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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 |
| *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*