Welcome to your review of Carnegie Learning’s **brand new** High School Math Solution, which is still being developed as we speak. As part of that work, we are in the process of building our **new Integrated Math Solution**. This new 2018 copyright builds on extensive teacher feedback and experience with our previous Integrated Math series. This will be a groundbreaking new set of materials, complementing and leveraging similar strategies used in our highly rated (forthcoming from Ed Reports) Middle School Math Solution. These include robust supports for teachers, highly individualized learning through adaptive software (MATHia), and a distinct focus on building a coherent, rigorous program that integrates the mathematical practices into EVERY lesson.

Other providers think of blended learning as a simple mix of print resources for instruction and software for practice. Carnegie Learning delivers a deeper level of blended learning, where students are given opportunities to learn together (using printed resources) and learn individually (using MATHia® Software or printed Skills Practice materials). This blend ensures students develop both the conceptual understanding and procedural fluency necessary to succeed in mathematics.

We invite you to follow this Step-by-Step Reviewer’s Guide to learn more about us and our program, as you embark upon a new math journey. Let’s begin your review.

**STEP 1**

**Organize your materials.**

Since final print versions are in production, we only provided a “table” copy of the Integrated I Student Text, copyright 2018. Please review and know that additional resources are available on the Murrieta microsite mentioned below. In addition, each reviewer has been given a hard copy of the following in their “teacher kit”:

- This Reviewer’s Guide!
- (1) High School Sampler
- (1) MATHia Brochure

Digital resources available on the custom microsite (www.carnegielearning.com/Murrieta):

- Introduction videos from the Solution’s author Sandy Bartle Finocchi, Senior Academic Officer at Carnegie Learning
- Draft files from the new Integrated Math I, copyright 2018
- Draft files from the new Integrated Math II, copyright 2018
- Tables of contents for Integrated Math I, Integrated Math II, and Integrated Math III, including MATHia
- Access to MATHia through the Teacher’s Toolkit which gives you full view of all MATHia (learning software that is designed to support learning with intelligent tutoring, conceptual understanding reinforcement, skill mastery and practice).
- Additional materials will be added as they are completed.
STEP 2

Find out more about our Carnegie Learning Way, including our instructional approach, at the Murrieta microsite: www.carnegielearning.com/Murrieta.

- Video 1: Carnegie Learning Overview
- Video 2: Transforming the Math Classroom
- Video 3: Integrated Math Introduction
- Video 4: Integrated Math I Overview
- Video 5: Integrated Math II Overview
- Video 6: Integrated Math III Overview
- Video 7: Integrated Math Final Thoughts

STEP 3

Grab the High School Math Solution Sampler. Read the front matter and examine the sample teacher notes.

To get the full view of the teaching and learning experience, please read the High School Math Solution Sampler.

SAMPLER

- Pages 2–4 tells you about Carnegie Learning and our overall approach to supporting you in the classroom.
- Pages 5–7 shows a sample progression of the structure through a lesson including our engage, develop, and demonstrate approach.
- Pages 8–13 takes you through how we support blended learning, the research findings on the impact of our approach and curriculum, and the features of the Solution.
- Pages 14–15 has the Table of Contents for Integrated Math I. To see the table of contents for all three Integrated Math texts, go to www.carnegielearning.com/Murrieta.
- Page 17 lists and explains each of the components of the Carnegie Learning High School Math Solution.
- Pages 19–60 gives a sample of the Teacher Implementation Guide and the support for each Module, Topic, and Lesson that teachers receive including pacing guidance, questions to ask, mathematical practices, differentiation strategies, and ELL Tips. Every chapter in the Teacher Implementation Guide provides an overview of content and pacing suggestions. Each lesson in the guide supports teachers with tips for differentiation, guiding questions, grouping suggestions, common misconceptions, and ELL support.
- Pages 61–69 demonstrates additional program features, including Skills Practice, Performance Tasks, Assessments, and Family Guides.
- Pages 70–75 provides insight into MATHia, our intelligent tutoring and mastery-based software that differentiates and fully supports each student.

Visit the Murrieta microsite to view the High School Math Sampler as well as other great resources, including product timeline, ELL support document, new product comparison, and MATHia Software brochure.
STEP 4

Review the Integrated Math I and Integrated Math II Student Text Lessons.

Students will receive instruction and work through interactive lessons within the textbook. Each lesson in the series delivers our Engage, Develop, and Demonstrate instructional model. It is through this model that students will be motivated, develop their conceptual understanding of mathematics, and demonstrate their learning.

