

# TRIGONOMETRY MAPPING 2010-2011



1<sup>st</sup> nine weeks

	Content	# of days	ACT Standard	Assessment
	<b>1.1 Coordinate Plane</b> Review Radicals Pythagorean Theorem Distance Formula Mid-point Formula Interval Notation Relations and Functions Vertical Line Test	<b>4</b>	<b>24-27</b> <b>28-32</b>	
	<b>1.2 Degree Measure</b> Complimentary and Supplementary Angles DMS,DD conversion Standard Position Quadrantal Angles Coterminal Angles	<b>3</b>	<b>28-32</b>	
	<b>1.3 Vertical Angles</b> Parallel Lines Cut by a Transversal	<b>3</b>	<b>20-23</b>	
	<b>Review and Quiz</b>	<b>3</b>		
	<b>1.4 Definition of Trig Function x, y and r</b> Finding Function of an Angle Function of Quadrantal Angles	<b>2</b>	<b>24-27</b>	
	<b>1.5 Reciprocal Identities</b> A Smart Trig Class Ranges of Trig Functions	<b>3</b>	<b>24-27</b>	
	<b>Curriculum Adjustment</b>			
	<b>Review and Chapter Test</b>	<b>3</b>		
	<b>2.1 Defintions in x, y, and r</b> SOH, CAH, TOA Cofunctions 30-60-90 and 45-45-90	<b>2</b>	<b>24-27</b> <b>28-32</b>	
	<b>Trig Tables</b>	<b>2</b>		
	<b>2.2 Reference Angles</b> Special Angles as Reference Angles	<b>2</b>	<b>28-32</b>	
	<b>2.3 Find Functions with Calculator</b> Find angles with Calculator Grade resistance	<b>2</b>	<b>28-32</b>	
	<b>Review and Quiz</b>	<b>3</b>		
	<b>2.4 Solve Right Δ's</b> Right Δs with AS Right Δs with SS Angles of Elevation and Depression	<b>4</b>	<b>28-32</b> <b>33-36</b>	
	<b>2.5 Bearing Applications</b>	<b>4</b>	<b>28-32</b> <b>33-36</b>	
	<b>Curriculum Adjustment</b>			
	<b>Review and Chapter Test</b>	<b>3</b>		

2<sup>nd</sup> nine weeks

<b>3.1 Radian Measure</b> Degree, Radian Conversions Function Value for Radians	<b>2</b>	<b>28-32</b> <b>33-36</b>	
<b>3.2 Arc Length <math>s=r\theta</math></b> Distance between Cities Sector of a Circle <b>Area</b> = $\frac{1}{2} r^2$	<b>4</b>	<b>28-32</b> <b>33-36</b>	
<b>Review and Quiz</b>	<b>2</b>		
<b>3.3 Circular Functions</b>	<b>3</b>	<b>28-32</b> <b>33-36</b>	
<b>3.3 Velocity Applications</b> Linear Velocity $V = r\omega$ Angular Velocity $\omega = \theta/t$	<b>5</b>	<b>28-32</b> <b>33-36</b>	
<b>Curriculum Adjustment</b>			
<b>Review and Chapter Test</b>	<b>3</b>		
<b>4.1 Periodic Function</b> Sine and Cosine Graphs Amplitude and Period	<b>2</b>	<b>33-36</b>	
<b>4.2 Shifts</b> Phase Shifts Vertical Shifts	<b>2</b>	<b>33-36</b>	
<b>Review and Quiz</b>	<b>2</b>		
<b>4.3 Secant, Cosecant, Tangent and Cotangent Graphs</b>	<b>4</b>	<b>33-36</b>	
<b>Review and Quiz</b>	<b>2</b>		
<b>4.1b Harmonic Motion</b>	<b>2</b>	<b>33-36</b>	
<b>Review and Chapter Test</b>	<b>3</b>		
<b>Curriculum Adjustment</b>			
<b>Semester Review and Semester Test</b>	<b>5</b>		

