# **Correlation to the 2016 Mathematics Standards of Learning and Curriculum Framework – Grade 6**

**Text/Instructional Material Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Publisher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Committee Member: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_**

**NOTE: The rating cells in the tables below are empty in order for division-level review teams to utilize this form.**

## **Section I. Correlation with the Mathematics 2016 SOL and Curriculum Framework**

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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| **6.1** |  |  |  |
| **6.2** |  |  |  |
| **6.3** |  |  |  |
| **6.4** |  |  |  |
| **6.5** |  |  |  |
| **6.6** |  |  |  |
| **6.7** |  |  |  |
| **6.8** |  |  |  |
| **6.9** |  |  |  |
| **6.10** |  |  |  |
| **6.11** |  |  |  |
| **6.12** |  |  |  |
| **6.13** |  |  |  |
| **6.14** |  |  |  |

## **Section II. Additional Criteria: Instructional Planning and Support**

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| **Criteria** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| **1.** Materials emphasize the use of effective instructional practices and learning theory. |  |  |  |
| * 1. Students are guided through critical thinking and problem-solving approaches.
 |  |  |  |
| * 1. Concepts are introduced through concrete experiences that use manipulatives and other technologies.
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| * 1. Multiple opportunities are provided for students to develop and apply concepts through the use of calculators, hand held devices, computers, and other technologies.
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| * 1. Students use the language of mathematics including specialized vocabulary and symbols.
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| * 1. Students use a variety of representations (graphical, numerical, symbolic, verbal, and physical) to connect mathematical concepts.
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| 1. The mathematics content is significant and accurate.
 |  |  |  |
| * 1. Materials are presented in an organized, logical manner which represents the current thinking on how students learn mathematics.
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| * 1. Materials are organized appropriately within and among units of study.
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| * 1. Format design includes titles, subheadings, and appropriate cross-referencing for ease of use.
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| * 1. Writing style, length of sentences, vocabulary, graphics, and illustrations are appropriate.
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| * 1. Level of abstraction is appropriate, and practical examples, including careers, are provided.
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| * 1. Sufficient applications are provided to promote depth of application.
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| 1. Materials present content in an accurate, unbiased manner.
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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.1 The student will represent relationships between quantities using ratios,  and will use appropriate notations, such as *, a* to *b*, and *a*:*b*. |  |  |  |

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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.2 The student will |  |  |  |
| a) represent and determine equivalencies among fractions, mixed numbers, decimals, and percents; and |  |  |  |
| b) compare and order positive rational numbers. |  |  |  |

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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.3 The student will |  |  |  |
| a) identify and represent integers; |   |  |  |
| b) compare and order integers; and |  |  |  |
| c) compare and order positive rational numbers. |  |  |  |

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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
|  6.4 The student will recognize and represent patterns with whole number exponents and perfect squares. |  |  |  |

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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.5 The student will  |  |  |  |
| a) multiply and divide fractions and mixed numbers;  |  |  |  |
| b) solve single-step and multistep practical problems involving addition, subtraction, multiplication, and division of fractions and mixed numbers; and |  |  |  |
| 1. solve multistep practical problems involving addition, subtraction, multiplication, and division of decimals.
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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.6 The student will  |  |  |  |
| 1. add, subtract, multiply, and divide integers;
 |  |  |  |
| 1. solve practical problems involving operations with integers; and
 |  |  |  |
| 1. simplify numerical expressions involving integers.
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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.7 The student will  |  |  |  |
| a) derive π (pi); |  |  |  |
| b) solve problems, including practical problems, involving circumference and area of a circle; and |  |  |  |
| c) solve problems, including practical problems, involving area and perimeter of triangles and rectangles. |  |  |  |

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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.8 The student will  |  |  |  |
| a) identify the components of the coordinate plane; and |  |  |  |
| b) identify the coordinates of a point and graph ordered pairs in a coordinate plane. |  |  |  |

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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.9 The student will determine congruence of segments, angles, and  polygons. |  |  |  |

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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.10 The student, given a practical situation, will |  |  |  |
| a) represent data in a circle graph; |  |  |  |
| b) make observations and inferences about data represented in a circle graph; and |  |  |  |
| c) compare circle graphs with the same data represented in bar graphs, pictographs, and line plots. |  |  |  |

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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.11 The student will |  |  |  |
| 1. represent the mean of a data set graphically as the balance point; and
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| 1. determine the effect on measures of center when a single value of a data set is added, removed, or changed.
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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.12 The student will  |  |  |  |
| 1. represent a proportional relationship between two quantities, including those arising from practical situations;
 |  |  |  |
| 1. determine the unit rate of a proportional relationship and use it to find a missing value in a ratio table;
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| 1. determine whether a proportional relationship exists between two quantities; and
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| 1. make connections between and among representations of a proportional relationship between two quantities using verbal descriptions, ratio tables, and graphs.
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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.13 The student will solve one-step linear equations in one variable, including practical problems that require the solution of a one-step linear equation in one variable. |  |  |  |

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| **Mathematics Standard of Learning** | **Adequate****Rating** | **Limited****Rating** | **No Evidence Rating** |
| 6.14 The student will |  |  |  |
| 1. represent a practical situation with a linear inequality in one variable; and
 |  |  |  |
| 1. solve one-step linear inequalities in one variable, involving addition or subtraction, and graph the solution on a number line.
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