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|  **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 1 | Wednesday, 8/7 |  |  | Rules, Syllabus, Books, and Introductions |  |
| Thursday, 8/8 | Linear Equations & Inequalities | P3 – Solving linear equations and inequalities in one variable | Warm up: Solve the given equation**Class:** Notes, isolating the variable, using a number line to solve inequalities, text p 25-26 #1-59**HW:** finish classwork | MA3A4a |
| Friday, 8/9 | Linear Equations & Inequalities | P4 – slope and intercepts; 2.1 – Graph linear functions; model situations | Warm up: define slope, explain how to find slope from two points, and also from a graph**Class:** Notes, find slope and x and y intercepts, graph linear functions given the intercepts, p 36-38 #1-25,31-35,41-59Class survey**HW:** finish classwork | MA3A4a,b |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 2 | Monday, 8/12 | Absolute Value | P7 – Solve inequalities involving absolute values | Warm up: solve the given absolute value inequality**Class:** Notes, find critical points and use number lines to solve absolute value inequalities, practice Worksheet**HW:** finish worksheet | MA3A4a |
| Tuesday, 8/13 | Quadratics | P5 – Solve quadratic equations and graph quadratic functions; P7 – Solve quadratic inequalities | Warm up: solve the given quadratic equation, list different methods of solving quadratic equations**Class:** Notes, graph quadratic functions by finding the vertex and intercepts, use Completing the square as another method of solving a quadratic equation, practice p 46 #1-34; p 58 #17-26**HW:** finish classwork | MA3A4a,b |
| Wednesday, 8/14 | Quadratics | 2.1 – Use quadratics to model situations | Warm up: find the vertex and intercepts of the given function**Class:** Notes, solve word problems using quadratic equations, students list steps in solving word problems, practice p 169-171 #7-12,13-22;54-64**HW:** finish classwork | MA3A4a |
| Thursday, 8/15 | Piecewise Functions | 1.3 – Graph piecewise functions | Warm up: rewrite the given absolute value function as a piecewise function**Quiz****Class:** Notes, practice graphing piecewise functions including step functions, worksheet**HW:** worksheet | MA3A4a,b |
| Friday, 8/16 | Combining functions | 1.4 – Building new functions from basic functions by adding, subtracting, multiplying, dividing, and composing  | Warm up: find the composition of the two given functions**Class:** Notes, review adding and subtracting functions, multiplying and dividing functions, and using composition to build new functions, practice p 116-117 #1-8,11-30**HW:** finish classwork | MA3A4c |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 3 | Monday, 8/19 | Linear, Absolute Value, Quadratic, Piecewise Functions | **Review** | Warm up: Define absolute value **Class:** worksheet over linear, absolute value, piecewise, and quadratic functions**HW:** study for test | MA3A4a,b |
| Tuesday, 8/20 |  |  | **TEST # 1** | MA3A4a,b |
| Wednesday, 8/21 | Power Functions and their behavior | 2.2 – Modeling power functions | Warm up: sketch the graph of a cubic function**Class:** Notes, ask what a power function is, graph monomial functions; Model planetary data with a power function p179 Ex 5, practice p 182-183 #1-22,27-48,51-54**HW:** finish classwork | MA3A4a |
| Thursday, 8/22 | Polynomial Functions and their behavior | 2.3 – find zeros of polynomial functions and graph them, transformations | Warm up: List intercepts, max/min, domain, range, and end behavior of given graph**Class:** Notes, discuss characteristics of graphs: intercepts, max/min, domain, range, end behavior; graph transformations of monomial functions and discuss characteristics; practice p 193-194 #1-12,29-32,53-56**HW:** finish classwork | MA3A4a,b |
| Friday, 8/23 | Polynomial Functions and their behavior | 2.3 – find zeros of polynomial functions and graph them | Warm up: Factor $8x^{3}-27$**Class:** Notes, find zeros of polynomial functions by factoring, discuss expected shapes of graphs, practice worksheet**HW:** p 193-194 #39-42,49-52 | MA3A4a |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 4 | Monday, 8/26 | Polynomial Functions and their behavior | 2.3 – polynomial end behavior and limits | Warm up: Describe end behavior of three functions**Class:** Notes, connect end behavior with limits of functions, practice worksheet**HW:** p 209 #17-28 | MA3A4a |
| Tuesday, 8/27 | Polynomial Theorems | 2.4 – Division of polynomials; Remainder, Factor, and Rational Root Theorems | Warm up: Factor $x^{3}+2x^{2}-5x-6$**Quiz over 2.2 – 2.3****Class:** Notes, discuss finding zeros of unfactorable functions, review long division of polynomials, synthetic division, practice p205-206 #1-24,27-32**HW:** finish classwork | MA3A4a,c |
| Wednesday, 8/28 | Polynomial Theorems | 2.4 – Division of polynomials; Remainder, Factor, and Rational Root Theorems; finding upper and lower bounds for zeros of polynomials | Warm up: find the possible roots of given function**Class:** Notes, discuss Rational Root Theorem, Upper and Lower Bound Test for Real Zeros, practice p206 #37-48**HW:** p206 #49-56 | MA3A4a,c |
| Thursday, 8/29 | Polynomials with complex zeros | 2.5 – Factoring polynomials with real coefficients using complex factors  | Warm up: Determine how many and what kind of roots 3 different quadratic functions have.**Class:** Exploration 1 p212: What can happen if the coefficients are not real? discuss complex zeros, Fundamental Theorem of Algebra, Linear Factorization Theorem , practice p215 #1-26**HW:** finish classwork | MA3A4a |
| Friday, 8/30**Professional****Learning****Early Release** | Polynomials with complex zeros | 2.5 – Factoring polynomials with real coefficients using factors with complex coefficients | Warm up: Simplify the given expression $(3+2i)\left(4-6i\right)(1-i)$**Class:** Continue practice with complex zeros p215-216 #27-44Where are areas that students need to slow down and be careful?**HW:** finish classwork | MA3A4a |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 5 | Monday, 9/2 | **LABOR DAY HOLIDAY** |
