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| * **Standard**:  **PC.FGR.3: Utilize trigonometric expressions to solve problems and model periodic phenomena with trigonometric functions.**
* **PC.FGR.3.5: Determine the value(s) of trigonometric functions for a set of given conditions.**
* **PC.FGR.3.6: Graph and write equations of trigonometric functions using period, phase shift, and amplitude in modeling contexts.**

**Assessment: ☐ Quiz ☐ Unit Test ☐ Project ☐ Lab ☐ None** |
|  | **Pre-Teaching***C:\Users\thiyasr\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\FEF22E5.tmp* **Learning Target** **Success Criteria 1** **Success Criteria 2** | **Activation of Learning***(5 min)* | **Focused Instruction***(10 min)****\*I DO*** | **Guided Instruction***(10 min)****\*WE DO*** | **Collaborative****Learning***(10 min)****\*Y’ALL DO*** | **Independent Learning***(10 min)****\*YOU DO*** | **Closing***(5 min)* |
| * Do Now
* Quick Write\*
* Think/Pair/Share
* Polls
* Notice/Wonder
* Number Talks
* Engaging Video
* Open-Ended Question
 | * Think Aloud
* Visuals
* Demonstration
* Analogies\*
* Worked Examples
* Nearpod Activity
* Mnemonic Devices\*
 | * Socratic Seminar \*
* Call/Response
* Probing Questions
* Graphic Organizer
* Nearpod Activity
* Digital Whiteboard
 | * Jigsaw\*
* Discussions\*
* Expert Groups
* Labs
* Stations
* Think/Pair/Share
* Create Visuals
* Gallery Walk
 | * Written Response\*
* Digital Portfolio
* Presentation
* Canvas Assignment
* Choice Board
* Independent Project
* Portfolio
 | * Group Discussion
* Exit Ticket
* 3-2-1
* Parking Lot
* Journaling\*
* Nearpod
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| *C:\Users\thiyasr\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\FEF22E5.tmp***Monday** | Learning Objective (LO)Students will analyze and apply trigonometric functions to evaluate values, determine reference angles, and graph sine and cosine functions to model periodic phenomena.Success Criteria (SC) I can recall and evaluate trig functions for special angles.I can use reference angles to determine trig values in any quadrant.I can describe and graph sine and cosine functions by identifying amplitude, period, and phase shift.I can connect trig functions to real-world periodic modeling contexts. | Quick warm-up: Evaluate sin⁡(30°)\sin(30°)sin(30°), cos⁡(45°)\cos(45°)cos(45°), and tan⁡(60°)\tan(60°)tan(60°). | Review SOH-CAH-TOA, unit circle special angles, and trig ratios. | Practice evaluating trig functions for 30°, 45°, and 60° as a class. | Pairs quiz each other using flashcards on unit circle values. | Students complete 5 evaluation problems on their own. | Exit ticket – “Which trig value do you find easiest to remember and why |
| **Tuesday** | Learning Objective (LO)Students will analyze and apply trigonometric functions to evaluate values, determine reference angles, and graph sine and cosine functions to model periodic phenomena.Success Criteria (SC) I can recall and evaluate trig functions for special angles.I can use reference angles to determine trig values in any quadrant.I can describe and graph sine and cosine functions by identifying amplitude, period, and phase shift.I can connect trig functions to real-world periodic modeling contexts. | Warm-up: “What’s the reference angle of 150°?” | Define reference angle and demonstrate finding reference angles for given angles in different quadrants | Work through 2–3 examples together | Small groups create a mini “reference angle chart” for quadrants. | Students complete a short practice set using reference angles. | How do you determine the sign of a trig function based on quadrant? |
| **Wednesday** | Learning Objective (LO)Students will analyze and apply trigonometric functions to evaluate values, determine reference angles, and graph sine and cosine functions to model periodic phenomena.Success Criteria (SC) I can recall and evaluate trig functions for special angles.I can use reference angles to determine trig values in any quadrant.I can describe and graph sine and cosine functions by identifying amplitude, period, and phase shift.I can connect trig functions to real-world periodic modeling contexts. | Warm-up: Evaluate sin⁡(210°)\sin(210°)sin(210°) using reference angles. | Model evaluating trig functions using reference angles (ex: cos⁡(240°)\cos(240°)cos(240°)). | Solve a set of trig values (120°, 300°, 330°) together. | Pairs work through 3–4 reference angle problems and justify signs. | Students complete a worksheet on reference angles. | What’s one strategy for remembering trig signs in each quadrant? |
| **Thursday** | Learning Objective (LO)Students will analyze and apply trigonometric functions to evaluate values, determine reference angles, and graph sine and cosine functions to model periodic phenomena.Success Criteria (SC) I can recall and evaluate trig functions for special angles.I can use reference angles to determine trig values in any quadrant.I can describe and graph sine and cosine functions by identifying amplitude, period, and phase shift.I can connect trig functions to real-world periodic modeling contexts. | Warm-up: Sketch a quick graph of sin⁡(x)\sin(x)sin(x) from memory. | Introduce sine and cosine graphs (basic shape, amplitude, and period). | Graph y=sin⁡(x)y=\sin(x)y=sin(x) and y=cos⁡(x)y=\cos(x)y=cos(x) together on grid paper. | Groups work to identify amplitude, period, and key points on graphs. | Students graph y=2sin⁡(x)y=2\sin(x)y=2sin(x) independently. | How does changing amplitude affect the graph of sine? |
| *C:\Users\thiyasr\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\FEF22E5.tmp***Friday** | Learning Objective (LO)Students will analyze and apply trigonometric functions to evaluate values, determine reference angles, and graph sine and cosine functions to model periodic phenomena.Success Criteria (SC) I can recall and evaluate trig functions for special angles.I can use reference angles to determine trig values in any quadrant.I can describe and graph sine and cosine functions by identifying amplitude, period, and phase shift.I can connect trig functions to real-world periodic modeling contexts. | **Delta math assignment** |

*\*key literacy strategies*