLK HOLIDAY	
	Tuesday, 1/19	10-4: Dividing Polynomials	Use synthetic division to divide polynomials	Warm Up: Review of Long Division of Polynomials Key Vocabulary: Synthetic division - Notes/Examples on synthetic division - Examples of using synthetic substitution to solve polynomials for a given value Summary: Solve the same division problem using both long and synthetic division Homework: pg. 324 #5-11, 19-27 odd, 39-48 all	MCC.MP.8 MCC9-12.A.APR.2
	Wednesday, 1/20	10-1 thru 10-5	Review	Test Review – Group Activity	
	Thursday, 1/21	10-1 thru 10-5	TEST	TEST 10-1 thru 10-5	
	Friday, 1/22	11-1: Finding Real Roots of Polynomial Equations	Identify the multiplicity of roots Use the rational root theorem and irrational root theorem to solve polynomial equations	Warm Up: Writing Prompt Key Vocabulary: multiplicity - Notes on how to use factorization to solve polynomial equations - Discuss what the roots of equations represent when graphed - Identify multiplicity of polynomials - Definition of rational root theorem and use of synthetic division/substitution to solve polynomials (if time permits) Homework: 342 #2-10, 15-20	MCC9-12.A.APR.3 MCC9-12.A.APR.2 MCC9-12.A.CED.3

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 4	Monday, 1/25	11-1: Finding Real Roots of Polynomial Equations	Identify the multiplicity of roots Use the rational root theorem and irrational root theorem to solve polynomial equations	Warm Up: Factoring Polynomials Review of Homework from previous class (Thursday) Use student workbook to supplement problems for classwork/homework	MCC9-12.A.APR.3 MCC9-12.A.APR.2 MCC9-12.A.CED.3
	Tuesday, 1/26	11-1: Finding Real Roots of Polynomial Equations	Use the rational root theorem and irrational root theorem to solve polynomial equations	Warm Up: Identify the multiplicity and possible rational roots of given polynomials - Examples on how to identify all real roots of a polynomial equation Classwork/Homework: pg. 342 #24-26, 29-34	MCC9-12.A.APR.3 MCC9-12.A.APR.2 MCC9-12.A.CED.3
	Wednesday, 1/27 Performance Essay English	11-2: Fundamental Theorem of Algebra	Use the FTOA and its corollary to write a polynomial equation of least degree with given roots	Warm Up: Use warm up from teacher's edition - Notes on writing polynomial functions given zeros Homework: pg. 349 #1-3, #11-13	MCC9-12.A.APR.3 MCC9-12.A.APR.2 MCC9-12.A.CED.3
	Thursday, 1/28	11-2: Fundamental Theorem of Algebra	Use the FTOA and its corollary to write a polynomial equation of least degree with given roots	Warm Up: Use warm up from teacher's edition - Notes on writing polynomial functions given zeros Homework: pg. 349 #1-3, #11-13	MCC9-12.A.APR.3 MCC9-12.A.APR.2 MCC9-12.A.CED.3
	Friday, 1/29	11.1 & 11.2	Quiz	Quiz 11.1 & 11.2	

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 5	Monday, 2/1	11-3: Investigating Graphs of Polynomial Functions	Use properties of end behavior to analyze, describe, and graph polynomial functions	Warm Up: Graph quadratics using transformations/factoring to find roots Key Vocabulary: end behavior, turning point - Notes/Examples of polynomial end behavior and graphs of parent functions of polynomials up to degree 5 Classwork: pg. 357 #2-9 Homework: pg. 357 #15-22, 32-35	MCC9-12.F.IF.4
	Tuesday, 2/2	11-3: Investigating Graphs of Polynomial Functions	Use properties of end behavior to analyze, describe, and graph polynomial functions	Warm Up: Fundamental Theorem of Algebra Problems - Examples on graphing polynomials using real zeros, x and y intercepts, x values from a table, end behavior, local maxima and minima Classwork/Homework: pg. 357 #10, 11, 23-26	MCC9-12.F.IF.4 MCC9-12.A.APR.3
	Wednesday, 2/3	11.1-11.3	Review	Review Assignment – Group Activity	
	Thursday, 2/4	11.1-11.3	TEST	TEST 11.1-11.3	
	Friday, 2/5	Module 10 & 11	Review	Warm Up: Writing Prompt Benchmark Review (Module 10) – Group Activity	

