


Campbell County Schools
Algebra IIB
4th Nine Weeks

<p>Mathematical Practices:</p> <ol style="list-style-type: none"> 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning. 	<p>Common Core Coding Explanation:</p> <div style="text-align: center; margin: 10px 0;"> <p>Conceptual Category Cluster Standard #</p>  <p>A.SSE.A.1</p> </div> <p>Domains Examples: SSE- Seeing Structure in Expressions REI- Reasoning with Equations & Inequalities CED- Creating Equations that Describe</p>
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Domain	Common Core Standards	Tasks / Suggested Pacing	Textbook Lessons Aligned to Common Core
	Trigonometry	30 days	
Description:	Building on their previous work with functions, and on their work with trigonometric ratios and circles in Geometry, students now use the coordinate plane to extend trigonometry to model periodic phenomena. Students will engage in high level math tasks that provide opportunities to express depths of knowledge using the Mathematical Practices.		

<p>Functions: Trigonometric Functions</p>	<p>Extend the domain of trigonometric functions using the unit circle.</p> <ul style="list-style-type: none"> • F.TF.A.1. Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle. • F.TF.A.2. Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle. 		
<p>Functions: Trigonometric Functions</p>	<p>Model periodic phenomena with trigonometric functions.</p> <ul style="list-style-type: none"> • F.TF.B.5. Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.★ 		
<p>Functions: Trigonometric Functions</p>	<p>Prove and apply trigonometric identities.</p> <ul style="list-style-type: none"> • F.TE.C.8. Prove the Pythagorean identity $\sin^2 \theta + \cos^2 \theta = 1$ and use it to find $\sin \theta$, $\cos \theta$, or $\tan \theta$, given $\sin \theta$, $\cos \theta$, or $\tan \theta$, and the quadrant of the angle. 		
<p>End of Course Review and Test</p>		<p>3 days</p>	
<p>Advanced Topics Teacher can use this time to cover interesting topics that students may not otherwise see. (e.g. binary numbers, fractals, unit circle, programming, trigonometric identities, etc.)</p>		<p>12 days</p>	