

South Central College MATH 125 Trigonometry

Course Outcome Summary

Course Information

Description

A study of the six trigonometric functions, their inverses and their applications forms the heart of this course. First, the two

Solve trigonometric conditional equations

10. Deduce various conversion formulas

Learning Objectives Prove the sum and difference formulas Prove the double-angle formula Prove the half-angle formula Prove the sum-to-product formula Prove the product-to-sum formula

11. Apply the trigonometric functions to angle, length and area measurement problems

Learning Objectives Interpret the trigonometric functions as functions of acute angle measure Solve right triangle problems using trigonometry Deduce the Law of Sines Deduce the Law of Cosines Deduce Heron's formula for the area of a triangle

12. Model periodic phenomena with the trigonometric functions

Learning Objectives Explain simple harmonic motion Review notions of period, phase shift and amplitude Examine classical applications of simple harmonic motion

13. Graph equations