6th Grade Unit 5 Information
1-Step Equations & Inequalities

CRCT Domain & Weight: Expressions & Equations 15.5%  (2/3 of the 23%)

FLIPBOOK for Unit 5
Overview of Unit 5
Prerequisites: Unit 5

Unit Length: Approximately 24 days

Checklist for Unit 5
Study Guide for Unit 5
Study Guide KEY for Unit 5

Calculators are Allowed in This Unit.

Click on the links below for resources by Concept:

Concept One: Solving Equations
Concept Two: Writing and Solving Word Problems
Concept Three: Write/Solve/Graph Inequalities
Concept Four: Dependent & Independent Variables
### Concept One: Solving Equations

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<th>Assessment</th>
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<tbody>
<tr>
<td><strong>MGSE6.EE.5</strong> 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.</td>
<td></td>
<td>- DO Eureka - True &amp; False Number Sentences <a href="#">License</a></td>
<td><strong>CC.6.EE.5</strong></td>
</tr>
<tr>
<td><strong>E.Q.</strong> What strategies can I use to help me understand and represent real situations using expressions and equations?</td>
<td></td>
<td>- Station Activities Equations</td>
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<td>- Station 1 – Need to make a set of cards</td>
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<td>- Station 2 – uses Algebra Tiles</td>
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<td>- Station 3 – Visual equations</td>
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<td>- Station 4 – Use in Concept 2</td>
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<td>- Glencoe CCSS Textbook(2013) p.509-520</td>
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<td>- Problem Solving Practice Equations</td>
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## Concept Two: Writing & Solving Word Problems

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<tr>
<td>MGSE6.EE.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.</td>
<td>Inverse Operation: Solution</td>
<td>Activator: ActiveInspire Equations Video, Notes, &amp; Practice</td>
<td>CC.6.EE.6</td>
</tr>
<tr>
<td>MGSE6.EE.7 Solve real-world and mathematical problems by writing and solving equations of the form ( x+p=q ) and ( pp=q ) for cases in which ( p, q ) and ( x ) are all nonnegative rational numbers.</td>
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<td>CC.6.EE.7</td>
</tr>
<tr>
<td>E.Q. What strategies can I use to help me understand and represent real situations using expressions &amp; equations?</td>
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<tr>
<td>E.Q. How can I write and interpret equations?</td>
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**Resources**
- Optional Eureka – TAPE DIAGRAMS
- Inequalities Power Point
- Spotlight Task *Fruit Punch*
- Collaborative Cards
- Frameworks 2 Part Task *Set It Up*
- Station Activities Equations
- Writing Equations
- Writing and Solving Equations Real World Problems

**Differentiation:**
- Newmark 6 Learning Book Pages 96-105
- Writing Equations Teamwork Partner Practice
# TCSS 6th Grade Unit 5 ~ Equations & Inequalities

## Concept Three: Write/Solve/Graph Inequalities

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</table>
| MGSE6.EE.8 Write an inequality of the form \( x > c \) or \( x < c \) to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form \( x > c \) or \( x < c \) have infinitely many solutions; represent solutions of such inequalities on number line diagrams. | inequality | **Activator:** Glencoe CCSS Textbook, Inquiry Lab pg. 615  
- Eureka Math – Writing & Graphing License  
- Inequalities PowerPoint  
- When Is It Not Equal Task  
**Write & Solve**  
- Glencoe CCSS Textbook(2013) p.615-624  
**Write, Solve, & Graph**  
- Glencoe CCSS Textbook(2013) p. 625-642  
- Partner Practice Writing Inequalities  
- Inequalities Independent Practice | **CC.6.EE.8** |
| E.Q. What strategies can I use to help me understand and represent real situations using inequalities? |  |  |  |
| E.Q. How can I tell the difference between an expression, equation and an inequality? |  |  |  |

**Differentiation:**

- Newmark 6 Learning Book Page 96-105  
- Reteaching Inequalities  
- Reteaching Writing and Graphing Inequalities  

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### TCSS 6th Grade Unit 5 ~ Equations & Inequalities

#### Concept Four: Dependent & Independent Variables

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| MGSE6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another. | Constant of proportionality: Direct Proportion (Direct Variation) Dependent variable Independent variable | - DO Eureka Math Independent & Dependent Variables [License](https://example.com)  
- Analyzing Tables Task  
- Making Sense of Graphs  
- Chocolate Boxes  
- Real World Independent vs. Dependent Problems | CC.6.EE.9 |
| a. Write an equation to express one quantity, the dependent variable, in terms of the other quantity, the independent variable.  
| b. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation \( d = 65t \) to represent the relationship between distance and time.  
| E.Q. How does a change in one variable affect the other variable in a given situation? | Glencoe CCSS Textbook(2013)  
- Tables p. 579 – 594  
- Graphs p. 595 – 602  
- Multiple Representations p. 603 – 614 | Differentiation:  
- Support Multiple Representation of Functions  
- Extend Enchanted Rock  
- Three Levels: Newmark 6 Learning Book Pages 106-110 | Back to Top |