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 6 Benchmark Week #1	Monday, 2/8 ENGLISH	Module 10 & 11	Review	Benchmark Review (Module 11) – Group Activity	
	Tuesday, 2/9 MATH	Module 10 & 11	BENCHMARK 1	**BENCHMARK #1**	
	Wednesday, 2/10 ELECTIVES	13-1: Variation Functions	Solve problems involving direct, inverse, joint, and combined variation	Warm Up: Use warmup found on teacher PowerPoint CD Key Vocabulary: constant of variation, direct, joint, inverse, combined variation - Notes on writing and graphing direct variation - Inverse variation task as a class - Notes on writing and graphing inverse variation Homework: pg. 405-406 (#5-8,17-19, 24-30)	MCC9-12.A.CED.2 MCC.MP.1 MCC9-12.A.CED.2 MCC9-12.A.CED.3 MCC9-12.FLE.2
	Thursday, 2/11 SCIENCE	13-1: Variation Functions	Solve problems involving direct, inverse, joint, and combined variation	Warm Up: pg. 222 #1-2 Key Vocabulary: constant of variation, direct, joint, inverse, combined variation - Review homework - Notes on joint and combined variation - Mixed variation practice in collaborative groups - Summary: how do we identify the type of variation from a list of ordered pairs? Homework: pg. 405-406 (22-23, 40-41, 45-47)	MCC.MP.1 MCC9-12.A.CED.3
	Friday, 2/12 SOCIAL STUDIES	13.1	Solve problems involving direct, inverse, joint, and combined variation	Group Activity on Variation (100 point value)	MCC9-12.A.CED.2 MCC.MP.1 MCC9-12.A.CED.2 MCC9-12.A.CED.3 MCC9-12.FLE.2

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 7	Monday, 2/15			Winter Holiday	
	Tuesday, 2/16				
	Wednesday, 2/17				
	Thursday, 2/18			FACULTY AND STAFF PROFESSIONAL LEARNING DAY / STUDENT HOLIDAY	
	Friday, 2/19				

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 8	Monday, 2/22	13-2: Multiplying & Dividing Rational Expressions	Simplify rational expressions Multiply and divide rational expressions	Warm Up: factoring review questions Key Vocabulary: rational expression - Review homework - Factoring trinomials race - Notes on simplifying rational expressions (varied difficulty of factoring involved) - Notes on multiplying rational expressions - Summary: Discussion on how to divide fractions Homework: pg. 412-413 (18-27, 36, 37, 39)	MCC9-12.A.APR.6 MCC9-12.A.APR.7(+)
	Tuesday, 2/23	13-2: Multiplying & Dividing Rational Expressions	Simplify rational expressions Multiply and divide rational expressions	Warm Up: Use warmup on teacher PowerPoint CD Key Vocabulary: rational expression - Review homework - Students independently work on higher level dividing problems - Notes on solving simple rational equations - Summary: discussion on adding and subtracting basic fraction (stress common denominator) Homework: pg. 412-413 (28-35, 38, 40-42)	MCC9-12.A.APR.7(+) MCC9-12.A.REI.2
	Wednesday, 2/24 Performance Essay Math	Modules 10, 11, & 13	Performance Essay	MATH PERFORMANCE ESSAY	
	Thursday, 2/25	13-3: Adding & Subtracting Rational Expressions	Add and subtract rational expressions Simplify complex fractions	Warm Up: adding and subtracting fractions with unlike denominators Key Vocabulary: complex fraction - Review homework - Students are given a rational add/subtract problem with like denominators to assess knowledge - Notes on finding least common multiple of polynomials - Skill check on LCM - Go through several examples of adding/subtracting with different denominators Homework: pg. 420-421 (17-27)	MCC9-12.A.APR.7+

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

| | Friday, 2/26 | 13-3: Adding & Subtracting Rational Expressions | Add and subtract rational expressions

Simplify complex fractions | Warm Up: pg. 420 #2-12 even
Key Vocabulary: complex fraction
- Review homework
- Video on complex fractions
- Complex fractions station activity
- Summary: ticket out the door: one subtraction, one complex fraction problem
Homework: pg. 420-421 (28-31, 39-41, 44) | MCC9-12.A.APR.7+ |

