MATHia X Getting Started for Students

Contents

Launch the Software as a Student	4
System Requirements Tool Instructions	5
Key Features of the Student Software	
Pre-Launch Protocol	6
Lesson Page	7
Student Help Tools	9
Step by Step	11
Skillometer	12
Glossary	13
Check for Understanding	14
Instructional Tools	15
Motivational/Engagement Features	18
Customer Support	20

LAUNCH THE SOFTWARE AS A STUDENT

Username: _____

Password: _____

To launch the software:

- 1. Visit http://online.carnegielearning.com
- 2. Enter your school ID (given to you by your teacher).
- 3. Enter your Username (given to you by your teacher).
- 4. If this is your first time logging in, click **I need a new password**. You will be prompted to enter and confirm a password of your choice and then return to the login page.
- 5. Enter your password.
- 6. Click Log In.
- 7. Click to launch the software.

		RESOURCE CONTINUES.	Landerski Landerski
Carnegie Learning Online	Carnegia >		
 HOME - SUPPORT - CONTACT	45		
BY LAUNCHING ON USING THE TEACHER & TOOLKET, COENTTIVE TUT- SOFTWARE, REVISITW HODE OR ADHIN REPORTS IN THE CARRIEGE LE ACKNOWLEDGE THAT YOU HAVE BEAD AND AGREED TO THE TERMS OF Mease see this important announcement re Chrome: http://www.carregielearning.com	DAE SOFTWARE, HATHAE ANNUES RESOURCE CENTER, YOU F THE LICENSE AGAREMENT. Iganding Google - /chrome		
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22012 Carringin Learning, Inc.			

SYSTEM REQUIREMENTS TOOL INSTRUCTIONS

NATIONAL CONTRACTOR	Carnegie Learning Online		
	Carries carries carries of the contract of the	Turking -	Access the System Requirements Tool from the Software Login page.

The System Requirements Tool will run an analysis to identify any issues with your browser or system settings. Testing your browser, please wait Please wait while we test your browser... $\xi_{\rm p}$



If the page does not finish loading, please review our Popup Blocker Help Page and make sure your popups are allowed, and go to the Java website and click "Do I have Java?" to check that Java is installed on your computer.

Description	Status	Detaile
Browser and platform	🚯 Caution	You are using Chrome 50 on OS X 10.10.5 Starting in September 2015, Gloogle has disabled support for several web plugins, including Java, for their Chrome browser. Please wist Google Chrome Updates for more information.
Java plug-in	Please Fix	Your Java plug-in is disabled or not installed. As of September, 2015, Google has disabled several plug-ins for their Chrome browser, including Java, We recommend using a supported browser (Safarai or Firefox). Please viait this link for more information.
Flash plug-in	Cood	You have the Flash 21.0 r0 plugin, which is supported.
Popups enabled	🛞 Please Fix	Your popups are currently blocked. For assistance, please view our Popups Helo Page. If you do not see your browser listed, please check the "Browser and Platform" section above to confirm that you're using a compatible web browser and operating system.
internet connection	Good	You are using a broadband connection, and your connection speed of 19.16 Mbps is ideal.
Screen size	🕝 Good	Your screen size of 1440x900 is ideal.
MS connection	Good	Your computer can successfully connect to the LMS servers.
RAM requirements	info	The Carnegie Learning software requires a minimum of 2 GB of RAM for Macs. To check the RAM on your computer. 1. Click the Apple in the top left-hand corner of your screen 2. Click About This Mac 2. Click About This Mac

The Status column on the Your Browser Test Results page indicates if any issues were identified with your browser or system settings.

Refer to the Details column for additional information on issues identified.

Pre-Launch Protocol

The Pre-Launch Protocol module is presented at the beginning of each course in the software. It provides an overview on how to use the various tools in MATHia X, as well as introduces key learning science topics.





Lesson Page

The Lesson Page provides a math lesson on specific topics for each unit.





The Key Terms that are introduced in the unit are available here. The Key Terms are hyperlinked to the Glossary.

Skills that you will learn in the unit are listed here. You will see these in the Skillometer[™] as you work.

Modeled problems of the math concepts in this unit are displayed on the Lesson Page.

