| Name: Mrs. Woods |  |  | Grading Quarter: $1$ | Week Beginning: 9/25/23 |
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| School Year: 23-24 |  |  | Subject: Precalculus |  |
| 3 을 20 2 | Notes: | Objective: Students will be able to find missing sides and angles in right triangles. <br> Lesson Overview: <br> Notes - finding missing sides (trig functions), missing angles (inverse trig), and angle of elevation or depression |  | Academic Standards: <br> P.F-TF.A. 3 Use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi / 3, \pi / 4$ and $\pi / 6$, and 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. |
|  | Notes: | Objective: Students will be able to find missing sides and angles in oblique triangles. <br> Lesson Overview: <br> Notes - Law of Sines and Cosines (and which types of triangles can be solved with each) Introduce the ambiguous case of Law of Sines |  | Academic Standards: <br> P.G-SRT.D. 10 Prove the Laws of Sines and Cosines and use them to solve problems. <br> P.G-SRT.D. 11 Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces). |
| $\sum$ 0 D O D N | Notes: | Objective: Students will be able to convert radians to degrees and vice versa. <br> Lesson Overview: <br> Notes - conversion formulas, positive and negative angles, the basics of the unit circle |  | Academic Standards: <br> P.F-TF.A. 3 Use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi / 3, \pi / 4$ and $\pi / 6$, and 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. |
|  | Notes: | Objective: Students will be able to calculate arc length in degrees and radians. <br> Lesson Overview: <br> Notes - formulas for arc length in degrees and radians. Also review for quiz tomorrow. |  | Academic Standards: <br> P.F-TF.A. 3 Use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi / 3, \pi / 4$ and $\pi / 6$, and 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. |


|  | Notes: | Objective: Students will be able to find missing <br> sides and angles of right triangles. <br> $\frac{\text { Lesson Overview: }}{\bar{\circ}}$. | Review concepts from U4 L1 on Kahoot |
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| P.F-TF.A.3 Use special triangles to |  |  |  |
| determine geometrically the values of |  |  |  |
| sine, cosine, tangent for $\pi / 3, \pi / 4$ and |  |  |  |
| $\pi / 6$, and use the unit circle to express |  |  |  |
| the values of sine, cosine, and tangent |  |  |  |
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| values for $x$, where $x$ is any real |  |  |  |
| number. |  |  |  |