| Tuesday, 9/3 | Rational functions | 2.6 – Transforming the graphs of rational functions | Warm up: Define parent function, give three examples of parent functions**Quiz over 2.2 – 2.5****Class:** Ask students to define rational function using mathematic terminology, graph $f\left(x\right)=\frac{1}{x}$ , discuss domain, range, continuity, increasing/decreasing, symmetry, extrema, asymptotes, end behavior (as limits); graph transformations of the parent function, discuss transforming the reciprocal function before graphing, practice p225 #1-18**HW:** finish classwork | MA3A1a, MA4Ab |
| Wednesday, 9/4 | Rational functions | 2.6 –Identifying asymptotes of rational functions | Warm up: Define asymptote and intercepts**Class:** discuss finding horizontal, vertical, and slant asymptotes, intercepts; practice p225-226 #19-36**HW:** finish classwork | MA3A1a |
| Thursday, 9/5 | Rational functions | 2.6 – predicting end behavior of rational functions | Warm up: Predict end behavior of linear, quadratic, cubic, quartic functions**Class:** Class activity: match functions with end behavior, practice p225-226 #37-44,51-62**HW:** finish classwork | MA3A1a |
| Friday, 9/6 | Rational functions | 2.7 – Solving rational equations graphically and algebraically | Warm up: Quick review p232 #3,45,6**Quiz over 2.2 – 2.6****Class:** Review LCD, solving by clearing fractions, practice p232-233 #2-22 evenHW:p232-233 #1-21 odd | MA3A1b,c |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 6 | Monday, 9/9 | Rational functions | 2.7 – Solving rational equations graphically and algebraically; finding inverses | Warm up: Quick review p232 #1**Class:** Discuss extraneous solutions, solve example 2 p229 and show graph to support answer practice p233-234 #23-30,32-35,39-42; inverses worksheet**HW:** finish classwork | MA3A1b,c |
| Tuesday, 9/10 | Rational functions | 2.8 – Solving rational inequalities graphically and algebraically | Warm up: Quick review p242 #8**Class:** Find critical values of Example 1 p236 and then use sign chart to determine solutions of inequality, Exploration 1 p237 Sketching a graph of a polynomial from its sign chart, practice p242-243 #1-32**HW:** finish classwork | MA3A1c |
| Wednesday, 9/11**Performance Essay****ENGLISH &****FINE ARTS** | Rational functions | 2.8 – Solving rational inequalities graphically and algebraically | Warm up: Quick review p242 #10**Class:** Continue to practice p265-266 #33-54,56-61**HW:** p246-247 #9,17,18,26,29,32,34,35,37 | MA3A1c |
| Thursday, 9/12 |  | **Review** | Warm up: Discuss the Factor Theorem and the Remainder Theorem**Class:** Review of Unit 2 – Polynomial functions p246-247 #40,49,53,60,64,68,70,74,76,85**HW:** study for test | MA3A1a,b,c |
| Friday, 9/13 |  |  | **TEST # 2** | MA3A1a,b,c |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 7Benchmark#1 | Monday, 9/16ELECTIVES | Exponential and logistic problems | 3.1 – Evaluate exponential expressions and identify and graph exponential and logistic functions including transformations | Warm up: Graph $f\left(x\right)=3\left(2\right)^{x-1}+3$**Class:** Review exponential functions – growth and decay, p261-263 #1-40,55-58**HW:** finish classwork | MA3A4a,b |
| Tuesday, 9/17ENGLISH |  | **Review for benchmark** | Warm up: Describe end behavior of 3 functions**Class:** Review functions and polynomials, worksheet**HW:** study for benchmark | MA3A3a,b,c; MA3A4a,b,c |
| **Wednesday, 9/18****MATH** |  |  | **MATH Benchmark #1** | **MA3A3a,b,c; MA3A4a,b,c** |
| Thursday, 9/19SCIENCE | Exponential and logistic modeling | 3.2 – Exponential growth, decay and regression to model real life problems | Warm up: Quick review p270 #3-4**Class:** Discuss population change at a constant percent,p266 Examples 2-4, practice p 270-271 #1-35**HW:** finish classwork | MA3A4a |
| Friday, 9/20SOCIAL STUDIES | Logarithmic functions | 3.3 – Converting logarithmic and exponential equations; evaluate and graph common and natural logarithms including transformations | Warm up: Quick review p280 #6,10**Class:** Review basic properties of logs, graph parent log and natural log function, review transformations, practice p 281-282 #1-46**HW:** finish classwork | MA3A4a |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 8 | Monday, 9/23 | Logarithmic functions | 3.3 – Converting logarithmic and exponential equations; evaluate and graph common and natural logarithms including transformations | Warm up: Match four logarithmic graphs with functions**Class:** Review homework, discuss characteristics of the functions in warm up, practice p281-282 #47-58,63-68,72-74**HW:** finish classwork | MA3A4a,b |
| Tuesday, 9/24 | Logarithmic functions | 3.4 – Properties of logarithms | Warm up: Exploration 2 p285 #1,3,8,10**Quiz over 3.1-3.3****Class:** Review Exploration 2 with students, have them determine the Product, Quotient, and Power properties of logs, discuss change of base, practice p 289 #1-38**HW:** finish classwork | MA3A4a |
| Wednesday, 9/25**Graduation** **Writing Test** |  |  | **Graduation Writing Test**Review of exponential and logistic functions |  |
| Thursday, 9/26 | Logarithmic functions | 3.4 – Properties of logarithms | Warm up: Matching p289 #43-46**Class:** Review HW, continue practice p289-290 #39-42,47-50,52-55, 63,64**HW:** finish classwork | MA3A4a |
| Friday, 9/27**Homecoming****Early Release** | Exponential, logistic, and logarithmic modeling  | 3.5 - Exponential growth, decay and regression and logarithmic functions to model real life problems | Warm up: Quick Review p300 #5,7,10**Class:** Review HW, review scientific notation and the need for it; solving exponential and logarithmic equations example 1,3; reading word problems example 5,7; practice p301-302 #1-38**HW:** finish classwork | MA3A4a |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 9 | Monday, 9/30 | Exponential, logistic, and logarithmic modeling | 3.5 - Exponential growth, decay and regression and logarithmic functions to model real life problems | Warm up: Determine by how many orders of magnitude a $100 bill and a dime differ**Class:** Review HW; discuss orders of magnitude, how to tackle word problems, practice p301-302 #39-50, **HW:** finish classwork | MA3A4a |
