

CONNEAUT AREA SCHOOL DISTRICT

MATHEMATICS

UNIT OF STUDY: Trigonometry:
radian/degree measure, unit circle, right
triangle, functions graphs, and
applications

COURSE/GRADE: Pre Calculus

WEEKS: 7

Module 6

Focus (emphasis) Standards/EC:
Use trigonometric functions and their inverses to evaluate and
solve application problems
Recognize and apply trigonometric identities to solve equations
and complete proofs

refer to PA standards

Technology/manipulatives:
I pad
Smart board
Electronic text book
calculator
Ruler
3 D figures
Nets
Dice
CAD program
Online videos for reinforcement
Studyzone.org
Studyisland
Firstinmath

Important (reinforced) Standards/EC:
All previous pre calculus materials
Polynomial functions of higher degree
Synthetic division
Zeros of polynomial functions
Rational functions
Nonlinear Inequalities

Reading, writing, speaking strategies:
Word problems, journal writing, bell ringers,
partner sharing, think aloud, paraphrasing,
board work, sharing out to class, note taking
skills development

Vocabulary: radian, degree, conterminal, arc length, linear and
angular speed, area of sector, unit circle, trigonometric functions,
sine, cosine, tangent, secant, cosecant, cotangent, reference
angle, amplitude, period, shrink/stretch, inverse, composition
functions

Questioning and discussion techniques:
Real world problems/applications, bill ringers,
exit tickets, journals, Frayer model, small group
tasks

<p>Real life application: finance, continuous compound interest, compound interest, radioactive decay, data analysis, population statistics, college enrollment, cost/revenue/profit, human memory, digital music sales, fluid flow, fuel use, diesel mechanics, path of diver, home prices, advertising, recycling, doubling investment,</p> <p>Career connections: www.xpmath.com/careers/lite.php</p>	<p>Performance assessment: quiz, test, Studyisland, performance projects, homework, group discussion, self-generated math labs</p>
<p>Computation:</p> <p>Two step algebraic equations</p> <p>Ratio and proportions</p> <p>Slope, distance, midpoint</p> <p>Cost benefit</p> <p>A trigonometric functions and manipulations</p>	<p>Accommodations/adaptations: Limiting , homework problems, guided problem solving, peer groups, tutorial time, needs based on IEP</p>
<p>SAS Module Resources: http://www.pdesas.org/standard/PACore</p> <p>http://www.corestandards.org/wp-content/uploads/Math_Standards.pdf</p> <p>http://www.education.pa.gov/K-12/Pages/default.aspx</p> <p>http://achievethecore.org/dashboard/300/search/1/2/9/10/11/12</p>	