# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>About Star Math</td>
<td>1</td>
</tr>
<tr>
<td>Computer-Adaptive Test and Scaled Score</td>
<td>1</td>
</tr>
<tr>
<td>Software Requirements</td>
<td>1</td>
</tr>
<tr>
<td>Test Security Overview</td>
<td>1</td>
</tr>
<tr>
<td>Prior to Testing</td>
<td>2</td>
</tr>
<tr>
<td>Day of Testing</td>
<td>2</td>
</tr>
<tr>
<td>Test Administration Procedure</td>
<td>3</td>
</tr>
<tr>
<td>General Testing Information</td>
<td>5</td>
</tr>
<tr>
<td>Pausing or Stopping a Test</td>
<td>5</td>
</tr>
<tr>
<td>Student Accommodations</td>
<td>5</td>
</tr>
<tr>
<td>Contact for Support</td>
<td>5</td>
</tr>
<tr>
<td>Software Tasks</td>
<td>6</td>
</tr>
<tr>
<td>Identify Students’ User Names and Passwords</td>
<td>6</td>
</tr>
<tr>
<td>How Students Log In</td>
<td>6</td>
</tr>
<tr>
<td>Test Flow Diagram—Progress Monitoring</td>
<td>7</td>
</tr>
<tr>
<td>Test Flow Diagram—Enterprise</td>
<td>8</td>
</tr>
<tr>
<td>Test Format Overview</td>
<td>9</td>
</tr>
<tr>
<td>Practice Questions and Failed Practices</td>
<td>9</td>
</tr>
<tr>
<td>Teacher Notes for Student Images</td>
<td>10</td>
</tr>
<tr>
<td>Student Images</td>
<td>14</td>
</tr>
<tr>
<td>Help Links</td>
<td>24</td>
</tr>
</tbody>
</table>
Introduction

This manual provides general information about the Star Math assessment and specific guidelines for administering Star Math. Test administrators and teachers should carefully read and review the contents of this manual prior to testing to ensure the highest levels of test fidelity.

About Star Math

Star Math is a computer-adaptive test that measures student achievement on math skills. As a student takes the assessment, the software selects items based on the student's responses. If the student answers the item correctly, the software increases the difficulty level of the next item. If the student answers incorrectly, the software lowers the difficulty level of the next item. By continually adjusting the difficulty of an item to what the student has shown she can or cannot do, the assessment is tailored to accurately measure each student's level of achievement. Star Math consists of 34 items (24 for progress monitoring) and takes approximately 20 minutes for the student to complete the assessment.

Students in grades 1–8 who are taking the Enterprise version of the test will see a "Part 2" after the actual test is over. In Part 2, the student may be presented with a tutorial and a practice question, followed by two new test questions. These questions are for calibration purposes only and have no effect on a student's test score.

Computer-Adaptive Test and Scaled Score

A computer-adaptive test creates a virtually unlimited number of test forms as it dynamically interacts with the student taking the test. A scaled score (SS) is the student's score on the assessment. It is used to report performance for all students on a consistent scale. To make the results of all tests comparable, it is necessary to convert all results of the tests to scores on a common scale. The Star Math scale ranges from 0–1400.

Software Requirements

For the most current system requirements for Star Assessments and other Renaissance software, please visit https://www.renaissance.com/system-requirements/.

Test Security Overview

Security is a concern in any testing situation, and sound testing procedures are the hallmark of test security. When teachers and test administrators consistently follow the procedures presented in this manual before, during, and after testing, they help ensure test results which are true representations of student achievement.

Additionally, test security safeguards are built in to Star’s computer-adaptive test design. It is highly unlikely any two students will see the same test items at the same time. This is because Star assessments are computer-adaptive based on individual student performance, and test items are selected from a large pool of items.
Prior to Testing

Preparation for testing is a key component of test fidelity. We recommend that test administrators and/or teachers complete the following tasks prior to testing.

