**Virginia Mathematics Standards of Learning Tracking Log**

**Bridging from Trigonometry**

The skills and strategies introduced in the Mathematics Standards of Learning vertically articulate from kindergarten to high school and many standards build in complexity within K-12 instruction. Teachers can use this tracker to help determine which standards students have had sufficient exposure and experience during the previous school year to make decisions regarding when and how experience with new standards might occur in the current school year.

|  | **Addressed during previous school year** | **Not Addressed/ Insufficient Exposure during previous school year** | **Comments** |
| --- | --- | --- | --- |
| T.1 The student, given a point on the terminal side of an angle in standard position, or the value of the trigonometric function of the angle, will determine the sine, cosine, tangent, cotangent, secant, and cosecant of the angle. |  |  |  |
| T.2 The student will develop and apply the properties of the unit circle in degrees and radians. |  |  |  |
| T.3 The student, given one of the six trigonometric functions in standard form, will |  |  |  |
| 1. state the domain and the range of the function; |  |  |  |
| 1. determine the amplitude, period, phase shift, vertical shift, and asymptotes; |  |  |  |
| 1. sketch the graph of the function by using transformations for at least a two-period interval; and |  |  |  |
| 1. investigate the effect of changing the parameters in a trigonometric function on the graph of the function. |  |  |  |
| T.4 The student will graph the six inverse trigonometric functions. |  |  |  |
| T.5 The student will verify basic trigonometric identities and make substitutions, using the basic identities. |  |  |  |
| T.6 The student will solve trigonometric equations and inequalities. |  |  |  |
| T.7 The student will determine the value of any trigonometric function and inverse trigonometric function. |  |  |  |
| T.8 The student will create and solve practical problems involving triangles. |  |  |  |
| T.9 The student will solve problems, including practical problems, involving |  |  |  |
| 1. arc length and area of sectors in circles using radians and degrees; and |  |  |  |
| 1. linear and angular velocity. |  |  |  |