



Gulfport School District

HIGH SCHOOL PACING GUIDE

ADVANCED ALGEBRA

QTR	COMPETENCY/OBJECTIVES
NUMBER AND OPERATIONS	
1. Understand and perform computations with different representations of numbers.	
1.2	a. Express a series using summation notation. (DOK 2)
1.2	b. Evaluate the sum of a series. (DOK 2)
1.1	c. Explain expansion by minors and find the determinant of a 3 x 3 matrix with that process. (DOK 2)
1.1	d. Use problem-solving strategies to solve non-routine problems. (DOK 3)
1.2	e. Solve application problems involving e and exponential functions related to growth and decay. (DOK 3)
ALGEBRA	
2. Use algebraic concepts to identify patterns and use multiple representations of relations and functions. Apply operations to expressions and equations.	
1.1	a. Find the sum, difference, product and quotient of functions, noting restrictions on the domain. (DOK 2)
1.1	b. Provide a convincing argument (or proof) regarding the inverse relationship of two functions. (DOK 3)
1.2	c. Describe patterns found in Pascal's Triangle and explain the relationship to the Binomial Theorem. (DOK 2)
1.2	d. Write and graph the equations of conic sections. (DOK 1)
1.1	e. Solve linear-quadratic and quadratic-quadratic systems of equations and inequalities. (DOK 2)
GEOMETRY	
3. Recognize, analyze, and graph conic sections.	
1.2	a. Describe and explain the conic sections resulting from cutting a cone. (DOK 1)
1.2	b. Explain and perform the geometric constructions of conic sections. (DOK 2)
DATA ANALYSIS and PROBABILITY	
4. Apply simple probability and curve fitting to data.	
1.2	a. Use technology and regression analysis to determine appropriate quadratic and cubic functions modeling real-life data. (DOK 3)

1.1 indicates the first 4.5 weeks of the 9 weeks course.
 1.2 indicates the second 4.5 weeks of the 9 weeks course.