Lesson Page

cont'd

After reading the Lesson Page, you will launch into the Check for Understanding questions. Check for Understanding questions can be used to gauge your understanding of material covered in the Lesson Page.

MATHia'X Example 34.44 Skills You Will Le

Click Let's Go! to jump to the Check for Understanding if you feel confident in the lesson material.

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ne R Lesson Q14	-				Preg	-		The Done
		ê			(O)			_
Check for	Understanding							
Which show	n a possible first step white the like terms &	to solving the equation Sr - and Rr.	-8 = 8t = 107					
Con	nbine the like terms &r	and Nr.						
But	tract 8 from the left sid	de of the equation.						
2.8r + 7.5 2.8r = 7 s = 2.5 Which choice	1 - 7.5 = 14.5 - 7 is correctly states the i 2.5 was not correctly	.5 error in the work? distributed.		•				
The	division is incorrect. 7	+28#25						
The	equation was not bela	most correctly: 7.5 should :	have been added to both aid	tes of the equation.				
Akil must so $-5 \approx -1$ which of the	due the following equa low + 24 e following steps would	tion for w. 6 you tell Akii to de first?						
S we	te the solution as w =	2.9.						
Div	de both sides of the eq	puetion by -10.						
Sub	ment 24 from both side	es of the equation.						
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	brow Name 1218						- *	

You will receive immediate feedback as you answer questions in the Check for Understanding. When you answer a question, a note is provided re-enforcing the concept, coloring it as red or green, indicating a correct/ incorrect answer. You can try again if your original answer was incorrect.

Student Help Tools

Four forms of help are available throughout the software to help solve the problem you are working on.

1. Just-in-Time Hints automatically appear when you make a common error. Just-in-Time Hints are indicated by the arrow in a red text box.

MATHia"X Interpreting Remainders U	leing Modela		# Home O System Help	E Glossery		tarla Hernandez 👻	
🖲 Tour 📕 Lesson 🖌 Step-by-Step 💡 Hints	y me		Progress			Fm Done	
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	4 7/8 -oz. parts						
		This bo divided	ox is for the <u>dividend</u> the 5. You entered the <u>divisor</u> .	number that i	s being		
Enter the number of servings of cereal Ma	aggie has in her bowl.	4 serving(s)				Position your mouse over th
Write a number sentence that describes t	the model using division.	8 -	=				red box to view the hint.
With the same numbers, write another nu using multiplication.	mber sentence that describes the model	× 7/8 =	•				
Nation Methods (Seri Venior 1213 Serve Venior 1213				-0206	Carregia Leare	mg (armge Laning >	

2. On-Demand Hints are hints that you can ask for at any time while working on a problem.

MATHia"X Interpreting Remainders Using Models	# Home	C System Help	# Glossary	🐵 Maria Hernandez 👻
ur 🕅 Lesson M Step-by-Step 🖓 Hints	Progres	-		💌 Fm Done
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	_			
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Hint		×		
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Enter the number of $\frac{1}{5}$ -unit parts that are in $\frac{4}{5}$.		1.0		
Write a number sentence that describes the model using division				
is Nort-1421 Chert Number 12.03 Server Header 1.2.03			1000	Ceregie Lawring 🗌 Carregie Louring 📚

There are multiple hints available for each question. The level of detail of On-Demand Hints increases as you ask for more help.

Student Help Tools

cont'd

- MATHia[®]X O Tour M Les on M Step-by-Step 2 Hint How many $\frac{1}{5}$ parts are in $\frac{4}{5}$? 4 mt Glossary Hints Graph: Plotting Points and Hints are available throughout the software to help you solve the problem you're working on. You can always ask for a Lines hint, and sometimes hints appear automatically, too When you need help with the math in a specific problem, click on or press the Hint button on the to lities Enter the number of 1 -unit p Graph: Setting Graph Bounds and Intervals O Tour ■ Lesson ▶ Step-by-Step > Solver Q Hints a that re are multiple hints available for each question, and you can move between hints by choosing the Next and Graph: Using the Trac AND COMPANY 12.55 IN Previous buttons. The tutor pauses briefly at each hint level to give you time to think about the hint. Miles from Francis' Home Time Riding me Pan Quantity Name Key Terms miles Unit hours Keyboard Navida
- 3. Click Help for detailed assistance with the software tools and interface.