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 9	Monday, 2/29	13-3: Adding & Subtracting Rational Expressions	Add and subtract rational expressions Simplify complex fractions	Buffer Day (if needed) to use to extend rational expression exercises. Based on student/class needs. Use student workbook to supplement	MCC9-12.A.APR.7+
	Tuesday, 3/1	13.1 – 13.3	Quiz	Quiz 13.1-13.3	
	Wednesday, 3/2 Performance Essay Social Studies	13-5: Solving Rational Equations & Inequalities	Solve rational equations and inequalities	Warm Up: Use warmup on teacher PowerPoint CD Key Vocabulary: rational equation, extraneous solution, rational inequality - Review homework - Notes on solving rational equations by multiplying the LCD (stress checking for extraneous solutions) - Partner work on real world applications (using ex. 3 and 4 in section, they complete the check it out problems) Homework: pg. 441-442 (19-28 evens, 38-43)	MCC9-12.A.REI.2 MCC9-12.A.CED.3 MCC9-12.A.CED.1
	Thursday, 3/3	13-5: Solving Rational Equations & Inequalities	Solve rational equations and inequalities	Warm Up: Describe how the solutions to an equation and inequality differ. Key Vocabulary: rational equation, extraneous solution, rational inequality - Review homework - Notes on solving rational inequalities algebraically- emphasize the difference between positive and negative LCD values - Independent practice on rational inequalities Homework: 441-442 (33-36, 44-46, 60-61)	MCC9-12.A.REI.11 MCC9-12.A.REI.2
	Friday, 3/4	13.1-13.3, 13.5	Review	Review – Group Activity	

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 10	Monday, 3/7	13.1-13.3, 13.5	Review	Review – Group Activity	
	Tuesday, 3/8	13.1-13.3, 13.5	Test	Test 13.1-13.3, 13.5	
	Wednesday, 3/9	6-4: Rational Functions	Graph Rational Functions Transform rational functions by changing parameters	Warm Up: basic factoring review Key Vocabulary: rational function, vertical asymptote, horizontal asymptote, discontinuous function, continuous function - Notes on the parent graph of rational functions and their transformations Homework: pg. 211 #2-7	MCC9-12.F.BF.3 MCC9-12.F.IF.5 MC9-12.F.IF.7d(+)
	Thursday, 3/10	6-4: Rational Functions	Graph Rational Functions Transform rational functions by changing parameters	Warm Up: basic factoring review Key Vocabulary: rational function, vertical asymptote, horizontal asymptote - Continue examples on the parent graph of rational functions and their transformations - Notes on identifying vertical and horizontal asymptotes, domain, and range of rational functions using their equations & graphs Homework: pg. 211 #17-22	MCC9-12.F.BF.3 MCC9-12.F.IF.5 MC9-12.F.IF.7d(+)
	Friday, 3/11	6-4: Rational Functions	Graph Rational Functions Transform rational functions by changing parameters	Warm Up: basic factoring review Key Vocabulary: rational function, vertical asymptote, horizontal asymptote, zeros, slant asymptote - Notes on using a calculator to graph rational functions with a polynomial in the numerator - Notes on identifying vertical, horizontal, and slant asymptotes, zeroes, domain, and range of rational functions using their equations & graphs Homework: pg. 211 #8-10, 14-16	MCC9-12.F.BF.3 MCC9-12.F.IF.5 MC9-12.F.IF.7d(+)

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 11	Monday, 3/14	FACULTY AND STAFF PROFESSIONAL LEARNING DAY / STUDENT HOLIDAY			
	Tuesday, 3/15	13.4	Quiz	Rational Function Quiz (13.4)	
	Wednesday, 3/16 Performance Essay Science	13.4: Rational Functions	Graph Rational Functions Transform rational functions by changing parameters	Warm Up: give a rational function problem to identify its characteristics Key Vocabulary: holes in graphs of rational functions - Examples on graphing and identifying those functions with holes in their graphs Classwork/Homework: pg. 211 #33-38 (graph each)	MCC9-12.F.BF.3 MCC9-12.F.IF.5 MC9-12.F.IF.7d(+)
	Thursday, 3/17 Early Release Professional Learning (1st, 2nd, 3rd, 5th)	13.4: Rational Functions	Review	Students will work in groups to review concepts from 6-4	MCC9-12.F.BF.3 MCC9-12.F.IF.5 MC9-12.F.IF.7d(+)
	Friday, 3/18 Early Release Professional Learning (7th, 6th, 4th, 5th)	13.4: Rational Functions	Review	Students will work in groups to review concepts from 6-4	MCC9-12.F.BF.3 MCC9-12.F.IF.5 MC9-12.F.IF.7d(+)

