

# Major Work of Math I Standards for Assessment

High School CC Math I Standards for Assessment	
Major Clusters	Supporting/Additional Clusters
<p><b>The Real Number System</b></p> <ul style="list-style-type: none"> <li>Extend the properties of exponents to rational exponents.</li> </ul> <p><b>Quantities</b></p> <ul style="list-style-type: none"> <li>Reason quantitatively and use units to solve problems.</li> </ul> <p><b>Seeing Structure in Expressions</b></p> <ul style="list-style-type: none"> <li>Interpret the structure of expressions</li> <li>Write expressions in equivalent forms to solve problems.</li> </ul> <p><b>Creating Equations</b></p> <ul style="list-style-type: none"> <li>Create equations that describe numbers or relationships.</li> </ul> <p><b>Reasoning with Equations and Inequalities</b></p> <ul style="list-style-type: none"> <li>Understand solving equations as a process of reasoning and explain the reasoning.</li> <li>Represent and solve equations and inequalities graphically</li> </ul> <p><b>Interpreting Functions</b></p> <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> </ul>	<p><b>Arithmetic with Polynomials and Rational Expressions</b></p> <ul style="list-style-type: none"> <li>Perform arithmetic operations on polynomials</li> </ul> <p><b>Reasoning with Equations and Inequalities</b></p> <ul style="list-style-type: none"> <li>Solve equations and inequalities in one variable.</li> <li>Solve systems of equations.</li> </ul> <p><b>Building Functions</b></p> <ul style="list-style-type: none"> <li>Build new functions from existing functions.</li> </ul> <p><b>Congruence</b></p> <ul style="list-style-type: none"> <li>Experiment with transformations in the plane.</li> </ul> <p><b>Geometric Measurement and Dimension</b></p> <ul style="list-style-type: none"> <li>Explain volume formulas and use them to solve problems.</li> </ul> <p><b>Interpreting Categorical and Quantitative Data</b></p> <ul style="list-style-type: none"> <li>Interpret linear models.</li> </ul>

- Analyze functions using different representations.

### **Building Functions**

- Build a function that models a relationship between two quantities.

### **Linear, Quadratic, and Exponential Models**

- Construct and compare linear and exponential models and solve problems.
- Interpret expressions for functions in terms of the situation they model.

### **Expressing Geometric Properties with Equations**

- Use coordinates to prove simple geometric theorems algebraically.

### **Interpreting Categorical and Quantitative Data**

- Summarize, represent, and interpret data on a single count or measurement variable.
- Summarize, represent, and interpret data on two categorical and quantitative variables.