

# Jane Long Academy Lesson Plan Template with Unpacking the Standards

2015-2016

Teachers: Ngoma B A: Pre-Calc Fall 2015 Lesson Plan Week of: October 11<sup>th</sup> (Week 8)

|  |  | Monday-12 <sup>th</sup> . & Tuesday- 13 <sup>th</sup> .   | Wednesday- 14 <sup>th</sup> . & Thursday-14 <sup>th</sup> .   | Friday- 16 <sup>th</sup> .  |
|--|--|---|---|---|
| <b>Pre-Planning: Unpacking the Standards</b> | <b>TEKS:</b><br>(R) - Readiness Standard   | PC.3E, PC.4A, PC.2I, PC.2"O", PC. 2F and PC.2H, PC.2E   | PC.3E, PC.4A, PC.2I, PC.2"O", PC. 2F and PC.2H, PC.2E   | No Quiz but Independent studies day chapter 4, Logs and Exponents. Turn in take home test Thursday electronically |
|  | <b>Verb(s)</b><br>- What verbs define the actions students will need to take when mastering this objective?  | Justify, Explain, Solve, create examples, present, elaborate, apply to real life and manipulate scenarios.  | Justify, Explain, Solve, create examples, present, elaborate, apply to real life and manipulate scenarios.  | No Quiz but Independent studies day chapter 4, Logs and Exponents. Turn in take home test Thursday electronically |
|  | <b>Concept</b><br>-What am I teaching?<br><br>-What do the students need to know?  | -See objectives<br><br>-Students take notes and collaborate.  | -See objectives<br><br>-Students take notes and collaborate.  | No Quiz but Independent studies day chapter 4, Logs and Exponents. Turn in take home test Thursday electronically |
|  | <b>Context</b><br><b>Readiness:</b><br>- Connections from previous grade level.<br>- To what degree will this impact learning two years down the road? | -Six Weeks Review<br><br>-Algebraic computations<br><br>-The skills are critical for understanding and developing trigonometric identities.                     | -Six Weeks Review<br><br>-Algebraic computations<br><br>-The skills are critical for understanding and developing trigonometric identities.                     | No Quiz but Independent studies day chapter 4, Logs and Exponents. Turn in take home test Thursday electronically |
|  | <b>I will know my students have mastered this standard when they can....</b>   | I will know my students understand the unit circle, trigonometric graphs and trigonometric properties when they will pass the weekly Quiz at least with an 80%. | I will know my students understand the unit circle, trigonometric graphs and trigonometric properties when they will pass the weekly Quiz at least with an 80%. | No Quiz but Independent studies day chapter 4, Logs and Exponents. Turn in take home test Thursday electronically |
|  | <b>I will assess the standard by.....</b>  | Weekly Quizzes, test, Projects, POWs & HOWs   | Weekly Quizzes, test, Projects, POWs & HOWs   | No Quiz but Independent studies day chapter 4, Logs   |

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|                     |   |  |  | and Exponents. Turn in take home test Thursday electronically   |   |
|                     | <b>Vocabulary</b><br>(Academic and Content)             | Trigonometric identity, Period, Amplitude, odd and even functions  | Trigonometric identity, Period, Amplitude, odd and even functions  | Logs, exponent, Euler number  |   |
|                     | <b>Lesson Topic</b><br>(Content Objective)              | -<br><b>Unit 4: Inverse of the Trigonometric Functions</b><br>Students graphically, tabularly, and algebraically analyze the inverse of the trigonometric functions.<br>-Students will graph trigonometric functions and read their properties.<br><b>Unit 5: Trigonometric Identities</b> Students analyze and transform trigonometric functions and identities | -<br><b>Unit 4: Inverse of the Trigonometric Functions</b><br>Students graphically, tabularly, and algebraically analyze the inverse of the trigonometric functions.<br>-Students will graph trigonometric functions and read their properties.<br><b>Unit 5: Trigonometric Identities</b> Students analyze and transform trigonometric functions and identities |   | No Quiz but Independent studies day chapter 4, Logs and Exponents. Turn in take home test Thursday electronically |
|                     | <b>ELPS</b> (Language Objective)                        | c1C, c3H, c3E, c4K, c4G, c5G, c5B  | c1C, c3H, c3E, c4K, c4G, c5G, c5B  |   | c1C, c3H, c3E, c4K, c4G, c5G, c5B   |
| <b>Lesson Cycle</b> | <b>Engage:</b><br><b>Warm-Up/Opening (min)</b>          | Warm up list   | Warm up list   | Notes taking  |   |
|                     | <b>Explain:</b><br><b>Guided Practice (min):</b>        | Trig identities page 481, Problem 90 page 483, Page 484 Double angles formulas, Page 485 tan identity, Page 487 half-angle formula and Page 493 Product-to-Sum and Sum-to-Product Formulas   | Trig identities page 481, Problem 90 page 483, Page 484 Double angles formulas, Page 485 tan identity, Page 487 half-angle formula and Page 493 Product-to-Sum and Sum-to-Product Formulas   | No Quiz but Independent studies day chapter 4, Logs and Exponents. Turn in take home test Thursday electronically |   |
|                     | <b>Elaborate:</b><br><b>Independent Practice (min):</b> | Exit ticket: copy the identities.  | Exit ticket: copy the identities.  |   | No Quiz but Independent studies day chapter 4, Logs and Exponents. Turn in take home test Thursday electronically |
|                     | <b>Closing ( min.):</b>                                 | Copy formulas and create example   | Copy formulas and create example   |   | Summary of the day  |
| <b>Rein forc</b>    | <b>Materials/ Resources:</b>                            | Notebook, Smartboard, Text book and laptops.   | Notebook, Smartboard, Text book and laptops.   | Notebook, Smartboard, Text book and laptops.  |   |

# Jane Long Academy Lesson Plan Template with Unpacking the Standards

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|                 |  |  |  |
|-----------------|--|--|--|
| <b>Homework</b> | See HOW and POW of Week 8  | See HOW and POW of Week 8  | See HOW and POW of Week 8  |
|                 | <b>MODIFICATIONS and/or ACCOMODATIONS:</b><br><i>-Gifted and Talented</i><br><i>-ELL/ ESL</i><br><i>-Special Education</i> | -Included in ELPS list above.<br><br>-Time adjustment on assignments based on students need. | -Included in ELPS list above.<br><br>-Time adjustment on assignments based on students need. |

**\*All lesson plans are subject to revisions and addendums by teacher.**

**Unit 5: Trigonometric Identities** Students analyze and transform trigonometric functions and identities