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 12	Monday, 3/21	13.4: Rational Functions	Review	Students will work in groups to review concepts from 6-4	MCC9-12.F.BF.3 MCC9-12.F.IF.5 MC9-12.F.IF.7d(+)
	Tuesday, 3/22	13.4	TEST	TEST – RATIONAL FUNCTIONS (13.4)	
	Wednesday, 3/23	21.1: Operations With Functions	Add, subtract, multiply and divide functions	Warm Up: Writing Prompt - Notes on adding and subtracting functions - Notes on multiplying and dividing functions Classwork/Homework: pg. 438 #2-7 and 15-23	MCC9-12.F.BF.1b
	Thursday, 3/24	21.1: Operations With Functions	Write and evaluate composite functions	Warm Up: Use warm up on PowerPoint presentation CD Key Vocabulary: composition of functions - Notes on composition of functions - Evaluating and writing composite functions (use a variety of functions) Homework: pg. 438 #8-13, 24-32	MCC9-12.F.BC.1c(+)
	Friday, 3/25	21.1: Operations With Functions	Review	Review previous night's homework Classwork: Students will complete a worksheet to practice operations with functions and compositions of functions	MCC9-12.F.BF.1b MCC9-12.F.BC.1c(+)

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 13	Monday, 3/28	21.2: Functions & Their Inverses	Determine whether the inverse of a function is a function

Write rules for the inverses of functions | Warm Up: Graph an exponential and logarithm with the same base to preview inverse functions
- Notes on using the horizontal line test to determine whether the inverse of a relation is a function
- Notes on writing rules for inverses of functions
Homework: pg. 445-6 #1-6, 9-17 | MCC9-12.F.BF.4b(+) MCC9-12.F.BF.4 |
| | Tuesday, 3/29 | 21.2: Functions & Their Inverses | | Determine which material from 14-2 needs to be re-delivered or earlier material that must be reviewed before approaching test

This day may also be used as an additional "buffer" day in case the pacing of the calendar is off | |
| | Wednesday, 3/30 Performance Essay Electives | 21.1 & 21.2 | Review | Review Activity – Collaborative Pairs
Student will complete assignment on sections 21.1 & 21.2 (100 point assignment) | |
| | Thursday, 3/31 | BGT | BGT | Buford's Got Talent (Schedule TBD) | |
| SPRING BREAK! Friday, 4/1 ➔ Friday, 4/8 | | | | | |

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 14 Benchmark Week #2	Monday, 4/11	21.1 & 21.2	Review	Review of Concepts Pre-Spring Break	
	Tuesday, 4/12	21.1 & 21.2	Quiz	Quiz 21.1 & 21.2	
	Wednesday, 4/13 SCIENCE	Absolute Value Functions			
	Thursday, 4/14 SOCIAL STUDIES	Absolute Value Functions			
	Friday, 4/15 ELECTIVES	Review	Benchmark Review	Benchmark Review – Group Activity	

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 15 Benchmark Week #2	Monday, 4/18 ENGLISH	Review	Benchmark Review	Benchmark Review – Group Activity	
	Tuesday, 4/19 MATH	Benchmark	Benchmark	**BENCHMARK #2**	
	Wednesday, 4/20	12-3: Piecewise Functions	Write and graph piecewise functions.

Use piecewise functions to describe real-world situations. | Warm Up: Use warm up given on teacher PowerPoint
Key Vocabulary: piecewise function, step function
- Create a table and a verbal description to represent the graph of piecewise/step functions
- Evaluate piecewise functions
- Graph step functions
Homework: pg. 394 #2-7 | MCC9-12.F.IF.4 MCC9-12.F.IF.2 MCC9-12.F.IF.7b MCC9-12.A.CED.2 |
| | Thursday, 4/21 | 12-3: Piecewise Functions | Write and graph piecewise functions.