<b>3<sup>rd</sup> nine weeks</b>	<b>5.1 Fundamental Identities</b> Find values Simplify Express one in terms of another	<b>4</b>	<b>28-32</b> <b>33-36</b>	
	<b>5.2 Verify Identities</b>	<b>4</b>	<b>28-32</b> <b>33-36</b>	
	<b>Review and Quiz</b>	<b>3</b>		
	<b>5.3 Sum and Difference</b> Cosine Cofunction Identities	<b>2</b>	<b>33-36</b>	
	<b>5.4 Sum and Difference</b> Sine and Tangent	<b>2</b>	<b>33-36</b>	
	<b>Review and Quiz</b>	<b>2</b>		
	<b>5.5 Double Angle Identities</b>	<b>2</b>	<b>33-36</b>	
	<b>5.6 Half Angle Identities</b>	<b>2</b>	<b>33-36</b>	
	<b>Curriculum Adjustment</b>			
	<b>Review and Chapter Test</b>	<b>4</b>		
	<b>6.1 Inverse Functions</b> Simplify Expressions with Arcfunction	<b>4</b>	<b>33-36</b>	
	<b>6.2 Solve Trig Equations by:</b> Linear Operations Factoring Quadratic Formula	<b>4</b>	<b>28-32</b> <b>33-36</b>	
	<b>Review and Quiz</b>	<b>2</b>		
	<b>6.3 Trig Equations with Half-Angles and Multiple Angles</b>	<b>2</b>	<b>33-36</b>	
	<b>6.4 Trig Equations with Inverse Functions</b>	<b>2</b>	<b>33-36</b>	
	<b>Curriculum Adjustment</b>			
<b>Review and Chapter Test</b>	<b>3</b>			

4 <sup>th</sup> nine weeks		<b>7.1 Law of Sines</b> AAS and ASA Area = $\frac{1}{2} ab \sin C$	<b>2</b>	<b>33-36</b>	
		<b>7.2 Ambiguous Case</b> SSA	<b>3</b>	<b>33-36</b>	
		<b>7.2 Law of Cosines</b> SAS SSS Heron's Formula	<b>4</b>	<b>33-36</b>	
		<b>Review and Quiz</b>	<b>2</b>		
		<b>7.4 Vectors</b>	<b>3</b>	<b>33-36</b>	
		<b>7.5 Application of Vectors</b> Magnitude and Direction Incline Applications Navigation Problems	<b>2</b>	<b>33-36</b>	
		<b>Curriculum Adjustment</b>			
		<b>Review and Chapter Test</b>	<b>3</b>		
		<b>8.1 Complex Numbers</b> Basic Operations Solve Equations	<b>2</b>	<b>28-32</b> <b>33-36</b>	
		<b>8.2 Complex Plane</b> Trig form of Complex Numbers Trig Form / Rectangular Form Conversions	<b>2</b>	<b>33-36</b>	
		<b>8.3 Product and Quotient of Complex Numbers</b> $a + bi$	<b>2</b>	<b>33-36</b>	
		<b>Review and Quiz</b>	<b>2</b>		
		<b>8.4 Powers and Roots of Complex Numbers</b>	<b>3</b>	<b>33-36</b>	
		<b>8.5 Polar Coordinates</b> Polar Graphs Convert Equation Forms	<b>4</b>	<b>33-36</b>	
		<b>Curriculum Adjustment</b>			
	<b>Review and Chapter Test</b>	<b>3</b>			
	Please note that all of chapter 8 may be covered. Time out of classroom instruction due to unavoidable				

	circumstances will determine amount covered.			
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This is the mapping for regular Trigonometry for the year 2010-2011. Please refer to final page for additional information regarding Pre AP Trigonometry.

## Pre AP Trigonometry

	<b>9.1 Exponential Functions</b> Exponential Functions $y = b^x$ Compound Interest Future Value Percent Value $e$	<b>3</b>		
	<b>9.2 Logarithmic Functions</b> Logarithm $\log_a x$	<b>4</b>		
	<b>9.3 Evaluating Logs and the Change of Base Formula</b> Common logs $\log x$ Natural Logarithms $\ln x$	<b>4</b>		
	<b>9.4 Exponential and Logarithmic Equations</b> Solutions of the equations	<b>4</b>		
	<b>Curriculum Adjustment</b>			
	<b>Review and Chapter Test</b>	<b>3</b>		

**Chapter 9 will be covered in Pre AP Trigonometry. Previous topics listed in regular Trigonometry will be covered more quickly and with enrichment. This will allow the time needed to cover Chapter 9.**