# **Core Skills Analysis**

#### **Mathematics**

- Ryan demonstrated an understanding of how to identify and construct algebraic expressions from word problems, showing the ability to translate verbal information into mathematical terms
- He gained skills in simplifying algebraic expressions, using both combining like terms and applying the distributive property effectively.
- Ryan learned to solve basic linear equations, enhancing his ability to isolate variables and maintain the balance of equations.
- Through practice, he developed proficiency in evaluating expressions for given variable values, which reinforced the concept of substitution.

## **Tips**

To bolster Ryan's understanding of algebraic expressions and equations, consider providing him with additional practice problems that incorporate real-life scenarios, which can help contextualize these concepts. Encouraging him to create his own word problems for peers can also strengthen comprehension. Incorporate visual aids, such as algebra tiles or graphing software, to illustrate concepts dynamically. For further exploration, engaging in online interactive math games related to algebra could reinforce skills in a fun and engaging manner.

### **Book Recommendations**

- <u>Algebra for Dummies</u> by Mary Jane Sterling: A comprehensive guide that breaks down algebra concepts in easy-to-understand language, perfect for beginners seeking a solid foundation.
- <u>Pre-Algebra</u> by Richard Rusczyk: An excellent resource for students ready to tackle algebra, filled with clear explanations and practical exercises.
- <u>Algebra Unplugged</u> by C. Kevin McMurtry: An engaging introduction to algebra that uses storytelling and real-world examples to make algebra relatable and enjoyable.

### **Learning Standards**

- CCSS.Math.Content.6.EE.A.2 Write, read, and evaluate expressions in which letters stand for numbers.
- CCSS.Math.Content.6.EE.B.5 Understand solving an equation or inequality as a process of answering a question.
- CCSS.Math.Content.7.EE.B.4 Use variables to represent quantities in a real-world or mathematical problem.