NWEA MAP Math Common Core Sample Items

NWEA has mathematics assessments for two grade bands, 2–5 and 6+. The assessment for 2–5 is comprised of four goal areas: Operations and Algebraic Thinking, Number and Operations, Measurement and Data, and Geometry. The assessment for 6+ is also comprised of four goal areas: Operations and Algebraic Thinking, The Real and Complex Number Systems, Geometry, and Statistics and Probability. Operations and Algebraic Thinking is a goal area that spans both grade band assessments and can be used to illustrate a typical RIT progression.

The RIT progression in the following chart for Operations and Algebraic Thinking illustrates that as the RIT bands increase, so do expectations for content knowledge. In addition, the chart also illustrates an increasing emphasis on application of content in items.
A better understanding of the RIT progression is achieved by studying the Operations and Algebraic Thinking goal area.

The lower RIT bands, below 161 and 161 – 170, contain items that assess student understanding of performing operations with whole numbers and algebraic reasoning with operations. In this example, a student progresses from computation with the whole unknown to computation with the part unknown.

With this expectation of content knowledge in place for the student, the next bands, 171 – 200, require the student to create a numerical equation to represent a real-life problem, solve a real-life problem, and use algebraic thinking to extend a pattern. All of these items build on the assumption that the student has mastered the four operations using whole numbers and is developing an understanding of relationship between quantities.
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The next logical step in the progression is the addition of variables in formal algebraic expressions and equations.

The lower and middle RIT bands have assessed student understanding of operations and relationships between quantities. These ideas now become semi-formal with the introduction of the concept of functions. Students explore functional relationships through reasoning about points on graphs, verbal descriptions, and tables.