Math : PreCalculus

Grade 11

#	*Essential Knowledge/Skill*	*Alignment*
A	I can investigate problems, justify processes, employ reverse thinking, choose a problem-solving strategy, and generalize.	S – IC - ID
B	I can simplify algebraic expressions, solve algebraic equations, and utilize algebra to solve problems.	A – REI – 1-12
C	I can identify, graph, compare, and create different types of functions.	A – CED – 1-4
1	Modeling: Model a real world scenario graphically, algebraically, and using a table.	CCSS – M - Modeling
2	Functions & Inverses: Understand the algebraic and graphical relationship between a function and its inverse	F-IF-5,6 F-BF-4,5
3	Graphical Transformations: Transform (shift, stretch, flip) various functions and understand the relationship between the algebra and the graph.	F-BF-3
4	Trigonometric Functions: Derive the unit circle and apply it to solving problems involving radians and degrees	F-TF-1,2,3,4
5	Trigonometric Applications: Graph, solve, & model Trigonometric functions and equations	F-TF-5,6,7
6	Trigonometric Identities: Use Trigonometric Identities to simplify and verify expressions	F-TF-8,9
7	Calculus 101: Solve for area under the curve and describe graphs algebraically.	
8	Algebra on Steroids: Solve more complex algebraic equations involving exponents	N-RN-1,2
9	Vectors & Parametrics: Apply vectors and parametrics to Physics and Calculus problems	N-VM-1,2,3,4,5

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