

Any standard **highlighted in yellow** has been determined by our WCSD teachers, district and state experts as essential for students to master.

<p>Strand 11.F.TF: I can extend the domain of trigonometric functions using the unit circle (Standards F.TF.1-3). I can model periodic phenomena with trigonometric functions (Standards F.TF.5-7).</p>			
<p>Standard 11.F.TF.1: I can understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.</p>			
<p>Learning Targets</p> <ul style="list-style-type: none"> I can understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle. 	<p>Academic Vocabulary & Notation</p> <ul style="list-style-type: none"> radian measure, angle, length, arc, unit circle, subtend 	<p>Question Stems</p> <ul style="list-style-type: none"> How would you explain your process? 	<p>Possible Assessments</p> <ul style="list-style-type: none"> <u>District CFAs</u>
<p>Standard 11.F.TF.2: I can explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.</p>			
<p>Learning Targets</p> <ul style="list-style-type: none"> I can explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers. I can interpret radian measures of angles traversed counter clockwise around the unit circle. 	<p>Academic Vocabulary & Notation</p> <ul style="list-style-type: none"> unit circle, coordinate plane, trigonometric functions, real numbers, radian measures, angles, traversed, counter clockwise, unit circle 	<p>Question stems</p> <ul style="list-style-type: none"> What math words can you use to explain how you've solved this problem? 	<p>Possible Assessments</p> <ul style="list-style-type: none"> <u>District CFAs</u>
<p>Standard 11.F.TF.3: I can use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi/3$, $\pi/4$, and $\pi/6$.</p>			
<p>Learning Targets</p> <ul style="list-style-type: none"> I can 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. I can use special triangles to determine values. 	<p>Academic Vocabulary & Notation</p> <ul style="list-style-type: none"> π, π symbol, unit circle, sine, cosine, tangent, values, real numbers, special triangles 	<p>Question stems</p> <ul style="list-style-type: none"> Justify your answer 	<p>Possible Assessments</p> <ul style="list-style-type: none"> <u>District CFAs</u>

<p>Standard 11.F.TF.5: I can choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.</p>			
<p>Learning Targets</p> <ul style="list-style-type: none"> I can choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline. 	<p>Academic Vocabulary & Notation</p> <ul style="list-style-type: none"> trigonometric functions, model, periodic phenomena, amplitude, frequency, midline 	<p>Question stems</p> <ul style="list-style-type: none"> I found _____ challenging because _____ 	<p>Possible Assessments</p> <ul style="list-style-type: none"> <u>District CFAs</u>
<p>Standard 11.F.TF.7: I can use inverse functions to solve trigonometric equations that arise in modeling context. I can evaluate the solutions using technology and interpret them in terms of context.</p>			
<p>Learning Targets</p> <ul style="list-style-type: none"> I can limit solutions to a given interval. I can use inverse functions to solve trigonometric equations. 	<p>Academic Vocabulary & Notation</p> <ul style="list-style-type: none"> inverse functions, trigonometric equations, model, context, solution, interval, inverse function 	<p>Question stems</p> <ul style="list-style-type: none"> What else could you do? 	<p>Possible Assessments</p> <ul style="list-style-type: none"> <u>District CFAs</u>