| Tuesday, 10/1 | Exponential, logistic, and logarithmic modeling | 3.5 - Exponential growth, decay and regression and logarithmic functions to model real life problems | Warm up: Enter data into calculator**Quiz over 3.1 -3.5****Class:** Logistic regression activity graphing calculator problems**HW:** worksheet | MA3A4a |
| Wednesday, 10/2 | Exponential & Logarithmic functions | 3.6 – Exponential and logarithmic functions and equations to solve business and finance applications related to compound interest and annuities | Warm up: How much money will Mary have if she invests $2500 at 3% interest compounded monthly for 10 years?**Class:** Review compound interest and interest compounded continuously, annuities, loans, mortgages, example 9 p310 – calculating loan payments, practice p310-311 #1-40,45-46,49-56**HW:** finish classwork | MA3A4a |
| Thursday, 10/3 |  | Review | Warm up: List the properties of logs**Class:** Review of Unit 3 – Exponential, Logistic and Logarithmic functions p314-315 #1,4,10,12,14,15,22,34,38,40,52,53,59-62,64,67,74**HW:** study for test | MA3A4a,b |
| Friday, 10/4 |  |  | **TEST # 3** | MA3A4a,b |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 10 | Monday, 10/7 | Functions and their properties | 1.2 – Represent functions numerically, graphically; analyze function characteristics such as domain, range,extrema, symmetry, asymptotes, end behavior | Warm up: Quick review p94 #9**Class:** Discuss vertical line test, domain, range, extrema, interval notation,inc/dec, odd/even functions p94-97 practice #5-8,10-40 even**HW:** p95 #29-61 odd | MA3A1a,bMA3A4a,b,c |
| Tuesday, 10/8 | 12 Basic Functions | 1.3 – Recognize the graphs of 12 basic functions, determine domains and combine these functions to create new functions | Warm up: List as many families of functions as you can and sketch the parent of each**Class:** Review HW, discuss the different functions from the warm up, compare characteristics, p106-107 #1-28,35-42,45-52,68,69**HW:** finish classwork | MA3A1a,bMA3A4a,b,c |
| Wednesday, 10/9**Perf Essay****SOCIAL STUDIES &****CTAE** | Building functions from functions | 1.4 – Build new functions from basic functions by adding/subtracting, multiplying/dividing, & composing functions | Warm up: Explain the steps in composing functions**Class:** Notes, p116-117 #1-36; practice with graphing calculators**HW:** finish classwork | MA3A1a,bMA3A4a,b,c |
| Thursday, 10/10 | Graphical Transformations | 1.6 – Algebraically and graphically represent translations, reflections, stretches/shrinks of functions  | Warm up: Create a function from each of three different families of functions & describe the transformations**Quiz over 1.2,3,4****Class:** Ask students to explain translations, reflections, stretches and shrinks; practice graphing p136-137 #1-28**HW:** finish classwork | MA3A1a,bMA3A4a,b,c |
| Friday, 10/11 | Graphical Transformations | 1.6 – Algebraically and graphically represent translations, reflections, stretches, and shrinks of functions and parametric relations | Warm up: determine function from graph**Class:** Review HW; discuss any questions involving transformations, reflect upon similarity of written functions, practice p137 #39-55**HW:** p138 #57-58 | MA3A1a,bMA3A4a,b,c |
| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 11 | Monday, 10/14 | **FALL HOLIDAY!** |
| Tuesday, 10/15 | **Professional Learning Day (Student Holiday)** |
| Wednesday, 10/16**PSAT and****College Fair** | Functions | Review Game | Warm up: determine function from graph**Class:** Review game of the 12 basic functions**HW:** none | MA3A1a,bMA3A4a,b,c |
| Thursday, 10/17**Fall Festival****Early Release** | Modeling with functions | 1.7 – identify functions, model real-world applications | Warm up: Quick review p148 #1,5,7**Quiz over 1.2,3,4,6****Class:** Notes, p148-149 #1-30**HW:** finish classwork | MA3A1a,bMA3A4a,b,c |
| Friday, 10/18**Professional** **Learning****Early Release** | Modeling with functions | 1.7 – identify functions, model real-world applications | Warm up: Quick review p148 #1,5,7**Quiz over 1.2,3,4,6****Class:** Notes, p148-149 #1-30**HW:** finish classwork | MA3A1a,bMA3A4a,b,c |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 12 | Monday, 10/21 | Modeling with functions | 1.7 – identify functions, model real-world applications | Warm up: p149 #31**Class:** Review HW, continue practice p149 #32-39**HW:** p152-154 #1-10, 11-23 odd, 27,42,45,46,53,62 | MA3A1a,bMA3A4a,b,c |
| Tuesday, 10/22 |  | **Review** | Warm up: p154 #61**Class:** Review of Unit 1.2,3,4,6,7  | MA3A1a,bMA3A4a,b,c |
| Wednesday, 10/23 |  |  | **TEST # 4** | MA3A1a,bMA3A4a,b,c |
| Thursday, 10/24 | Sequences | 9.4 – express arithmetic and geometric sequences explicitly and recursively; find limits of convergent sequences | Warm up: Quick review p675 #5,8**Class:** Review arithmetic and geometric sequences; ask students if they know recursive; discuss infinite sequences and convergence/divergence; p671 Example 3,4; p676 #2-32 even,**HW:** p676 #1-31 odd | MA3A9a,b,c |
| Friday, 10/25 | Sequences | 9.4 – express arithmetic and geometric sequences explicitly and recursively; find limits of convergent sequences | Warm up: Group activity p676 #41**Class:** Review HW, continue practice p676-677 #37-40**HW:** p677 #43-48 | MA3A9a,b,c |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 13Benchmark #2 | Monday, 10/28**ELECTIVES** | Series | 9.5 – Use sigma notation and find finite sums of terms in arithmetic and geometric sequences | Warm up: Find the sum of the natural numbers from 1 to 100 without a calculator**Class:** Review HW; discuss sigma notation, sum of arithmetic & geometric series, discuss difference in finite & infinite, practice p684 #2-30 even**HW:** p684 #1-29 odd | MA3A9e,f,g |
