

HPISD Curriculum: Pre Calculus Pre-AP

Title	Estimated Duration	6 Weeks					
Unit 4: Proving Trigonometric Identities	13 days	1	2	3	4	5	6
Unit Overview							
Proving Trigonometric Identities							
Generalizations/Enduring Understandings							
The student will understand that:	<ul style="list-style-type: none"> • Trigonometric expressions and equations can be re-written with equivalent trigonometric identities. • A trigonometric proof is an analytical process whereby one side of the equation is transformed to look exactly like the other side. 						
Concepts		Guiding/Essential Questions					
<ul style="list-style-type: none"> • Identity • Relationships 		<ul style="list-style-type: none"> • What techniques can be used to complete a trigonometric proof? 					
Learning Targets							
<ul style="list-style-type: none"> • Students will select and apply effective strategies to prove trigonometric identities. 							
Formative Assessments				Summative Assessments			

TEKS:	Processes and Skills: What students should be able to DO	Facts: What students should KNOW
Use trigonometric identities such as reciprocal, quotient, Pythagorean, cofunctions, even/odd, and sum and difference identities for cosine and sine to simplify trigonometric expressions. P.5.M	<ul style="list-style-type: none"> • Use trigonometric identities and algebraic techniques to prove trigonometric statements. • Evaluate trigonometric expressions using identities including sum and difference identities and double angle identities. 	<ul style="list-style-type: none"> • Trigonometric expressions can be written a variety of ways by substituting an equivalent identity. • Trigonometric expressions can be re-written using identities in order to make calculations easier.
Topics		
Prove trigonometric identities		
Language of Instruction		
double angle identities Pythagorean identities quotient identities reciprocal identities sum and difference identities		
State Assessment Connections		National Assessment Connections
Resources		