- Read this test administration manual thoroughly and carefully.
- Create a schedule for testing. Try to avoid distracting locations or times when other students, school bells, or public address announcements can interfere with student concentration. Provide a copy of the schedule to each person involved with testing.
- Cover or remove any materials on the walls, whiteboard, and other areas that might help students answer test items. Do NOT permit students to use calculators or other devices during the test (an on-screen calculator may be provided for some questions; see “Picture 2” on page 10).
- Make sure there is enough light and ventilation in the test area.
- Ensure all testing devices are working properly. If you are administering the test with a tablet or laptop, make sure the battery is adequately charged before testing.
- If any students are taking the test using audio (see “Help Links” on page 24), make sure the computer or tablet has a set of headphones plugged in and that the volume is set so the student can hear the audio clearly without disturbing other students.
- Make sure you have provided enough note paper and sharpened pencils for the students to use during the test.
- Arrange the desks or computer workstations so that students have enough room to work on the test. This should include enough space for note paper so that students can perform the necessary calculations for the test items.
- Create a seating chart for the testing area. Consider students who may have difficulty concentrating with distractions such as windows, doorways, or classmates.
- Post a “Do Not Disturb” sign outside the testing environment.
- Access students’ user names and passwords (see page 6). It is important to note that teachers can only search for students in their own classes. If you choose to print this information, be sure it is stored in a secure location before and during testing, and destroyed after testing.
- Check the settings for all preferences that apply to Star Math (see "Help Links" on page 24).

Day of Testing

- Make sure you have the correct monitor password if it is required (see "Help Links" on page 24).
- Use “Test Format Overview” on page 9 to familiarize students with what a Star Math test looks like. The Student Images section can be used to make handouts or to project for students to help them more clearly understand the test format. The text included in
the “Teacher Notes for Student Images” section beginning on page 10 is a guide to use with students as you discuss the pictures.

☐ Remind students to bring a book to read silently at their seat after they are finished testing to minimize distractions for those who are still testing.

☐ On the computers or tablets used for testing, start the browser and go to the Renaissance address (URL). On the Welcome page, select I’m a Student.

☐ We recommend enabling “full screen” mode on your browser to ensure no scrolling is required. Browsers with customizations (bookmark tabs, extensions, etc.) and low-resolution screen settings result in a smaller available space which could result in needing to scroll to see the Next button during testing.

☐ Provide a break prior to testing. Students should use the restroom and get a drink of water during this time.

Test Administration Procedure

If you are using a seating chart, make sure all the students are seated correctly. Read aloud, word for word, the material printed in the “Read Out Loud” sections. You may repeat the directions as needed. Text in (italic font) is information meant for you and should not be read to students.

Today you will take a test called Star Math. It is a math test that has multiple-choice questions. You will answer the questions on a computer or a tablet, but you can work the problems out on note paper. There are 34 questions on the test, and it should take you somewhere between 20 and 30 minutes to answer all of the questions.

(If students are in grade 7 or higher): For some of the algebra and geometry questions, there will be an on-screen calculator and an on-screen formula reference sheet that you can use to answer the questions.

(If students are taking the test using audio): Listen to the audio when a new question is presented to you. You will be able to pause, resume, or replay the audio if you need to.

Some of the questions will be easy, while others will be more challenging. Don’t worry about how many questions you think you get right or how many you think you get wrong. Everyone will likely miss some of the questions. The main goal is for you to do the best you can.

Be sure to read each question and all of the answer choices carefully before selecting your answer. If you do not know the answer to a question, go ahead and choose what you think is the best answer.

Remember that once you have selected your answer, you will need to select Next to move on to the next question. You can change your answer choice before you select Next but not after. Once you move on to the next question you cannot go back.

(Pause for questions.)

If you see a picture of a clock at the top of the screen, time is almost up for that question. Choose your best answer and select Next to move on to the next question. If you do not choose an answer in time, you will see a message that says time is up for that question. The next question will appear in a few seconds.

(Pause for questions.)
You will see a message that tells you when you have finished the test. Select OK and remain quiet at your seat. You may read your book silently, but you may not continue to use the computer for other activities.

(Pause to answer any questions students may have. Be sure all students know their user names and passwords before moving to the steps for logging in to the test.)

(Instruct students to pause and wait for instructions after each step in the login process to ensure no one rushes ahead.)

Enter your user name and password and select Log In.

(When all students are logged in, continue.)

Select Star Math on the Home page.