The Help tool provides you with helpful information on getting started and working with the software tools.

4. Click **Tour** to view descriptions for the various features of MATHia X.



The Tour will display an overlay that defines each of the tools on the screen.

Step by Step

The Step by Step demonstrates how to use the tools in a lesson by guiding you step-by-step through a sample math problem.

Starting a Step by Step

When you click Let's Go!, the Step by Step will automatically begin.

Basic Instructions

- 1. Read the scenario.
- 2. Read the hint in the little window and try to answer the question. If you don't know the answer, you can guess. This will not affect your skill level.
- 3. If you enter the wrong answer twice, the system will correctly complete the step for you. Take some time to think about why the suggested answer is the correct one.
- 4. Continue answering the questions until you complete the problem.
- 5. Click **Go to Problem** to go to the required math problems.



Step by Step is located here. When working on a problem, you can refer back to the Step by Step for assistance.

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How many -	parts are in -7?					
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		4 mil	0.0			
			5.4 #8			

Skillometer

The Skillometer shows a summary of the major skills that are being covered in a given workspace as well as your progress on those skills.

The name of each skill, such as "Calculate quotient," is displayed along with a level of mastery. The level of mastery is not a percent of your correct and incorrect responses. Rather, it is a predictor of the probability that you will be able to demonstrate that skill again in the future. An orange bar indicates skills that have not been completely mastered. A green bar indicates skills that have been completely mastered in the current workspace. As you work, you will notice the elongated progress meter progressing from orange to green.

MATHia"X Interpreting Remainders Using Models	# Home	🕻 System Help 🖉 Glossary	😁 Maria Hernandez 👻
O Tour ■ Lesson ¥ Step-by-Step ♀ Hints	Progress	in the second second	I'm Done
$3\frac{1}{2}$	Skills Model division with a whole number quotient. Model division by a larger number Calculate fractional part of quotient. Calculate quotient Write division sentence. Write multiplication sentence	Progress to Mastery	×
Enter the number of servings of cereal Maggle has in her bowl. Write a number sentence that describes the model using division.		4	
With the same numbers, write another number sentence that describes the model using multiplication.	$\boxed{4} \times \frac{7}{8} = \boxed{3\frac{1}{2}}$]	
Problem NextFolds. Clear Nexten. 13.83. Server rester. 13.93		# 2014	Geregie Laensing - Grougie Laensing >

Skill Tracking Behavior

When beginning a given unit, the initial skill levels are not zero because there is some likelihood that you are already familiar with a concept or will be able to learn the skill unassisted. When you answer something correctly, the level of mastery increases because there is a greater probability that you understand the skill and will be able to complete a similar task in the future. Answering incorrectly or asking for a hint usually indicates that you do not understand a given skill, so the level of mastery may decrease. For some skills, it is likely that reading a hint will increase understanding, so the level of mastery may increase. Similarly, for some skills, it is likely that by answering incorrectly, you will "learn from your mistake," so the level of mastery may increase. Note that the level of mastery will stop increasing after a given percent, even if you continually request hints. So, it is not possible for you to "hint" your way through to complete a unit.

Glossary

The Glossary is available throughout the software. It contains a list of definitions and examples for key mathematical terms used throughout the curriculum. You can open the Glossary by choosing the icon at the top of the screen.

	Glossary		ad at	1	2
00000	Q, croe			Equila	1
<u> 1111</u>	arc to circle ratio	circle			H
- One	area of a circle	Definition			
	center di a circle	A circle is the set of all points in a plane that are th	e same distance from a given point, calle	d the center of the circle.	
2	circle graph concentric pincles	The measure of a circle is 360 degrees. Examples:			L
	great circle	The measure of circle G is 360 degrees. The measure	sure of sindle O is 360 degrees.		
	inscribed circle				
	Line Tangent to a Cittle Theorem				
nter the numb	Secant of a Circle				
	segment of a circle				

The Glossary is automatically opened when you click on any of the key terms links in the lesson page. For example choosing the link **circle** in the right column of the lesson opens the Glossary entry for circle as shown above.