| Tuesday, 10/29**SOCIAL STUDIES** |  | Review | Warm up: Write $f\left(x\right)=\left|-4x-2\right|$ as a piecewise function**Class:** Review of Units P3,4,5,7; 1.2-4,6; 2.1-8;3.1-6;9.4 worksheet**HW:** review worksheet | MA3A3a,b,c; MA3A4a,b,c; MA3A9a,b,c |
| Wednesday, 10/30**ENGLISH** |  | Review | Warm up:**Class:** Review of Units P3,4,5,7; 1.2-4,6; 2.1-8;3.1-6;9.4 worksheet**HW:** study for benchmark | MA3A3a,b,c; MA3A4a,b,c; MA3A9a,b,c |
| **Thursday, 10/31****MATH** |  |  | **Math Benchmark #2** | **MA3A3a,b,c; MA3A4a,b,c; MA3A9a,b,c** |
| Friday, 11/1**SCIENCE** | Series | 9.5 – Use sigma notation and find finite sums of terms in arithmetic and geometric sequences; find sums of convergent geometric series | Warm up: Find the sum of the given infinite series**Class:** Limits of partial sums; p682 Example 3; practice p684-685 #35-36; group activity p685 #39**HW:** p685 #40-46 | MA3A9e,f,g |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 14 | Monday, 11/4 | Series | 9.5 – Use sigma notation and find finite sums of terms in arithmetic and geometric sequences; find sums of convergent geometric series | Warm up: find the sum of the given infinite series**Class:** Review HW; Extending the concepts of sequences and series p686 #49-51**HW:** p686 #52 | MA3A9e,f,g |
| Tuesday, 11/5 |  | **Review** | Warm up: Discuss factoring cubic functions**Class:** Ask students to trade warm up answers and improve upon them; discuss how performance essays are graded **HW:** study for performance essay |  |
| **Wednesday, 11/6****Performance Essay****MATH &****FOREIGN LANG** |  |  | **Math Performance Essay** |  |
| Thursday, 11/7**Half day due to****Perf Exam grading** | Mathematical Induction | 9.6 – Use the principle of mathematical induction to prove mathematical generalizations | Warm up: Quick review p690 #3,6,9**Class:** Worksheet on induction/deduction**HW:** finish worksheet | MA3A9d |
| Friday, 11/8 | Mathematical Induction | 9.6 – Use the principle of mathematical induction to prove mathematical generalizations | Warm up: p690 #4**Quiz over 9.4,5****Class:** Review worksheet on induction/deduction; discuss meaning of the words; practice p690-691 #2,6,10,14,21-24**HW:** p690 #7,9,13,25-33 odd | MA3A9d |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 15 | Monday, 11/11 |  | 9.6 – Use the principle of mathematical induction to prove mathematical generalizations | Warm up: partners: p691 #36 writing to learn**Class:** Discuss answers to warm up; review HW; continue practice p691-692 #37-42**HW:** review worksheet | MA3A9d |
| Tuesday, 11/12 |  | **Review** | Warm up:**Class:**  Review Unit 9.4-6 worksheet**HW:** study for test | MA3A9a,b,c,d,e,f,g |
| Wednesday, 11/13 |  |  | **TEST # 5** | MA3A9a,b,c,d,e,f,g |
| Thursday, 11/14 |  | StatisticsThere are 15 days for this. | Warm up:**Class:** Notes, **HW:** | MA3D1;MA3D2;MA3D3 |
| Friday, 11/15 |  |  | Warm up:**Class:** Notes, **HW:** |  |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 16 | Monday, 11/18 |  |  | Warm up:**Class:** Notes, **HW:** |  |
| Tuesday, 11/19 |  |  | Warm up:**Class:** Notes, **HW:** |  |
| Wednesday, 11/20 |  |  | Warm up:**Class:** Notes, **HW:** |  |
| Thursday, 11/21 |  |  | Warm up:**Class:** Notes, **HW:** |  |
| Friday, 11/22 |  |  | Warm up:**Class:** Notes, **HW:** |  |
| **THANKSGIVING BREAK!** |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 17 | Monday, 12/2 | Statistics |  | Warm up:**Class:** Notes, **HW:** |  |
| Tuesday, 12/3 |  |  | Warm up:**Class:** Notes, **HW:** |  |
| Wednesday, 12/4**Performance** **Essay****SCIENCE &****HEALTH/PE** |  |  | Warm up:**Class:** Notes, **HW:** |  |
| Thursday, 12/5 |  |  | Warm up:**Class:** Notes, **HW:** |  |
| Friday, 12/6 |  |  | Warm up:**Class:** Notes, **HW:** |  |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 18 | Monday, 12/9 |  |  | Warm up:**Class:** Notes, **HW:** |  |
| Tuesday, 12/10 |  |  | Warm up:**Class:** Notes, **HW:** |  |
| Wednesday, 12/11 |  |  | Warm up:**Class:** Notes, **HW:** |  |
| Thursday, 12/12 |  | Review for final | Warm up:**Class:** Review **HW:** Review | MA3A3a,b,c; MA3A4a,b,c; MA3A9a,b,c |
| Friday, 12/13 |  | Review for final | Warm up:**Class:** Review **HW:** Review | MA3A3a,b,c; MA3A4a,b,c; MA3A9a,b,c |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 19Benchmark Week #3 | Monday, 12/16 |  | **Review for Final Exam** |  | MA3A3a,b,c; MA3A4a,b,c; MA3A9a,b,c |
| Tuesday, 12/17 | **Semester Exams (Benchmark #3) – 7th Period** |
| Wednesday, 12/18 | **Semester Exams (Benchmark #3) – 1st & 2nd Periods** |
| Thursday, 12/19 | **Semester Exams (Benchmark #3) – 3rd & 4th Periods** |
| Friday, 12/20 | **Semester Exams (Benchmark #3) – 5th & 6th Periods** |

**End 1st Semester**

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 1 | Monday, 1/6 | **Professional Learning Day (Student Holiday)** |
| Tuesday, 1/7 | Angles and their measures | 4.1 – Convert between radians and degrees, find arc lengths, convert to nautical miles, solve for angular speed | Warm up: Quick review p325 #1,3,7,132**Class:** Discuss angle measurement – latitude and longitude; Example 1p321; Exploration 1 – construct a 1-radian angle; ask students to find conversion formulas; practice p325 #2- 24 even**HW:** p325 #1-23 odd | MA3A2a |
| Wednesday, 1/8 | Angles and their measures | 4.1 –find arc lengths, convert to nautical miles, solve for angular speed | Warm up: find the arc length of the given circle problem (using inches)**Class:** Review HW; discuss finding the arc length in radians; find radian and also degree measure arc length formulas; Example 3 perimeter of a pizza; practice p325-326 #25-32**HW:** p325-326 #33-43 | MA3A2a |
| Thursday, 1/9 | Angles and their measures | 4.1 – Convert between radians and degrees, find arc lengths, convert to nautical miles, solve for angular speed | Warm up: Convert given problem to radians**Class:** Review HW; continue practice word problems p326 -327 #45,48,50,52,54**HW:** p326-327 #46,49,51,53 | MA3A2a |