Check that your name is at the top of the screen and that the test you are taking is Star Math. If you see a different name or test, raise your hand.

(If the student is not logged in correctly, select Cancel, and the student will return to the Login page. Verify that student is entering the correct user name and password and selecting the correct assessment.)

(Students may be asked if they are taking the Star Math test inside of the school or out of it—for example, if they are taking the test from home. If students are not asked this question, ignore this step; if they are asked this question:)

(For students taking the test outside of the school): On this screen, select No.

(For students taking the test inside of the school): On this screen, select Yes.

(When all students are ready to begin, continue.)

If you have any questions about this test, please ask them now. You can ask for help before you start the test. Once the test starts, I will not be able to help you with any questions or tell you if you have picked the right answer. Remember to stay in your seat when you have completed your test. If there is something you need, raise your hand and I will come to help you. Do not talk to anyone while others are still taking the test.

Are there any questions?

(Enter the monitor password, if it is required.)

You may select Start and begin. Do your best!

(The test administrator should remain in the room during the entire test session and monitor students while testing. The testing session is ended when all students have completed the assessment. Check all testing devices to ensure all students have completed the test and screens have returned to the Login page.)
General Testing Information

Pausing or Stopping a Test

If a student needs to leave the room unexpectedly while taking a test, you can stop a test by selecting Stop Test in the upper-right corner of the screen. A prompt will ask if you want to resume the test later, stop the test, or cancel the action. A student has eight days to resume a test at the point where he or she left off (the student will see a different item, however). Keep in mind that pausing or stopping a test is a nonstandard administration; use this option only when absolutely necessary. See “Help Links” on page 24 for more information.

Student Accommodations

For information about Star Assessment accommodations for students with an IEP or 504 Plan who have extended time as an accommodation, please visit http://doc.renlearn.com/KMNet/R00581317DED9FC4.pdf.

Contact for Support

For assistance, call (800) 338-4204. Outside the US, call 1.715.424.3636.
Software Tasks

Identify Students' User Names and Passwords

For the latest instructions on creating and printing a Student Password Report, visit https://help2.renaissance.com/setup/22115.

How Students Log In

1. Start the web browser and go to the Renaissance address (URL).

2. On the Login page, select I’m a Student.

3. The student enters his or her user name and password and then selects Log In.
Test Flow Diagram—Progress Monitoring

1. Open Renaissance in a web browser.
2. Select I’m a Student.
3. Enter student’s user name and password.
4. Select Log In.
5. Select Star Math.
6. Enter the monitor password.
7. Select Start.
8. Student answers practice questions.
9. Did the student pass the practice?
   - Yes: Test begins; student answers questions 1–24.
   - No: Student selects either No or Yes.
10. Is the student enrolled in more than one class that is using Star Math?
    - Yes: Student selects either No or Yes.
    - No: Is the student asked if they are taking the Star Math test inside the school?
11. Has the student taken a Star Math test in the past 180 days?
    - Yes: Test begins; student answers questions 1–24.
    - No: Student selects either No or Yes.
12. If student cannot pass the practice, see “Practice Questions and Failed Practices” on page 9.

FINISH

Y = Yes
N = No

Test will not begin; student should select OK and notify teacher or test monitor.
Test Flow Diagram—Enterprise

START

Open Renaissance in a web browser.

Select I’m a Student

Enter student’s user name and password.

Select Star Math

Select a class.

Enter the monitor password.

Select Start

Has the student taken a Star Math test in the past 180 days?

Test begins; student answers questions 1–34.

Was the student asked if they are taking the Star Math test inside the school?

Is the student enrolled in more than one class that is using Star Math?

Test will not begin; student should select OK and notify teacher or test monitor.

Did the student pass the practice?

If student cannot pass the practice, see “Practice Questions and Failed Practices” on page 9.

Has the student seen the tutorial video, correctly answered the practice question, and answered new questions on a test taken within the past 180 days?

Student watches video and answers the practice question.

Student answers new questions 1–2.

Did the student correctly answer the practice question?

The student selects either No or Yes.

Student answers practice questions.

Did the student pass the practice?

Test ends; student selects OK.

Student selects either No or Yes.