On the search tab of the Glossary, use the find box on the top left to search for a topic or term. You should enter complete words, but do not be too detailed, as the search is based on exact matching of the words entered. Any topic or term in the Glossary that has text matching your search will be displayed in the left window, in alphabetical order. Click on the term in the left window that you wish to view. A definition and example for the term will appear in the right window. The Glossary is also available in Spanish and can be accessed by clicking the Español button at the top.

Comma de la Recta Tangente a un Círculo Seconda de la Recta Tangente a un Círculo Teorema Seconda de la Recta Tangente a un Círculo Teorema: Si una recla es tangente a un circulo, entences es perpendicular al radio de un cárculo en el puncta es tangente a la circunteencia. Teorema: Si una recla es tangente a la circunteencia. Teorema: Si una recla es tangente a la circunteencia. Teorema: Si una recla es tangente a la circunteencia. Teorema: Si una recla es tangente a la circunteencia. Teorema: Si una recla es tangente a la circunteencia. Ejemplo: La recta M es perpendicular al radio PG, entances la recta M es tangente al circunteencia. Eguidistates	English So desde el punto de tangencia. De to en que el radio intersecta al circulo, la	Pre Done
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	oulo P en el punto Q.	
4 a rez. parta		
Enter the number of servings of ceresi Maggie has is her bowl.		

Check for Understanding

The Check for Understanding gauges your understanding of material to be covered in the upcoming lesson.

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		Current Workspace 1 of 2 Check For Under	Co to Morkspace		
Linear Equations > Lasson: Solving Linear	Equalidas		•		
Lesson: Linear Equations	and Pan Balances	Workspace(s)			Access the Check for
		1 Check for Understanding	•		Understanding from the
Solve an Equation Using Labo	eled Shapes on a Pan Balance	2 Exploring Two-Step Equations			Lesson Page
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4x+2 * To use the particularize to solve for x, do	3x + 0 elemine the number of 1s that balance one x.	Key Terms			
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Instructional Tools

Explore Tools

Explore Tools allow you the opportunity to investigate different mathematical concepts, search for patterns, and look for structure in ways that make sense to you. These tools also provide optional supports for you as you answer questions and solve problems.

Elasson Q Hinta	Program ICI For Date				
stroducing a Balance to Solve One-Step Equations is this Explore Tool to investigate equations. You will use this tool in a variety of roblems, so take some time to become familiar with how to use it. b use this tool, enter expressions into both sides of the equation, Only 1 variable can e used in any equation, and only whole numbers from $0 - 6$ are accepted. Both sides if the equation can have up to 2 terms.	Use the balance to answer each question. Any letter can be used as a variable. Let's use the letter g as a variable. Enter the equation $g + 1 = 6$ into the balance. The right side of this balance is heavier, because there are1(s) on the right side and1(s) on the left side, and the variable g stands for an unknown amount.				
	One way to solve this equation is to ask, "What number plus 1 more is equal to 0.?" Type a value for g in the dashed box to balance the equation. $\begin{array}{c} & & \\ &$				
2 • 6	If $g=6$, the $\begin{tabular}{ c c c } \hline & \end{tabular}$, because $\begin{tabular}{ c c } \hline & \end{tabular} +1 & \begin{tabular}{ c c } \hline & \end{tabular} & \end{tabular} & \end{tabular} & \end{tabular} & \end{tabular}$ Given the original equation $g+1=6$, what happens to the balance if $g=0$? Type the given value for g in the dashed box on the balance.				
	The mounter fraction of a final second contract of the				

Animations

Animations provide you with an opportunity to watch, pause, and re-watch demonstrations of various mathematical concepts. They are a way to connect the visual representations of different mathematical ideas to their abstract underpinnings through visual representations and audio narrative.

