

WebAssign®



WebAssign Student Guide

June 2010

WebAssign Student Guide is published by Advanced Instructional Systems, Inc.

© 2010 by Advanced Instructional Systems, Inc.

All rights reserved.

Printed in the United States of America.

06.02.2010

WebAssign™ is a service mark of Advanced Instructional Systems, Inc.

calcPad®, chemPad®, pencilPad®, and Personal Study Plan® are registered trademarks of Advanced Instructional Systems, Inc. (dba WebAssign). WebAssign™, physPad™, and numberLine™ are trademarks of WebAssign.

Adobe®, Acrobat®, Acrobat Reader®, Flash®, and Shockwave® are registered trademarks of Adobe Systems Incorporated in the United States, other countries, or both.

Apple®, Mac®, and Safari® are registered trademarks of Apple Inc., in the United States, other countries, or both.

Internet Explorer®, Microsoft®, PowerPoint®, and Windows® are registered trademarks of Microsoft Corporation in the United States, other countries, or both.

Java™ is a trademark of Sun Microsystems, Inc. in the United States, other countries, or both.

Linux® is the registered trademark of Linus Torvalds in the United States, other countries, or both.

Mozilla® and Firefox® are registered trademarks of the Mozilla Foundation in the United States, other countries, or both.

Other product and company names mentioned herein may be the trademarks of their respective owners.

Under the copyright laws, neither this documentation nor the software may be copied, in whole or in part, without the written consent of Advanced Instructional Systems, except in the normal use of the software.

Questions in the database that are identified with a specific textbook have been used with the permission of the publisher who owns the copyright.

Order the WebAssign service from:

WebAssign
Centennial Campus
1730 Varsity Drive
Suite 200
Raleigh, NC 27606

Web: <http://webassign.net>

Tel: (800) 955-8275 or (919) 829-8181

Fax: (919) 829-1516

Email: info@webassign.net

1. What's New	1
2. Overview	3
System Requirements for WebAssign	4
Recommendations	6
3. Getting Started	7
Enrolling in a Class in WebAssign	8
Enrolling Yourself in a Class Using a Class Key	8
Logging in to WebAssign	10
Viewing and Changing Your Email Address	11
Changing Your Password	12
Purchasing WebAssign Access and eBooks	14
Choosing Between eBooks and Printed Textbooks	15
Purchasing WebAssign Access and eBooks Online	17
Entering Access Codes to Verify Purchase	21
Requesting Refunds	23
Understanding Your Home Page	23
Logging Out	24
4. Working On Assignments	25
Viewing a List of Assignments	26
Opening Assignments	27
Submitting Answers	28
Saving Your Work	29
Viewing Scoring Details for a Question	30
Viewing Your Previous Submissions for a Question	30
Making Notes About a Question	30
Getting Email Notifications About Assignments	31
Working on Group Assignments	32
Working on Timed Assignments	32
Working on Assignments with LockDown Browser	34
5. Answering Questions	36
Working with Randomized Text or Numbers	37
Working with Practice Questions	38
Answering Multiple-Choice Questions	38
Answering Multiple-Select Questions	39
Answering Fill-In-The-Blank Questions	39
Answering Questions that Are Scored Manually	40
Answering Essay Questions	40
Uploading Files for Questions	41
Answering pencilPad Questions	42
Answering Numerical or Math Questions	43
Answering Numerical Questions	44
Answering Symbolic Questions with Calculator Notation	47

Answering mathPad Questions	49
Answering calcPad Questions	51
Answering NumberLine Questions	54
Answering Graphing Questions	57
Answering Chemistry Questions.	60
Answering chemPad Questions	61
Answering MarvinSketch Questions	63
Answering JME Questions	68
Answering physPad Questions	69
Answering Poll Questions	71
6. Submitting Assignments	73
Saving and Submitting Work	74
Submitting Parts of Questions	75
Submitting Whole Questions	76
Submitting Entire Assignments	77
Understanding Feedback.	78
Understanding Partial Credit	80
7. Viewing Resource Materials	81
8. Viewing eBooks	83
Opening eBooks.	84
Using eBook Features.	84
Closing eBooks	86
9. Mastering Concepts with the Personal Study Plan	87
Understanding your Personal Study Plan.	88
Determining if a Personal Study Plan is Set Up for Your Class	89
Gaining the Most Benefit from Your Personal Study Plan.	89
Taking a Personal Study Plan for Credit	90
Using a Personal Study Plan as a Study Tool	91
Using the Personal Study Plan as a Refresher	91
Taking the Personal Study Plan	92
Using Personal Study Plan Online Resources	93
Available Personal Study Plan Resources	93
Identifying Resource File Types.	93
Understanding Personal Study Plan Pages.	93
Viewing your Personal Study Plan from Your Home Page	94
Working with the Personal Study Plan Overview Page	95
Opening Online Resources on the Teach Me Page	96
Rating Resources and Adding Feedback	98
Identifying Which Sections You Need to Work On	98
Retaking a Personal Study Plan Quiz to Improve Your Score.	99
10. Getting Instructor Assistance.	100
Sending Your Teacher a Private Message	101
Asking Your Teacher a Question About an Assignment	101
Asking Your Teacher to Extend the Due Date for an Assignment	102

Making a Manual Extension Request	102
Making an Automatic Extension Request	103
11. Viewing Scores and Grades	105
12. Participating in Forums	107
13. Using your Calendar	108
14. Managing Your WebAssign Accounts	110
Changing Your Email Address	111
Using the Same Login for Different Accounts	111
Changing Your Password	112
Resetting your Password	113
15. Troubleshooting	115
Different Name or Institution Displays at the Top of Your WebAssign Page	116
You Cannot Access WebAssign	116
You Cannot Submit an Assignment	117
A. Entering Math Notation in mathPad, calcPad, and physPad.	118
General Math	119
Bases, Exponents, Roots, and Logarithms	120
Algebraic Notation	121
Set and Interval Notation.	122
Trigonometric Functions	122
Vector Notation	124

1

What's New

Past Releases

The May 2010 release of WebAssign includes the new physPad question type. For more information, see [Answering physPad Questions](#) on page 69.

