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| **Class** | Algebra 2 | **Topic** | U14 - Trigonometric Identities | **Lesson** | 1 | **Of** | 7 |

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| **Objective** | Students will:   * Understand that trigonometric identities are related to right-angled triangles. * Generate the six basic trigonometric identities named:   a.) Sine  b.) Cosine  c.) Tangent  d.) Cotangent  e.) Secant  f.) Cosecant   * Understand the reciprocal, Pythagorean and Quotient identities relating these six basic trigonometric identities |
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| **“I Can” Statement** | • I can write any basic trigonometric identity given a right-angled triangle |

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| **Common Core Standards** | [CCSS.MATH.CONTENT.HSG.SRT.C.6](http://www.corestandards.org/Math/Content/HSG/SRT/C/6/) Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.  [CCSS.MATH.CONTENT.HSG.SRT.C.7](http://www.corestandards.org/Math/Content/HSG/SRT/C/7/) Explain and use the relationship between the sine and cosine of complementary angles. |
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| **Bell Work** | Solve a quick quiz to refresh what is a hypotenuse, an adjacent, an opposite and an angle ϴ of a right-angled triangle |

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| **Procedures** | 1. Start and lead students discussion related to the bell work.  2. Distribute the Guided Notes  3. Present lesson or play a video lesson.  4. Distribute Lesson Assignment.  5. Have students check each other’s work. |

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| **Assessment** | Assignment 14-1  What is a right-angled triangle?  What is the hypotenuse, base and perpendicular of a right-angled triangle? |

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| **Additional Resources** | [Regents Prep online quiz](http://www.regentsprep.org/regents/math/algebra/an1/propprac.htm) |