**Curriculum Coverage in Mathematics for the 2018-2019 School Year as Outlined by TN Standards**

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| * **TN Standards Major Work of the Grade (70%):** * **Multiply and divide fractions** * **Apply system of rational numbers** * **Understand ratio concepts** * **Use ratio reasoning** * **Arithmetic with algebraic expressions** * **Solve one-variable equations and inequalities** * **Represent relationships between independent/dependent variables** | * **Supporting (30%):** * **Compute fluently with multi-digit numbers** * **Solve area, surface area, and volume problems** * **Understand statistical variability** * **Summarize and describe distributions** |

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| **TN Standards** | **Learning Outcomes** | **Instructional Focus** | **Content** |
| **Expressions and Equations** | | | |
| **6.EE.A.1** Write and evaluate numerical expressions involving whole number exponents | I can use the order of operations to simplify expressions with exponents. | ENTER HERE | **Go Math Lesson**  9.3 Order of Operations (pg. 249)  **Engage NY Task:**  [Grade 6 Mathematics Module 4, Topic B](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-b-overview) (9.3) |
| **6.EE.A.2** Write, read, and evaluate expressions in which variables stand for numbers  **a)** Write expressions that record operations with numbers and with variables standing for numbers. | I can model and write algebraic expressions. | ENTER HERE | **Go Math Lesson**  10.1 Modeling and Writing Expressions (pg. 261)  **Engage NY Task:**  [Grade 6 Mathematics Module 4, Topic D](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-d-overview) (10.1) |
| **6.EE.A.2b** Identify parts of an expression using mathematical terms. (sum , term, product, factor, quotient, coefficient) View one or more parts of an expression as a single entity. | I can identify parts of an expression using mathematical terms. | ENTER HERE | **Go Math Lesson**  10.1 Modeling and Writing Expressions (pg. 261)  **Engage NY Task:**  [Grade 6 Mathematics Module 4, Topic D](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-d-overview) |
| **6.EE.A.2c** Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real world problems. Perform arithmetic operation, including those involving whole number exponents, in the conventional order when there are no parentheses to specify a particular order. (Order of Operations) | I can use order of operations to evaluate algebraic expressions. | ENTER HERE | **Go Math Lesson**  10.2 Evaluating Expressions (pg. 269)  **Engage NY Task:**  [Grade 6 Mathematics Module 4, Topic C](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-c-overview) (10.2)  [Grade 6 Mathematics Module 4, Topic F](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-f-overview) (10.2) |
| **6.EE.A.3** Apply the properties of operations to generate equivalent expressions. | I can identify and write equivalent expressions. | ENTER HERE | **Go Math Lesson**  10.3 Generating Equivalent Expressions (pg. 275)  **Engage NY Task:**  [Grade 6 Mathematics Module 4, Topic C](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-c-overview) (10.3)  [Grade 6 Mathematics Module 4, Topic D](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-d-overview) (10.3) |
| **6.EE.A.4** Identify when expressions are equivalent (i.e., when the expressions name the same number regardless of which value is substituted into them.) | I can identify and write equivalent expressions. | Students should progress from identifying equivalent expressions to generating equivalent expressions as a result of applying multiple properties of operations and should be able to explain the connection between the expressions. This standard lays the foundation for future coursework for which students rewrite expressions to reveal specific quantities. Additionally, students should solidify this understanding by explaining their reasoning with precise mathematical vocabulary. | **Go Math Lesson**  10.3 Generating Equivalent Expressions (pg. 275)  **Engage NY Task:**  [Grade 6 Mathematics Module 4, Topic C](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-c-overview) (10.3)  [Grade 6 Mathematics Module 4, Topic D](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-d-overview) (10.3) |
| **6.EE.B.5** Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. | I can determine whether a number is a solution of an equation. | ENTER HERE | **Go Math Lesson**  11.1 Writing Equations to Represent Situations (pg.297)  **Engage NY Task:**  [Grade 6 Mathematics Module 4, Topic G](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-g-overview) (11.1) |
| **6.EE.B.6** Use variables to represent numbers and write expressions when solving real world or mathematical problems, understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set | I can write algebraic equations. | ENTER HERE | **Go Math Lesson**  11.1 Writing Equations to Represent Situations (pg.297)  **Engage NY Task:**  [Grade 6 Mathematics Module 4, Topic G](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-g-overview) (11.1)  [Grade 6 Mathematics Module 4, Topic H](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-h-overview) (11.1) |
| **6.EE.B.7** Solve real world and mathematical problems by writing and solving equations of the form x+p=q and px=q | I can solve addition and subtraction equations.  I can solve multiplication and division equations. | As students deepen their understanding of solving one-step equations resulting  from real-world situations, they should not only create an equation from a real- world or mathematical situation, but should also identify and interpret dependent and independent variables with respect to the context. Solving equations is a process of reasoning to find the number(s) that make an equation true, which can include checking if a given number is a solution. Although the process of reasoning will eventually lead to standard methods for solving equations, students should be flexible working with different examples where looking for structure will produce more efficient solution paths. This allows them to explain their reasoning for selecting the specific solution path. | **Go Math Lesson**  11.2 Addition and Subtraction Equations (pg. 303)  11.3 Multiplication and Division Equations (pg. 311)  **Engage NY Task:**  [Grade 6 Mathematics Module 4, Topic G](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-g-overview) (11.2 and 11.3)  [Grade 6 Mathematics Module 4, Topic H](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-h-overview) (11.2 and 11.3) |
| **6.EE.B.8** Write an inequality of the form x is greater than c or x is less than c to represent a constraint or condition in a real world or mathematical problem. Recognize that inequalities of the form x is greater than c or x is less than c have infinitely many solutions.; represent solutions of such inequalities on number line diagrams. | I can use inequalities to represent real-world constraints or conditions. | As students solidify their foundational understanding of interpreting and writing inequalities, they should extend their knowledge togenerating inequalities from a context and creating a context from a given inequality. Students should also combine these skills to graph their solutions on a number line and understand what the solution set represents with respect to the context. | **Go Math Lesson**  11.4 Writing Inequalities (pg. 319)  **Engage NY Task:**  [Grade 6 Mathematics Module 4, Topic G](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-g-overview) (11.4)  [Grade 6 Mathematics Module 4, Topic H](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-h-overview) (11.4) |
| **6.EE.C.9** Use variables to represent two quantities in a real-world problem that change in relationship to one another.  **a)** Write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable.  **b**) Analyze the relationship between the dependent and independent variable using graphs and tables, and relate these to the equation. | I can identify independent and dependent variables from tables and graphs.  I can use an equations to show a relationship between two variables.  I can use verbal descriptions, tables, and graphs to represent algebraic relationships. | Students should move from using variables to represent two quantities to analyzing the relationship between the quantities in complex real-world problems with graphs, tables, and equations. Students should also provide written and verbal justification to explain the relationship of the quantities and  the connections between multiple representations. It is also important for students to understand and explain that each representation (graph, table, equation) shows the same relationship. Students will extend their understanding of the relationship between independent and dependent variables in later grades as they work with linear functions that are both discrete and continuous. | **Go Math Lesson**  12.2 Independent and Dependent Variables in Tables and Graphs (pg. 337)  12.3 Writing Equations from Tables (pg. 345)  12.4 Representing Algebraic Relationships in Tables and Graphs (pg. 351)  **Engage NY Task:**  [Grade 6 Mathematics Module 4, Topic H](https://www.engageny.org/resource/grade-6-mathematics-module-4-topic-h-overview) (12.2, 12.3, and 12.4) |