Use piecewise functions to describe real-world situations. | Warm Up: pg. 400 #4-7
- Graph piecewise functions involving linear functions
- Examples on real-world problems incorporating piecewise functions
Homework: pg. 394-5 #9-19 (linear only) | MCC9-12.F.IF.4 MCC9-12.F.IF.2 MCC9-12.F.IF.7b MCC9-12.A.CED.2 |
| | Friday, 4/22 | 12-3: Piecewise Functions | Write and graph piecewise functions.

Use piecewise functions to describe real-world situations. | Warmup: Example of evaluating a piecewise quadratic function
- Graph piecewise functions involving quadratic functions
Homework: pg. 394-5 #9-19 (include quadratics) | MCC9-12.F.IF.4 MCC9-12.F.IF.2 MCC9-12.F.IF.7b MCC9-12.A.CED.2 |

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 16	Monday, 4/25	21.1, 21.2, Absolute Value, 19.3	Review	Review – Group Activity	
	Tuesday, 4/26	21.1, 21.2, Absolute Value, 19.3	Test	TEST – 21.1, 21.2, Absolute Value, & 19.3	
	Wednesday, 4/27	14-1: Radical Functions	Graph radical functions and inequalities Transform radical functions by changing parameters	Warm Up: Writing Prompt Key Vocabulary: radical function, square root function - Have students develop square root function by taking the inverse of x^2 - Discuss domain and range of square root function - Create chart of transformations - Notes on graphing square root functions using transformations - Notes on writing radical functions Homework: pg. 454-455 (24-26, 30-38 evens, 39-41, 51-54)	MCC9-12.F.IF.5 MCC9-12.F.IF.7b MCC9-12.F.BF.3
	Thursday, 4/28	14-1: Radical Functions	Graph radical functions and inequalities Transform radical functions by changing parameters	Warm Up: evaluate cube root parent function for different values of x and graph the points Key Vocabulary: radical function, cube root function - Have students develop cube root function by taking the inverse of x^3 - Discuss domain and range of cube root function - Review chart of transformations - Notes on graphing cube root functions using transformations - Notes/practice on radical inequalities Homework: pg. 454-455 (27-29, 43-46)	MCC9-12.F.IF.5 MCC9-12.F.IF.7b MCC9-12.F.BF.3
	Friday, 4/29	14-2: Solving Radical Equations & Inequalities	Solve radical equations and inequalities	Warm Up: Solve quadratic by square root method Key Vocabulary: radical equation, radical inequality - Notes on solving equations with one radical - Independent practice on this concept - Notes on solving equations with two radicals Homework: p. 462 (27-35)	MCC9-12.A.REI.2

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 17	Monday, 5/2	14-2: Solving Radical Equations & Inequalities	Solve radical equations and inequalities	Warm Up: extraneous solution check Key Vocabulary: radical equation, radical inequality - Review homework - Have students solve an equation with an extraneous solution to see if they catch it - Notes on solving equations with rational exponents - Classwork: 5 problems to turn in Homework: p. 462-463 (36-41, 54, 60, 62, 63)	MCC9-12.A.REI.2
	Tuesday, 5/3	14-2: Solving Radical Equations & Inequalities	Review graphing and solving radical equations	Warm Up: Factoring Review Key Vocabulary: radical equation, radical inequality - Use student workbook to supplement review questions based on student need Homework: Study for test	MCC9-12.F.IF.5 MCC9-12.F.IF.7b MCC9-12.F.BF.3 MCC9-12.A.REI.2 MCC9-12.A.SSE.1
	Wednesday, 5/4	14.1-14.2	Review	Review – Group Activity	
	Thursday, 5/5	14.1-14.2	Test	TEST 14.1 & 14.2	
	Friday, 5/6	8-1: Measures of Central Tendency & Variation	Find measures of central tendency and measures of variation for statistical data. Examine the effects of outliers on statistical data.	Warm Up: Define mean, median, mode, and range in your own words. Be prepared to discuss Key Vocabulary: expected value, probability distribution, mean, median, mode, box and whisker plot, quartile, inter-quartile range - Notes on measures of central tendency - Notes on finding expected value - Notes on creating box and whisker plot and quartiles - Use pg. 233 #2-8 as classwork Homework: pg. 233 #13-19	MCC9-12.S.ID.2 MCC9-12.S.MD.2

AP Exams Monday, 5/2 – AP Chem, AP Enviro Science, and AP Psych Tuesday, 5/3 – AP Spanish Language Wednesdays, 5/4 – AP English Literature Thursday, 5/5 – AP Calculus Friday, 5/6 – AP US History, AP Studio Art	Milestones To be determined.

