



## Two-Year Implementation Plan for Alaska Mathematics Standards High School

Alaska adopted new Mathematics Standards in June 2012. In the spring of 2014, the Standards Based Assessments will continue to assess Grade Level Expectations. In the spring of 2015, new assessments, developed by the SMARTER Balanced Assessment Consortium, will be administered based on the new standards. This document provides optional guidance for districts on how to transition curriculum and instruction of the new standards while ensuring that students receive instruction on content covered in the 2013-2014 Standards Based Assessments.

The Alaska Department of Education & Early Development strongly recommends fully implementing the new mathematics standards for kindergarten-grade2.

The Standards for Mathematical Practice should be implemented in conjunction with the content standards in *all* grades. These replace the Process Skills in the Grade Level Expectations.

Comparison Transition Tools for Standards Transition at <http://education.alaska.gov/akstandards/standards/2012comparison.html> were used when developing this document.



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	<b>Algebra I</b>	<b>Geometry</b>	<b>Algebra II</b>
<b>2013-2014 New Standards to Implement</b>	Interpreting Functions <ul style="list-style-type: none"> <li>• F-IF. 1-5, 6, 7, 9</li> <li>• F-BF.1b, 2-4</li> <li>• F-LE.1</li> <li>• F-EE.3</li> <li>• F-LE.5</li> </ul> Interpreting Categorical Quantitative Data <ul style="list-style-type: none"> <li>• S-ID.2, 3, 5-8</li> </ul>	Similarity, Right Triangles, and Trigonometry <ul style="list-style-type: none"> <li>• G-SRT.1-7, 9-11</li> </ul> Conditional Probability and Rules of Probability <ul style="list-style-type: none"> <li>• S-CP.3--9</li> </ul>	Write expressions in equivalent forms to solve problems. <ul style="list-style-type: none"> <li>• A-APR.3, 4, 7</li> </ul> Complex Number System <ul style="list-style-type: none"> <li>• N-CN.1,2,7,8,9</li> </ul> Making Inferences and Justifying Conclusions <ul style="list-style-type: none"> <li>• S-IC.1, 3-5</li> </ul>
<b>Concepts addressed new standards</b>	Interpreting Functions <ul style="list-style-type: none"> <li>• Understand the concept of a function and use function notation.</li> <li>• Interpret functions that arise in applications in terms of the context.</li> <li>• Analyze functions using different representations.</li> <li>• Build a function that models a relationship between two quantities.</li> <li>• Construct and compare linear, quadratic, and exponential models and solve problems.</li> <li>• Interpret the parameters in a linear or exponential function in terms of a context.</li> </ul> Interpreting Categorical Quantitate Data <ul style="list-style-type: none"> <li>• Summarize, represent and interpret data on a single count or measurement variable.</li> <li>• Summarize, represent and interpret data on two categorical or quantitative variables.</li> </ul>	Similarity, Right Triangles and Trigonometry <ul style="list-style-type: none"> <li>• Understanding similarity in terms of similarity transformations.</li> <li>• Define trigonometric ratios and solve problems involving right triangles.</li> <li>• Apply trigonometry to general triangles.</li> </ul> Conditional Probability and Rules of Probability <ul style="list-style-type: none"> <li>• Understand independence and conditional probability and use them to interpret data.</li> <li>• Use rules of probability to compute probabilities of compound events in a uniform probability mode.</li> </ul>	Write expressions in equivalent forms to solve problems. <ul style="list-style-type: none"> <li>• Identify zeros of polynomials and use them to construct graphs of the function.</li> <li>• Use polynomial identities to solve problems.</li> </ul> Complex Number System <ul style="list-style-type: none"> <li>• Perform arithmetic operations with complex numbers</li> <li>• Use complex numbers in polynomial identities and equations.</li> </ul> Making Inferences and Justifying Conclusions <ul style="list-style-type: none"> <li>• Understand and evaluate random processes.</li> <li>• Make inferences and justify conclusions from sample surveys, experiments, and observational studies.</li> </ul>



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<b>2014-2015 Remaining standards to implement (replace all GLEs)</b>	Full implementation of Alaska Mathematics Standards	Full implementation of Alaska Mathematics Standards	Full implementation of Alaska Mathematics Standards
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