Pole Number Dividende	Watch the animation and then answer each question.
his animation demonstrates how to divide a whole number by a fraction. efore attempting to answer any questions, watch the animation.	The dividend was divided into $\frac{1}{4}$ -sized pieces because the \checkmark has a denominator of 4.
1 Wester 1 West	The quotient $2 + \frac{3}{4}$ is $2\frac{2}{3}$. The remainder is $\frac{2}{3}$ because $\frac{2}{3}$ of a \bullet is left over. Indicate whether each of the following number sentences describes the model using multiplication.
How many $\frac{3}{4}$ is an in 2? There are process of size $\frac{3}{4}=2.$	$\label{eq:Ves} \begin{array}{ c c } & \nabla \mbox{ Ves } \end{array} & \begin{array}{ c c } & 3 \\ \hline & 3 \\ \hline & 4 \end{array} \times 2\frac{2}{3} = 2 \end{array}$
a you answer each question, you can re-watch the video as many times as you eed.	\bigcirc Yes \bigcirc No $2\frac{2}{3} \times \frac{3}{4} = 2$ \bigcirc Yes \bigcirc No $2 \times 2\frac{2}{3} = \frac{3}{4}$

Instructional Tools

cont'd

Classification Tools

Classification tools allow you to apply your mathematical understanding into the form of categorizing answers based on similarities. These tools also provide you with the means to demonstrate proficiency in recognizing patterns in problem structure.

MATHia'X understanding_netic_relationships			- Home	C System Help	# Closery	G Sera kee
A Lesson O Hints			Progress	e e		In D
Additive and Multiplicative Reasoning		ing each comparison to class subglicative reasoning.	ify it as bei	ng bened on addi	tive reasoning	er
Ţ ŝ		Sandy is 33 years older than Matthew. The Hawks scored 16 more		Additive	e Reasoning	
		points than the Tamados. Sandy is 3 times as old as Matthew		Multiplicat	tive Reasoni	ng
oday, they both measured their plants to determine whose plant had grown m	~ 🛉	For every 7 songs on the MP3 player, 3 are pop songs.				
		Liang got 35 more votes than Zach in the elections.				
No.		Tornados et a nete of 7 to 3.				
Lics Plant Ellins Plant		voltes Liang got in the electrons.				
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Problem Solving

Problem solving tools provide you with highly individualized and self-paced instruction that adapts to your exact needs to deepen your conceptual understanding of the mathematics. Through adaptive learning technologies, you engage in reasoning and sense-making.

	ing - Alternation					in tel filling a	and the second second	and the second	
H Lamon H Sab-okowb A to	****					Program			
Dontriell teaches karate and ternis classes at the local recreation centre. He always teaches the same ratio of karste classes to tennis classes. The double number line shows the number of karate classes and the number of tennis classes that Dontrell teaches at the recreation center. Use the double number line to calculate the unknown values.			1. Supp teach? 2. Supp teach?	Suppose that Dontrell plans on teaching 15 kante classes this year. How many tennis clases tennis classes I want to do the optional double number line tasks. Suppose that Dontrell plans on teaching 12 tennis classes this year. How many karste classes karste Classes Least to do the optional double number line tasks					is will be
Minor Tick Marks									
Number of Karate Classes	+	10	20	04	40	50 	60	70	#0 ++
Number of Tennis Classes	•	1	12	18	24	30	36	42	41
					0				

Instructional Tools

Worked Examples

Worked Examples provide you with a tool that allows you to question your understanding, make connections with the steps, and ultimately self-explain. Analyzing Worked Examples also allows you to identify your own misconceptions, make sense of the mathematical concepts, and then ultimately to persevere in problem solving.



Homepage

You have a clear picture of the work that is ahead of you. You see the modules, units, and number of workspaces assigned to you.



Unlocked units have a **Let's Go!** or a **Review** button. Review indicates completed units that you can go back to and review. Modules can be expanded or collapsed by clicking the empty space.

Student Crew

As in the text, the characters in the software will provide information to help you along the way.



Growth Mindset Language in Animation

Research shows students who believe that they can get smarter will work harder. Learning about the way the brain changes as you learn has been shown to encourage you to believe you have the capability to learn. Within MATHia X, we praise effort above innate ability.



cont'd

CUSTOMER SUPPORT

Customer Support is available to answer your questions about using the software.

Email: help@carnegielearning.com

Phone: 877.401.CLCS (2527) or 888.851.7094 (Select Option 3)

Chat: Visit resources.carnegielearning.com/contact-us to connect with us via chat.

Websites:



