

Grade 11

Distance Learning Module 1: Trigonometric Functions

Week of: 3/30 - 4/3

Mathematics: Pre-calculus - Level 2 - Modified from [Unit D - Trigonometry](#)

Targeted Goals from Stage 1: Desired Results

Content Knowledge: Convert between degrees and radians, finding the reference angle, applying angle measure to find arc length

Vocabulary: terminal side, initial side, reference angles

Skills: the definition of a radian and its relationship to the radius of a circle, the trig reciprocal identities,

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Intro to Distance Learning Degrees, Drawing an angle	Read posted letter with course information <u>SmartBoard notes 5.1</u>	Picture of student solutions (Textbook: Page# 404, Ex: 1-6)
Tuesday: Radians, Relationship between degrees and radians	<u>Smart Board Day 2 notes from 5.1</u> Khan Academy video: <u>Intro to radians</u>	Picture of student solutions Textbook: Page# 404, Ex: 15-29 odd
Wednesday: Arc Length	LIVE Instruction <u>SmartNotes</u> (Page 16-17)	Picture of student solutions Textbook: Page# 404, Ex: 33-39 odd
Thursday: Special right triangles	Khan Academy: <u>special right triangles video</u> Khan Academy: <u>trig ratios of special right triangles article</u>	<u>Khan Academy practice</u>
Friday: Right Triangle Trigonometry	Khan Academy: <u>right triangle trig video</u>	<u>Khan Academy Practice problems</u>

Week criteria for success (attach student checklists or rubrics):

Students will be able to:

- Use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi/3$, $\pi/4$ and $\pi/6$
- Know precise definitions of angle, and distance around a circular arc,
- explain and use the relationship between the sine and cosine of complementary angles

Supportive resources and tutorials for the week (plans for re-teaching):

- Office hours,
- Textbook
- [Math Meetings \(Video Tutorial\)](#)
- Khan Academy
- [Google Slides for Module 1](#)