Test Flow Diagram—Enterprise

START

Open Renaissance in a web browser.

Select I’m a Student

Enter student’s user name and password.

Select Star Math

Select a class.

Enter the monitor password.

Select Start

Has the student taken a Star Math test in the past 180 days?

Test begins; student answers questions 1–34.

Was the student asked if they are taking the Star Math test inside the school?

Is the student enrolled in more than one class that is using Star Math?

Test will not begin; student should select OK and notify teacher or test monitor.

Did the student pass the practice?

If student cannot pass the practice, see “Practice Questions and Failed Practices” on page 9.

Has the student seen the tutorial video, correctly answered the practice question, and answered new questions on a test taken within the past 180 days?

Student watches video and answers the practice question.

Student answers new questions 1–2.

Did the student correctly answer the practice question?

The student selects either No or Yes.

Test Flow Diagram—Enterprise

START

Open Renaissance in a web browser.

Select I’m a Student

Enter student’s user name and password.

Select Star Math

Select a class.

Enter the monitor password.

Select Start

Has the student taken a Star Math test in the past 180 days?

Test begins; student answers questions 1–34.

Was the student asked if they are taking the Star Math test inside the school?

Is the student enrolled in more than one class that is using Star Math?

Test will not begin; student should select OK and notify teacher or test monitor.

Did the student pass the practice?

If student cannot pass the practice, see “Practice Questions and Failed Practices” on page 9.

Has the student seen the tutorial video, correctly answered the practice question, and answered new questions on a test taken within the past 180 days?

Student watches video and answers the practice question.

Student answers new questions 1–2.

Did the student correctly answer the practice question?

The student selects either No or Yes.

Test Flow Diagram—Enterprise

START

Open Renaissance in a web browser.

Select I’m a Student

Enter student’s user name and password.

Select Star Math

Select a class.

Enter the monitor password.

Select Start

Has the student taken a Star Math test in the past 180 days?

Test begins; student answers questions 1–34.

Was the student asked if they are taking the Star Math test inside the school?

Is the student enrolled in more than one class that is using Star Math?

Test will not begin; student should select OK and notify teacher or test monitor.

Did the student pass the practice?

If student cannot pass the practice, see “Practice Questions and Failed Practices” on page 9.

Has the student seen the tutorial video, correctly answered the practice question, and answered new questions on a test taken within the past 180 days?

Student watches video and answers the practice question.

Student answers new questions 1–2.

Did the student correctly answer the practice question?

The student selects either No or Yes.

Test Flow Diagram—Enterprise

START

Open Renaissance in a web browser.

Select I’m a Student

Enter student’s user name and password.

Select Star Math

Select a class.

Enter the monitor password.

Select Start

Has the student taken a Star Math test in the past 180 days?

Test begins; student answers questions 1–34.

Was the student asked if they are taking the Star Math test inside the school?

Is the student enrolled in more than one class that is using Star Math?

Test will not begin; student should select OK and notify teacher or test monitor.

Did the student pass the practice?

If student cannot pass the practice, see “Practice Questions and Failed Practices” on page 9.

Has the student seen the tutorial video, correctly answered the practice question, and answered new questions on a test taken within the past 180 days?

Student watches video and answers the practice question.

Student answers new questions 1–2.

Did the student correctly answer the practice question?

The student selects either No or Yes.

Test Flow Diagram—Enterprise

START

Open Renaissance in a web browser.

Select I’m a Student

Enter student’s user name and password.

Select Star Math

Select a class.

Enter the monitor password.

Select Start

Has the student taken a Star Math test in the past 180 days?

Test begins; student answers questions 1–34.

Was the student asked if they are taking the Star Math test inside the school?

Is the student enrolled in more than one class that is using Star Math?

Test will not begin; student should select OK and notify teacher or test monitor.

Did the student pass the practice?

If student cannot pass the practice, see “Practice Questions and Failed Practices” on page 9.

Has the student seen the tutorial video, correctly answered the practice question, and answered new questions on a test taken within the past 180 days?

Student watches video and answers the practice question.

Student answers new questions 1–2.

Did the student correctly answer the practice question?