| Friday, 1/10 | Trigonometric functions of acute angles | 4.2 – define the six trigonometric functions using the lengths of the sides of a right triangle | Warm up: Quick review p334 #1,3,6,10**Class:** Review HW; Review sine, cosine, tangent and introduce secant, cosecant, and cotangent functions; Exploration 1 p330; discuss special triangles; practice p335 #2-24 even**HW:** p335 #1-23 odd | MA3A2b,c |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 2 | Monday, 1/13 | Trigonometric functions of acute angles | 4.2 – define the six trigonometric functions using the lengths of the sides of a right triangle | Warm up: Find the height of a building using three different trig functions**Class:** Review HW; Discuss using a calculator to solve problems – radian mode or degree? practice p335 #26-54 even**HW:** p335 #25-53 odd | MA3A2b,c |
| Tuesday, 1/14 | Trigonometric functions of acute angles | 4.2 – define the six trigonometric functions using the lengths of the sides of a right triangle | Warm up: Find the length of the runway**Class:** Review HW, more practice word problems #63,66,73-74**HW:** 75-76 | MA3A2b,c |
| Wednesday, 1/15 | The Circular Functions | 4.3 – Solve problems involving the trigonometric functions of real numbers and the properties of sine and cosine as periodic functions | Warm up: Quick review #1-4**Class:** Review HW, Extending trig functions to circular functions; Exploration 1 p339; practice worksheet finding trig functions of any angle; #2-12 even**HW:** #1-15 odd | MA3A2d,e |
| Thursday, 1/16 | The Circular Functions | 4.3 – Solve problems involving the trigonometric functions of real numbers and the properties of sine and cosine as periodic functions | Warm up: Quick review #5-10**Class:** Review HW; finding trig functions of angles >360° or <0°; practice #18-36 even**HW:** #19-35 odd | MA3A2d,e |
| Friday, 1/17 | The Circular Functions | 4.3 – Solve problems involving the trigonometric functions of real numbers and the properties of sine and cosine as periodic functions | Warm up: Evaluate the given functions without a calculator**Class:** Review HW; exploration 2 – exploring the unit circle; #38-52 even**HW:** #37-51 odd | MA3A2d,e |
| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 3 | Monday, 1/20 | **MLK HOLIDAY** |
| Tuesday, 1/21 | The Circular Functions | 4.3 – Solve problems involving the trigonometric functions of real numbers and the properties of sine and cosine as periodic functions | Warm up: Draw the unit circle and label the sections**Class:** Review HW; group activity #53; apply previous lessons to solving word problems #56-60 even**HW:** #55-59 odd | MA3A2e |
| Wednesday, 1/22 |  | Review | Warm up: p401 #100**Class:** Review HW; Review exercises p 399-401 #10,14,24,30,35,36,37,40,49**HW:** study for test | MA3A2a,b,c,d,e |
| Thursday, 1/23 |  |  | **TEST #1** | MA3A2a,b,c,d,e |
| Friday, 1/24 | Graphs of sine and cosine | 4.4 – Generate the graphs of the sine and cosine functions and explore various transformations of those graphs | Warm up:Quick Review #1-6**Class:** Exploration 1 Graphing sint as a function of t; graph cost; example 1,2**HW:** #1-6 | MA3A3a,b,c,d |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 4 | Monday, 1/27 | Graphs of sine and cosine | 4.4 – Generate the graphs of the sine and cosine functions and explore various transformations of those graphs | Warm up: Quick review #7-8**Class:** Review HW; Explore Frequency of sinusoid example 3, and phase shift, example 4,5; practice #8-16 even**HW:** #7-15 odd | MA3A3a,b,c,d |
| Tuesday, 1/28 | Graphs of sine and cosine | 4.4 – Generate the graphs of the sine and cosine functions and explore various transformations of those graphs | Warm up: Quick review #9-10**Class:** Review HW; Graphs of Sinusoids, example 5,6; practice #18-40 evenHW: #19-39 odd | MA3A3a,b,c,d |
| Wednesday, 1/29 | Graphs of sine and cosine | 4.4 – Generate the graphs of the sine and cosine functions and explore various transformations of those graphs | Warm up: p358 #73 (Partners)**Class:** Review HW; Constructing a sinusoidal model using time exploration p355; example 7**HW:** #74-76 | MA3A3a,b,c,d |
| Thursday, 1/30 | Graphs of tangent, cotangent, secant, and cosecant | 4.5 - Generate the graphs of the tangent, cotangent, secant, and cosecant functions and explore various transformations of those graphs | Warm up: Graph the tangent function (partners)**Class:** Review HW; graphing tangent, cotangent functions Example 1,2: #2,4,6,10,17,22**HW:** #5,9,20,21,24,25,28 | MA3A3a,b,c,d |
| Friday, 1/31 | Graphs of tangent, cotangent, secant, and cosecant | 4.5 - Generate the graphs of the tangent, cotangent, secant, and cosecant functions and explore various transformations of those graphs | Warm up:Quick review #1-4**Class:** Review HW; graphing secant, cosecant functionsExample 3,4; #1,2,8,12,18,**HW:** #7,11,19,23,26 | MA3A3a,b,c,d |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 5 | Monday, 2/3 | Graphs of tangent, cotangent, secant, and cosecant | 4.5 - Generate the graphs of the tangent, cotangent, secant, and cosecant functions and explore various transformations of those graphs | Warm up: Quick review #5-8**Class:** Review HW; solving for x in a given interval; practice #30-38 even; writing to learn #41**HW:** 31-39 odd, 42 | MA3A3a,b,c,d |
| Tuesday, 2/4 | Graphs of tangent, cotangent, secant, and cosecant | 4.5 - Generate the graphs of the tangent, cotangent, secant, and cosecant functions and explore various transformations of those graphs | Warm up: Quick review #9-10**Class:** Review HW; continue practice by applying functions to word problems #42-50 even**HW:** #43-49 odd | MA3A3a,b,c,d |
| Wednesday, 2/5Performance EssayENGLISH &FINE ARTS | Inverse trigonometric functions | 4.7 – Relate the concept of inverse functions to trigonometric functions | Warm up: Quick review #1-4**Class:** Review HW; finding exact values of inverse trig functions; practice problems #2-32 even**HW:** #7-27 odd | MA3A8a,b |