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

					(CCGPS, GPS, AP)
Week 18	Monday, 5/9	8-1: Measures of Central Tendency & Variation	Find measures of central tendency and measures of variation for statistical data. Examine the effects of outliers on statistical data.	Warm Up: How does increasing the mean affect the median, mode, and range of data? Key Vocabulary: variance, standard deviation, outlier - Notes on finding variance and standard deviation - Notes on examining outliers (Q1 – 1.5IQR or Q3 + 1.5IQR - Word Problem examples on measures of central tendency & variation(Use pg. 11 #9-12 as classwork) Homework: pg. 233 &234 #20-36	MCC9-12.S.ID.2 MCC9-12.S.ID.3
	Tuesday, 5/10	8-2: Data Gathering	Explain how random samples can be used to make inferences about a population	Warm Up: Determine the standard deviation and variance of your final grades from your last report card (guess if you don't remember) Key Vocabulary: population, census, sample, random sample, biased sample, statistic, parameter - Notes on population vs sample vs census - Examples of identifying biased samples - Examples on analyzing surveys and making predictions Homework: pg. 241-242 #3-33 odd	MCC9-12.S.IC.4 MCC9-12.S.IC.1
	Wednesday, 5/11	8.1 & 8.2	Quiz	QUIZ 8.1 & 8.2	
	Thursday, 5/12	AP World Test	AP World Test	Group Activity – Many students missing class today due to AP World History test	
	Friday, 5/13	Stats Activity	Stats Activity	Stats Activity – Collaborative Pairs	
AP Exams Monday, May 9 – AP Biology and AP Music Theory Tuesday, May 10 – AP Government Wednesday, May 11– AP English Language and AP Macroeconomics Thursday, May 12 – AP World History and AP Statistics Friday, May 13 – AP Human Geography				Milestones To be determined.	

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 19	Monday, 5/16	8-3: Surveys, Experiments, and Observational Studies	Focus on the commonalities and differences between surveys, experiments, and observational studies	Warm Up: Pick the 2 most missed questions from Friday's quiz – have students answer these again using different values Key Vocabulary: experiment, observational study, controlled experiment, control group, treatment group, randomized comparative experiment - Notes on identifying experimental vs observational studies - Notes on evaluating a published report - Notes on designing an experiment or observational study & data collection - Guided Practice pg. 249 #3-12 Homework: pg. 250-251 #14-29	MCC9-12.S.IC.3 MCC9-12.S.IC.6
	Tuesday, 5/17	8.1-8.3	Review	Review – Group Activity	
	Wednesday, 5/18	8.1-8.3	Test	TEST 8.1-8.3	
	Thursday, 5/19	Review	Review	Exam Review	
	Friday, 5/20	Review	Review	Exam Review	

COURSE: Accelerated Analytic Geometry B/Advanced Algebra	SEMESTER: Spring 2016
TEACHER(S): Laura Graves & Justin Johnson	

WEEK	DAY	CONCEPT	OBJECTIVES	INSTRUCTIONAL STRATEGIES	STANDARDS (CCGPS, GPS, AP)
Week 20 Benchmark Week #3	Monday, 5/23	Senior Exams (Benchmark #3 – 5th, 6th, & 7th)			
	Tuesday, 5/24	Senior Exams (Benchmark #3 – 1st, 2nd, 3rd, & 4th) / Semester Exams (Benchmark #3 – 7th)			
	Wednesday, 5/25	Semester Exams (Benchmark #3 – 1st & 2nd)			
	Thursday, 5/26	Semester Exams (Benchmark #3 – 3rd & 4th)			
	Friday, 5/27	Semester Exams (Benchmark #3 – 5th & 6th)			