The student selects either No or Yes.
Test Format Overview

It is important to prepare your students for what the Star Math testing experience will be like. Prior to the testing session, use the following Teacher Notes and Student Images (either projected or in handouts) to help your students know what to expect at each stage of the test.

Practice Questions and Failed Practices

If a student has not taken a Star Math test in the past 180 days, the student will see three practice questions before the actual test starts. The practice session is primarily meant to gauge the student’s ability to work with the program’s interface, to see if the student understands how to select and enter an answer.

If the student does not answer two of the three practice questions correctly, the student will be given another set of three practice questions. Once the student answers two of those three practice questions correctly, the test will begin. If the student does not answer two of those three practice questions correctly, the practice session ends and the test will not start for that student. Have the student try another practice, and carefully observe the student.

- If the student does not understand how to answer questions, review the testing procedures with the student.
- If the student understands how to answer questions, but keeps running out of time before entering an answer, you may need to extend the time limits for that student. See “Help Links” on page 24 for information on setting the Extended Question Time Limit preference.
- If the student understands how to answer questions, but keeps giving incorrect answers, this may indicate that the student is not ready to have his or her abilities assessed by Star Math.
Teacher Notes for Student Images

Picture 1

Each of the questions has a mathematical problem and a list of possible answers. Your job is to choose the best answer for the question.

Sometimes the correct answer might not be one of the choices in the list. For example, in the problem shown in Picture 1, two plus three equals five, but five is not one of the possible answers. In this case, choose **not given** as your answer.

![Math problem and answer choices](image1)

**Picture 2**

Some algebra and geometry questions will have an on-screen calculator and an on-screen formula reference sheet that you can use to answer the questions.

You can click or tap the calculator buttons, or press the keys on the keyboard to use the calculator. Use the scrollbar on the formula reference sheet to move up and down within it.

![Algebra and geometry question](image2)

**Picture 3**

If you are using audio while taking the test, there will be a control in the upper part of the screen that you can use to pause, resume, or replay the audio for the current question.

You do not have to wait for the audio to finish before answering a question; you can enter your answer at any time.

![Audio control](image3)
Choosing your answer is easy. Use any of these methods to choose and enter your answer. You can change your answer choice before you enter it.

Each possible answer has a letter next to it (A, B, C, or D)

(4a: When using the mouse) Click on your answer choice using the left mouse button. Then, enter your answer choice by clicking **Next** on the screen.

(4b: When using a tablet) Tap your answer choice. Then, enter your answer choice by tapping **Next**.

(4c: When using a keyboard) Press the letter that matches your answer choice. Then, enter your answer choice by pressing **Enter** or **return**.
When you choose an answer, a blue highlight will appear around it (as shown). This only shows you which answer you selected. It does not mean that you selected the correct answer.

To change your answer, click on it with the mouse, tap it (if you are using a tablet), or press the letter of your new answer choice on the keyboard. The program will highlight your new choice. You cannot change your answer after you click or tap Next, or after you press Enter or return.

If you see a picture of a clock at the top of the screen, time is almost up for that question. Choose your answer quickly. If you don’t choose an answer in time, you will see a message that says time is up for that question. The next question will come up in a few seconds, so be ready.
Before you take the test, you may get some practice questions. The practice questions look just like the real test. If you see this message when you are answering the practice questions, you should raise your hand and call the teacher or test monitor. He or she will know what to do.

When you finish answering the practice questions, the program will show you this message:

The real test will start automatically. Relax and get ready; the first question will come up soon. Keep answering the questions until the computer tells you that you have finished the test.

Do not forget that you can work the math problems out on note paper. If you do not know the answer to a question, go ahead and choose what you think is the best answer.

After the last test question, you will see this message. You may need to watch a video and answer a practice question before you move on to the new questions. Select Next to begin.

If a question in Part 2 is long, use the scroll bars to see the whole question and all the answer choices. You cannot use the keyboard to answer questions in Part 2.

When you are finished with the test, tell the teacher or test monitor that you are finished.

If you have any questions about this test, please ask them now. Once the test starts, the teacher or test monitor will not be able to explain any of the questions or help you choose an answer. Also, the teacher cannot tell you if you selected the right answer.