| Thursday, 2/6 | Inverse trigonometric functions | 4.7 – Relate the concept of inverse functions to trigonometric functions | Warm up: Quick review #5-6**Class:** Review HW; Analyzing characteristics of trig functions; #34-52 even**HW:** #33-51 odd | MA3A8a,b |
| Friday, 2/7 | Inverse trigonometric functions | 4.7 – Relate the concept of inverse functions to trigonometric functions | Warm up: Quick review #7-10**Class:** Review HW; apply inverse trig functions to solve word problems #53, 54**HW:** #55,56,57-62 | MA3A8a,b |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 6Benchmark #1 | Monday, 2/10ELECTIVES | Applications of trigonometry | 4.8 – Apply the concepts of trigonometry to solve real world problems | Warm up: Quick review #1-4**Class:** Review HW; apply trig to solve word problems; practice example 1,2,3,4 with partners**HW:** #1-9 odd | MA3A3d |
| Tuesday, 2/11SCIENCE | Applications of trigonometry | 4.8 – Apply the concepts of trigonometry to solve real world problems | Warm up: Quick review #5-8**Class:** Review HW; continue to practice word problems – exploration 1; example 5 harmonic motion **HW:** #11-23 odd | MA3A3d |
| Wednesday, 2/12SOCIAL STUDIES | Applications of trigonometry | 4.8 – Apply the concepts of trigonometry to solve real world problems | Warm up: Quick review #9-10**Class:** Review HW; continue practice #24-33 partners**HW:** review worksheet | MA3A3d |
| Thursday, 2/13ENGLISH |  | Review for benchmark | Warm up: graph f(x)=sin(x+π)**Class:** Review HW; benchmark review worksheet**HW:** study for benchmark | MA3A2a,b,c,d,eMA3A3a,b,c,d |
| Friday, 2/14MATH |  |  | **MATH Benchmark #1** | MA3A2a,b,c,d,eMA3A3a,b,c,d |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 7 | Monday, 2/17 | **Winter Holiday!** |
| Tuesday, 2/18 | **Professional Learning Day** |
| Wednesday, 2/19 |  | Review for test | Warm up: Solve given word problem**Class:** Review HW; Unit 4.4-8 review p400-401 #53-106**HW:** study for test | MA3A3a,b,c,dMA3A6aMA3A8a,b |
| Thursday, 2/20 |  |  | **TEST #2** | MA3A3a,b,c,dMA3A6aMA3A8a,b |
| Friday, 2/21 | Fundamental Trigonometry Identities | 5.1 – Use the fundamental trigonometric identities to simplify expressions  | Warm up: Quick review #1-4**Class:** Review HW; finding the Pythagorean Identities; simplifying trig expressions, example 1,2,practice #2-50 even**HW:** #1-49 every other odd | MA3A5 |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 8 | Monday, 2/24 | Fundamental Trigonometry Identities | 5.1 – Use the fundamental trigonometric identities to simplify expressions  | Warm up: Quick review #5-8**Class:** Review HW; solving trig equations, example 6,7, practice #52-74 even**HW:** #51-73 odd | MA3A5 |
| Tuesday, 2/25 | Fundamental Trigonometry Identities | 5.1 – Use the fundamental trigonometric identities to simplify expressions  | Warm up: Quick review #9-12**Class:** Review HW; more practice with identities worksheet**HW:** #75-80,81,82 | MA3A5 |
| Wednesday, 2/26Performance EssaySOCIAL STUDIES &CTAE | Proving trigonometric identities | 5.2 – To confirm identities analytically | Warm up: Quick review #1-4**Class:** Review HW; proving trig identities discuss general strategies – how does a proof begin? end? example 1,2,3 practice #2-20 even**HW:** #1-21 odd | MA3A5 |
| Thursday, 2/27 | Proving trigonometric identities | 5.2 – To confirm identities analytically | Warm up: Quick review #5-6**Class:** Review HW; continue proofs of identities example 4,5, practice #24-40 even**HW:** #25-41 odd |  |
| Friday, 2/28 | Proving trigonometric identities | 5.2 – To confirm identities analytically | Warm up: Quick review #7-12**Class:** Review HW; Identities in calculus – example 6, practice #42-56 even**HW:** #43-57 odd | MA3A5 |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 9 | Monday, 3/3 | Sum and Difference Identities | 5.3 – Apply the identities of sine, cosine, and tangent of a sum or difference | Warm up: Quick review #1-6**Class:** Review HW; Quiz Unit 5.1,2; Exploration 1 Getting past the obvious but incorrect formulas; Ex 1; Cosine of a sum or difference; Sine of a sum or difference; Ex 2,3; practice #2-14 even**HW:** #1-15 odd | MA3A5 |
| Tuesday, 3/4 | Sum and Difference Identities | 5.3 – Apply the identities of sine, cosine, and tangent of a sum or difference | Warm up: Quick review #7-10**Class:** Review HW; Ex 4 Proving reduction formulas; Tangent of a difference or sum Ex 6; practice #16-34 even**HW:** #17-33 odd | MA3A5 |
| Wednesday, 3/5 | Sum and Difference Identities | 5.3 – Apply the identities of sine, cosine, and tangent of a sum or difference | Warm up: p450 #4**Class:** Review HW; continued practice #36-54 even**HW:** #35-55 odd | MA3A5 |
| Thursday, 3/6 |  | Review for test | Warm up: p451 #8**Class:** Review HW; Review Unit5.1,2,3: practice #1-22**HW:** review for test | MA3A5 |
| Friday, 3/7 |  |  | **TEST #3** | MA3A5 |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 10 | Monday, 3/10 | Multiple angle identities | 5.4 – Apply the double angle, power reducing, and half angle identities | Warm up: Quick review #1-4**Class:** Review HW; present double angle identities and power reducing identities ex 1,2,3; practice #2-20 even**HW:** #1-21 odd | MA3A5 |
| Tuesday, 3/11 | Multiple angle identities | 5.4 – Apply the double angle, power reducing, and half angle identities | Warm up: Quick review #5-8**Class:** Review HW; Half angle identities ex2,3; Exploration 1 finding the sine of half an angle, practice #24-38 even **HW:** #25-37 odd | MA3A5 |
| Wednesday, 3/12 | Multiple angle identities | 5.4 – Apply the double angle, power reducing, and half angle identities | Warm up: Quick review #9-10**Class:** Review HW; solving trig equations ex 4,5; practice #40-52 even**HW:** #41-53 odd | MA3A5 |
| Thursday, 3/13 | Law of Sines | 5.5 – Prove the Law of Sines and use the computational applications to solve a variety of problems | Warm up: Quick review #1-4**Class:** Review HW; Law of Sines; Ex 1; Exploration 1 Determining the number of triangles; Ex 2,3; practice #2-24 even**HW:** #1-23 odd | MA3A6c |