- **Engage**: We activate student thinking by tapping into prior knowledge and real-world experiences. Our lessons provide an introduction that generates curiosity and plants seeds for deeper learning.
- **Develop**: We build a deep understanding of mathematics through a variety of activities, real-world problems, sorting activities, worked examples, and peer analysis, all in an environment where collaboration, conversations and questioning are routine practices.
- **Demonstrate**: We provide opportunities for students to reflect on and evaluate what was learned. Ongoing formative assessment underlies the entire experience, driving real-time adjustments, next steps, insights, and measurements.

With the instructional approach in mind, review the lessons in Integrated Math I and II. For a clear overview of Integrated Math and what makes it special, be sure to watch the videos from Sandy Bartle Finocchi.

STEP 5

See how the textbook connects with the software. Login to the MATHia Teacher’s Toolkit and review the Integrated Math and RtI content available in MATHia. Work the problems. Have fun!

Carnegie Learning’s High School Math Solution uniquely integrates our textbook resources with MATHia, our intelligent math tutoring and learning platform. MATHia punctuates student learning by working with the textbook topics and providing students the opportunity to deepen conceptual understanding and build procedural fluency. This component of the program mimics a human tutor and carefully assesses how individual students approach problem solving. MATHia adjusts and provides the necessary help each student needs in order to achieve — and move beyond — on-grade level skill mastery.
Through MATHia, you will have access to reports that predict the trajectory of student learning, performance on standardized assessments, the amount of time spent on the platform, as well as content mastery. MATHia’s leadership reports give administrators and instructional leaders interactive data so they can view student performance across the district, buildings, and even at the class level.

For students who have limited access to technology, please see the Student Skills Practice Book.

To experience MATHia, log into the Teacher’s Toolkit: www.carnegielearning.com/login.

- As a teacher, login with the teacher credentials. You can explore each workspace and any of the problems in MATHia by logging into the teachers toolkit and selecting the Content Browser in the upper right hand corner. Click between courses to see all the individual workspaces and to launch them.

- As a student, login with the student credentials. You will see three courses in MATHia, one for each of the Integrated courses. Click on each one to view the student experience.
First you will see the whole table of contents for the course. This is full of modules, which break down into units and then workspaces. Workspaces are where you will do some work!

At the unit level, you will see some introductory material including learning goals, a short video and connections to prior learning.

Then at the workspace level you will begin to do some math. Notice how the Progress Bar within each workspace adjusts as you work and approach mastery! It will not move you on to a new topic until all of your skills are mastered. If you don't know how to proceed, try a hint, which adjusts through research-driven adaptivity for each student to provide relevant help.
STEP 6

Be ready for what is coming soon!

We know that this does not give you the full High School Math Solution. It is being written and produced as we speak. The Solution will be the freshest learning experience for both your teachers and students. We will keep you updated as each piece is released, including student lessons, Teacher’s Implementation Guides, assessments, performance tasks, and Skills Practice.

As you conduct your review, please contact David Ware with any questions.

Phone: 949.632.4503
Email: dware@carnegielearning.com

We’re here to help!

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**Pre-Test**

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
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3. Rewrite the explicit formula of this sequence $a_n = 5 + 3(n - 1)$ in function form $f(x) = ax + b$.

4. The sequence generated by $a_n = 2 + 2(n - 1)$ can be represented by the linear function $f(x) = 2x - 6$. How is the first term of the sequence related to the y-intercept of the function?

5. Does this table of values represent a linear function? If so, write the function. If not, explain why it does not represent a linear function.

<table>
<thead>
<tr>
<th>$x$</th>
<th>$f(x)$</th>
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<tbody>
<tr>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
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<td>14</td>
<td>4</td>
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</table>

6. This table represents a linear function. Complete the table for consecutive values of the input. Use the table to demonstrate that the difference is constant between consecutive output values of any linear function.

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<td>3</td>
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**Post-Test**

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3. Rewrite the explicit formula of this sequence $a_n = 2 + 6(n - 1)$ in function form $f(x) = ax + b$.

4. The sequence generated by $a_n = 5 - 3(n - 1) + 3n$ can be represented by the linear function $f(x) = 2x - 6$. How is the first term of the sequence related to the y-intercept of the function?

5. Does this table of values represent a linear function? If so, write the function. If not, explain why it does not represent a linear function.

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