Have fun, and do your best!
Each of the questions has a mathematical problem and a list of possible answers. Your job is to choose the best answer for the question.

Sometimes the correct answer might not be one of the choices in the list. For example, in the problem shown in Picture 1, two plus three equals five, but five is not one of the possible answers. In this case, choose **not given** as your answer.
Some algebra and geometry questions will have an on-screen calculator and an on-screen formula reference sheet that you can use to answer the questions.

The surface area of a right prism is 250 cm². The area of its square base is 25 cm². What is the height of the prism?

- A) 10 cm
- B) 20 cm
- C) 8 cm
- D) 15 cm

You can click or tap the calculator buttons, or press the keys on the keyboard to use the calculator. Use the scrollbar on the formula reference sheet to move up and down within it.
If you are using audio while taking the test, there will be a control in the upper part of the screen that you can use to pause, resume, or replay the audio for the current question.

You do not have to wait for the audio to finish before answering a question; you can enter your answer at any time.
Choosing your answer is easy. Use any of these methods to choose and enter your answer. You can change your answer choice before you enter it.

Each possible answer has a letter next to it (A, B, C, or D).

1. \[ 5 - 2 = \_\_\_ \]
   - A 2
   - B 3
   - C 4
   - D not given

Click on your answer choice using the left mouse button. Then, enter your answer choice by clicking Next on the screen.
Choosing your answer is easy. Use any of these methods to choose and enter your answer. You can change your answer choice before you enter it.

Each possible answer has a letter next to it (A, B, C, or D).

Tap your answer choice. Then, enter your answer choice by tapping Next.
Choosing your answer is easy. Use any of these methods to choose and enter your answer. You can change your answer choice before you enter it.

Each possible answer has a letter next to it (A, B, C, or D).

Press the letter that matches your answer choice. Then, enter your answer choice by pressing Enter or return.
When you choose an answer, a blue highlight will appear around it (as shown). This only shows you which answer you selected. It does *not* mean that you selected the correct answer.

To change your answer, click on it with the mouse, tap it (if you are using a tablet), or press the letter of your new answer choice on the keyboard. The program will highlight your new choice. *You cannot change your answer after you click or tap Next, or after you press Enter or return.*
If you see a picture of a clock at the top of the screen, time is almost up for that question. Choose your answer quickly. If you don’t choose an answer in time, you will see a message that says time is up for that question. The next question will come up in a few seconds, so be ready.

1. \[ 5 - 2 = \_\_\_ \]

A. 2
B. 3
C. 4
D. not given
Before you take the test, you may get some practice questions. The practice questions look just like the real test. If you see this message when you are answering the practice questions, you should raise your hand and call the teacher or test monitor. He or she will know what to do.

When you finish answering the practice questions, the program will show you this message:

**Great job on the practice. Let’s go to the test.**

The real test will start automatically. Relax and get ready; the first question will come up soon. Keep answering the questions until the computer tells you that you have finished the test.
After the last test question, you will see this message. You may need to watch a video and answer a practice question before you move on to the new questions. Select **Next** to begin.

If a question in Part 2 is long, use the scroll bars to see the whole question and all the answer choices. You cannot use the keyboard to answer questions in Part 2.
Help Links

There are a number of topics in the help system that can help you prepare to administer the Star Math test:

- Stopping a Star Math Test: [https://help2.renaissance.com/SM/Stopping_a_Test](https://help2.renaissance.com/SM/Stopping_a_Test)
- Resuming an Interrupted Test: [https://help2.renaissance.com/SM/Resuming_an_Unfinished_Test](https://help2.renaissance.com/SM/Resuming_an_Unfinished_Test)
About Renaissance

Renaissance is the leader in K–12 learning analytics—enabling teachers, curriculum creators, and educators to drive phenomenal student growth. Renaissance’s solutions help educators analyze, customize, and plan personalized learning paths for students, allowing time for what matters—creating energizing learning experiences in the classroom. Founded by parents, upheld by educators, and enriched by data scientists, Renaissance knows learning is a continual journey—from year to year and for a lifetime. Our data-driven, personalized solutions are currently used in over one-third of U.S. schools and more than 60 countries around the world. For more information, visit www.renaissance.com.