| Friday, 3/14 | **Professional Learning (Student Holiday)** |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 11 | Monday, 3/17 | Law of Sines | 5.5 – Prove the Law of Sines and use the computational applications to solve a variety of problems | Warm up: Quick review #5-6**Class:** Review HW; applications of the Law of Sines, Ex4,5; practice #26-38 even**HW:** #25-37 odd | MA3A6c |
| Tuesday, 3/18 | Law of Sines | 5.5 – Prove the Law of Sines and use the computational applications to solve a variety of problems | Warm up: Quick review #7-10**Class:** Review HW; continue practice applications #40-52 even**HW:** #39-51 odd | MA3A6c |
| Wednesday, 3/19Performance EssayMATH &FOREIGN LANG |  |  | **MATH Performance Essay** |  |
| Thursday, 3/20**Professional****Learning****Early Release** | Law of Cosines | 5.6 - Prove the Law of Cosines and use the computational applications to solve a variety of problems | Warm up: Quick review #1-4**Class:** Review HW; Students derive the law of cosines; Review of SSS and SAS; Ex 1,2, practice #2-16 even**HW:** #1-15 odd | MA3A6c |
| Friday, 3/21**Professional****Learning****Early Release** | Law of Cosines | 5.6 - Prove the Law of Cosines and use the computational applications to solve a variety of problems | Warm up: Quick review #5-6**Class:** Review HW; Area of a triangle; Heron’s Formula; Ex 3,4;practice #17-20,22,26**HW:** #21-31 odd | MA3A6c |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 12Benchmark #2(Friday) | Monday, 3/24 | Law of Cosines | 5.6 - Prove the Law of Cosines and use the computational applications to solve a variety of problems | Warm up: Quick review #7-10**Class:** Review HW; applications of the Law of Cosines Ex 5,6; practice #32-40 even**HW:** #33-41 odd | MA3A6cMA3A7 |
| Tuesday, 3/25 | Law of Cosines | 5.6 - Prove the Law of Cosines and use the computational applications to solve a variety of problems | Warm up: p451 #61**Class:** Review HW; continue to apply the Law of Cosines to real world problems, practice p452 #62-68 even**HW:** p452 #63-67 odd | MA3A6cMA3A7 |
| Wednesday, 3/26 |  | Review for test | Warm up: p451 #62 Surveying a Canyon**Class:** Review HW; Unit 5.4-6, p451-452 practice #51-60 | MA3A5MA3A6cMA3A7 |
| Thursday, 3/27 |  |  | **TEST #4** | MA3A5MA3A6cMA3A7 |
| Friday, 3/28ELECTIVES |  | Review for benchmark | Warm up: **Class:** Review HW; Review Unit 4.1-5,7,8; 5.1-6; Worksheet**HW:** study for benchmark | MA3A2a,b,c,d,eMA3A3a,b,c,dMA3A5 |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 13Benchmark#2(Monday – Thursday) | Monday, 3/31MATH |  |  | **MATH Benchmark #2** | MA3A2a,b,c,d,eMA3A3a,b,c,d |
| Tuesday, 4/1SCIENCE | Vectors in the plane | 6.1 – Apply the arithmetic of vectors and use vectors to solve real world problems | Warm up: Quick review #1-4**Class:** Review HW; Define vector,Discuss head minus tail rule; Exploration 1 p457 Vector Archery; Ex1, Magnitude Ex2, Vector Operations Ex 3; practice #2-20 even**HW:** #1-19 odd | MA3A10a,b,c |
| Wednesday, 4/2SOCIAL STUDIES | Vectors in the plane | 6.1 – Apply the arithmetic of vectors and use vectors to solve real world problems | Warm up: Quick review #5-6**Class:** Review HW; Unit vectors Ex4, Direction angles – resolving the vector Ex5,6; practice #22-38 even**HW:** #21-37 odd | MA3A10a,b,c |
| Thursday, 4/3ENGLISH | Vectors in the plane | 6.1 – Apply the arithmetic of vectors and use vectors to solve real world problems | Warm up: Group activity #53 p465**Class:** Review HW; applications of vectors ex7,8,9; practice #40-52 even**HW:** #39-51 odd | MA3A10a,b,c,d |
| Friday, 4/4**Buford’s** **Got Talent** | Dot-product of vectors | 6.2 – Calculate dot product and projections of vectors | Warm up: Quick review #1-4**Class:** Review HW; define Dot Product and discuss properties of the dot product; Ex1,2; Discuss the Angle between two vectors theorem, ex3; practice #2-22 even**HW:** #1-21 odd | MA3A10a,b,c,d |
| **SPRING BREAK!** |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 14 | Monday, 4/14 | Dot-product of vectors | 6.2 – Calculate dot product and projections of vectors | Warm up: Quick review #5-8**Class:** Review HW; Discuss orthogonal vectors, ex4; Projection of u onto v, ex5,6, practice #24-32 even**HW:** #23-31 odd | MA3A10a,b,c,d |
| Tuesday, 4/15 | Dot-product of vectors | 6.2 – Calculate dot product and projections of vectors | Warm up: Quick review #9-10**Class:** Review HW; applications of dot product, work ex7; practice #46-56 even**HW:** #45-55 odd | MA3A10a,b,c,d |
| Wednesday, 4/16 | Parametric equations | 6.3 – Define parametric equations, graph curves parametrically, solve equations | Warm up: Quick review #1-2**Class:** Review HW; discuss parameters and parametric equations; ex1; discuss eliminating the parameter ex2; exploration 1 p476 Graphing the curve of Example 2 parametrically, practice #2-16 even**HW:** #1-15 odd | MA3A12a,b |
| Thursday, 4/17 | Parametric equations | 6.3 – Define parametric equations, graph curves parametrically, solve equations | Warm up: Quick review #3-4**Class:** Review HW; continue with eliminating the parameter ex3,4; practice #18-26 even**HW:** #17-25 odd | MA3A12a,b |
| Friday, 4/18 | Parametric equations | 6.3 – Define parametric equations, graph curves parametrically, solve equations | Warm up: Quick review #5-6**Class:** Review HW; finding parametric equations for lines and line segments, ex 5,6, practice #28-36 even**HW:** #27-35 odd | MA3A12a,b |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 15 | Monday, 4/21 | Parametric equations | 6.3 – Define parametric equations, graph curves parametrically, solve equations | Warm up: Quick review #7-8**Class:** Review HW; applications of parametric equations ex 8,9,10; practice #38-40 even**HW:** #37-41 odd | MA3A12a,b |
| Tuesday, 4/22 | Parametric equations | 6.3 – Define parametric equations, graph curves parametrically, solve equations | Warm up: Quick review #9-10**Class:** Review HW; applications of parametric equations; practice #42 Writing to learn; 44-50 even**HW:** #43-51 odd | MA3A12a,b |
