

Grade 11

Distance Learning Module2: Unit Circle

Week of: 4/6 - 4/10

Mathematics: Pre-Calculus Level 2 - Modified from Unit D - Trigonometry

Targeted Goals from Stage 1: Desired Results

Content Knowledge: unit circle definitions of the six trig functions, there are patterns within values of trig functions in the unit circle,

Vocabulary: coterminal, unit circle, reference angle

Skills: finding trig functions on the unit circle of special angles using points

Expectation:

| Description of Task (s): | Resources and Materials: | Daily Checks (Return to Google Classroom or snapshots from a cell phone) |
|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Monday: Introduction to Unit Circle | Video Tutorial (Khan) : Intro to Unit Circle SmartNotes: Unit Circle | Khan Practice: Unit Circle Textbook Practice Solution Picture: Page# 417, Ex: 1 & 5 |
| Tuesday: Defining six trig ratios | Video Tutorial (Khan): Ratios of Trig Functions SmartNotes: Unit Circle Practice Worksheet: Exact Trig Values of Special Angles | Khan Practice: Trig Unit Circle Review Picture of students worksheet solutions |
| Wednesday: Completing Unit Circle | LIVE Instruction SmartNotes: Unit Circle | Textbook Practice Solution Picture: Page# 417, Ex: 11 - 29 odd |
| Thursday: Reference Angles, Finding Trig Values of non-acute angles | Live Instructions SmartNotes: Unit Circle | Textbook Practice Solution Picture: Page# 417 Ex: 33, 35 |

Friday: No School

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

Students will be able to

- use the unit circle to express the values of sine, cosine, and tangent for $\pi - x$, $\pi + x$, and $2\pi - x$ in terms of their values for x , where x is any real number,
- Use the unit circle to explain symmetry,

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

- Textbook
- Unit Circle Tutorial YouTube Video
- Office Hours