| Wednesday, 4/23Performance EssaySCIENCE &HEALTH/PE | Parametric equations | 6.3 – Define parametric equations, graph curves parametrically, solve equations | Warm up: Quick review #**Class:** Review HW; continue applications practice #67**HW:** review worksheet | MA3A12a,b |
| Thursday, 4/24 |  | Review for test | Warm up: Quick review #**Class:** Review HW; review unit 6.1-3; p514-515 #2-32 even**HW:** study for test | MA3A10a,b,c,dMA3A12a,b |
| Friday, 4/25 |  |  | **TEST #5** | MA3A10a,b,c,dMA3A12a,b |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 16 | Monday, 4/28 | Polar coordinates | 6.4 – Convert points and equations from polar to rectangular coordinates and vice versa. | Warm up: Quick review #1-6**Class:** Discuss Cartesian plane and the polar coordinate system; ex1,2; Discuss converting Cartesian coordinates to polar coordinates and vice versa; Ex 3,4; practice #2-22 even**HW:** #1-21 odd | MA3A6b |
| Tuesday, 4/29 | Polar coordinates | 6.4 – Convert points and equations from polar to rectangular coordinates and vice versa. | Warm up: Quick review #7-8**Class:** Review HW; Converting equations; ex5,6; practice #24-50 even**HW:** #23-49 odd | MA3A6b |
| Wednesday, 4/30 | Polar coordinates | 6.4 – Convert points and equations from polar to rectangular coordinates and vice versa. | Warm up: Quick review #9-10**Class:** Review HW; finding distance using polar coordinates ex7; practice #52-54 even**HW:** #51,53 | MA3A6b |
| Thursday, 5/1 | Graphs of polar curves | 6.5 – Graph polar equations and determine the max/min r-value and the symmetry of the graph | Warm up: Quick review #1-4**Class:** Review HW; discuss symmetry in example graphs; List Symmetry Tests for Polar Graphs; Ex1; analyze graphs – min/max ex2,3; practice #2-12 even**HW:** #1-11 odd | MA3A6bMA3A13a,b |
| Friday, 5/2 | Graphs of polar curves | 6.5 – Graph polar equations and determine the max/min r-value and the symmetry of the graph | Warm up: Quick review #5-6**Class:** Review HW; Show slides of rose curves; analyze rose curves ex4; show graphs of Limacon curves; ex5,6; practice #14-42 even**HW:** #13-41 odd | MA3A6bMA3A13a,b |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 17 | Monday, 5/5 | Graphs of polar curves | 6.5 – Graph polar equations and determine the max/min r-value and the symmetry of the graph | Warm up: Quick review #7-10**Class:** Review HW; Discuss other polar curves; Spiral of Archimedes, Lemniscate curve ex 7,8; practice #46-56 even**HW:** #45-55 odd | MA3A6bMA3A13a,b |
| Tuesday, 5/6 | Graphs of polar curves | 6.5 – Graph polar equations and determine the max/min r-value and the symmetry of the graph | Warm up: draw the graph of the given polar equation**Class:** Review HW; continue practice with Polar Curves #57 group activity; #58**HW:** #61-66 | MA3A6bMA3A13a,b |
| Wednesday, 5/7 | De Moivre’s Theorem and nth roots | 6.6 – Represent complex numbers in the complex plane and write them in trigonometric form | Warm up: Quick review #1-4**Class:** Review HW; discuss the complex plane we used with quadratics; ex1; absolute value of a complex number in trigonometric form; ex2; practice 2-18 even**HW:** #1-17 odd | MA3A11a,b |
| Thursday, 5/8 | De Moivre’s Theorem and nth roots | 6.6 – Represent complex numbers in the complex plane and write them in trigonometric form | Warm up: Quick review #5-8**Class:** Review HW; multiplication and division of complex numbers, ex3,4; DeMoivre’s Theorem ex5,6; practice #20-38 even**HW:** #19-37 odd | MA3A11a,b |
| Friday, 5/9 | De Moivre’s Theorem and nth roots | 6.6 – Represent complex numbers in the complex plane and write them in trigonometric form | Warm up: Quick review #9-10**Class:** Review HW; Finding the roots of complex numbers, ex7,8,9; practice #40-56 even**HW:** #39-55 odd | MA3A11a,b |
| AP ExamsMonday, 5/5 – AP Chem (AM), AP Enviro Science (AM), and AP Psych(PM)Wednesday, 5/7 – AP Calculus (AM) Thursday, 5/8 – AP English Literature (AM)Friday, 5/9 – AP English Language (AM), AP Art (AM), and AP Statistics (PM) | Career Pathways TestingTuesday, 5/6Make-Up Exams As Needed |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 18 | Monday, 5/12 |  | Review for test | Warm up: p515 #36**Class:** Review HW; review Unit 6.4,5,6: p515-516 #38,41,44,46,49,53-60,68,71,75,76,80**HW:** study for test | MA3A6bMA3A11a,bMA3A13a,b |
| Tuesday, 5/13 |  |  | **TEST #6** | MA3A6bMA3A11a,bMA3A13a,b |
| Wednesday, 5/14 |  | Review for final exam | Warm up: Find all six trig functions in the given triangle**Class:** Review HW; Unit 4.1-5,7,8 Review Exercises p399-401**HW:** finish classwork | MA3A2a,b,c,d,eMA3A3a,b,c,dMA3A6aMA3A8a,b |
| Thursday, 5/15 |  | Review for final exam | Warm up: Solve the given identity**Class:** Review HW; Unit 5.1-6 Review Exercises p450-453**HW:** finish classwork | MA3A5MA3A6cMA3A7 |
| Friday, 5/16 |  | Review for final exam | Warm up: Graph the given polar equation**Class:** Review HW; Unit 6.1-6 Review Exercises p514-517 **HW:** finish classwork | MA3A10a,b,c,dMA3A12a,bMA3A6bMA3A11a,bMA3A13a,b |
| AP ExamsMonday, May 12 – AP Biology (AM) and AP Music Theory (AM)Tuesday, May 13 – AP Government (AM) and AP Human Geography (PM)Wednesday, May 15 – AP US History (AM)Thursday, May 16 – AP Macroeconomics (AM) and AP World History (AM) | EOCTsThursday, 5/15 – EconomicsFriday, 5/16 – 9th Lit & Comp, American Lit & Comp, & Analytic Geometry(Other EOCTs will be given during Semester Exam periods.) |

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| **WEEK** | **DAY** | **CONCEPT** | **OBJECTIVES** | **INSTRUCTIONAL STRATEGIES** | **STANDARDS****(CCGPS, GPS, AP)** |
| Week 19Benchmark#3 | Monday, 5/19 | **Senior Exams (Benchmark #3 – 4th, 5th, 6th, & 7th)** |
| Tuesday, 5/20 | **Senior Exams (Benchmark #3 – 1st, 2nd, & 3rd) / Semester Exams (Benchmark #3 – 7th)** |
| Wednesday, 5/21 | **Semester Exams (Benchmark #3 – 1st & 2nd)** |
| Thursday, 5/22 | **Semester Exams (Benchmark #3 – 3rd & 4th)** |
| Friday, 523 | **Semester Exams (Benchmark #3 – 5th & 6th)** |