Starting with the February 2010 release of WebAssign, you can enter your lab data and analyses of your data. See [Answering Numerical Questions](#) on page 44.

The January 2010 release of WebAssign includes the new Conditional Release of Assignments feature, which can change the way you progress from one assignment to the next if your instructor uses this option:

- If a conditional release icon  is displayed, you must meet a condition on a prerequisite assignment in order to access this one. If the icon is gray, you have not yet met the condition. Click the icon or assignment name for a description.

If you need to access a conditional assignment but have not met the condition, contact your instructor. He or she might waive the condition for you. For more information, see [Viewing a List of Assignments](#) on page 26.

The December 2009 release of WebAssign includes the new NumberLine question type. For more information, see [Answering NumberLine Questions](#) on page 54.

The September 2009 release of WebAssign includes a new testing feature and enhancements to the way you open some kinds of assignments.

- The way you open some assignments has been simplified, and the icons representing assignment restrictions have been updated. For more information, see [Working On Assignments](#) on page 25.

Some of your tests and quizzes might now require you to use the free WebAssign LockDown Browser. When you are working on these assignments, you cannot use other applications, view other Web sites, copy, or print. These restrictions help to provide a fair testing

environment for all students. For more information, see Working on Assignments with LockDown Browser on page 34.

2

Overview

Use WebAssign to work on your assignments, quizzes, and tests — whatever your instructor sets up for you — at any time of the day or night. Depending on how your instructor uses WebAssign, you can also see your scores and completely graded assignments. All you need is a computer with a connection to the Internet and a Web browser.

Your instructor creates your assignments, schedules them, and sets guidelines such as:

- How many times you can submit an assignment.
- If you can have extensions of due dates.
- If you can save your work without submitting it.
- The kind of feedback that you receive after you submit an assignment.

 **Note:** The WebAssign support staff cannot give extensions, change your score, give you extra submissions, or help you with the content of your assignments.

Follow the system requirements and recommendations to make sure that WebAssign works correctly and you receive credit for your assignments.

This section contains the following topics:

- System Requirements for WebAssign
- Recommendations

System Requirements for WebAssign

Before you start using WebAssign, or if you encounter problems when working in WebAssign, check to see if your system meets the following requirements.

Browsers Supported for WebAssign

WebAssign is tested and supported for the following Web browsers:

- Mozilla Firefox, version 3 or later, for Linux, Mac OS X, and Windows
- Microsoft Internet Explorer, version 7 or later, for Windows
- Apple Safari, version 3 or later, for Mac OS X and Windows

Current releases of other modern browsers are expected to work but have not been tested. If you encounter problems when using another browser, try using one of the supported browser versions.

Browser Plug-Ins Required for Some WebAssign Content

Some WebAssign content and tools require the following browser plug-ins:

- Adobe Acrobat Reader, version 8 or later
- Adobe Flash Player, version 10 or later
- Adobe Shockwave Player, version 11 or later
- Java, version 6 (build 1.6.0) or later

If you encounter problems when using advanced features of WebAssign such as mathPad or eBooks, check to be sure that you have supported versions of these plug-ins installed.

Additional learning resources provided by textbook publishers or instructors might require other software.

Automatic Plug-In Version Checking

When you log in to WebAssign as a student, WebAssign checks your scheduled assignments for certain questions identified as requiring either Java version 6 or Adobe Flash Player version 10. If any of your assignments include these questions, your system is checked to see if you have the required plug-in version installed.



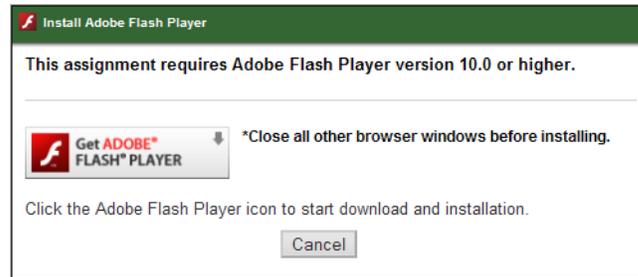
Note: WebAssign does *not* perform a comprehensive check of all assignment questions to determine all plug-in requirements. You should be aware of the following:

- Questions using pencilPad or the WebAssign graphing tool require Adobe Flash Player, version 7 or later.
- Questions created by instructors might require other plug-ins or plug-in versions.

If you do not have the required plug-in version installed, a warning is displayed on your Home and My Assignments pages informing you about the required plug-in version.

One or more of the assignments on this page require Adobe Flash Player version 10.0 or higher.		Version Information
	*Close all other browser windows before installing. Click the Adobe Flash Player icon to start download and installation.	You do not have Adobe Flash Player installed.

Click the plug-in icon in this warning to obtain and install the required plug-in. Assignments identified by WebAssign as requiring a plug-in version that is not installed display an icon  indicating what plug-in version is required. You cannot open these assignments until the required plug-in version is installed. Clicking the assignment name displays an additional warning message.



Click the plug-in icon in this warning to obtain and install the required plug-in.

Required Connectivity and Recommended Connection Speeds

WebAssign is a Web-based application and requires Internet access. For best performance, especially when working with media-enhanced eBooks or assignments, use a broadband connection such as Cable or DSL.

If broadband Internet access is not available in your area, use a dial-up connection speed of at least 56K.

Installing Browsers and Browser Plug-Ins

Use the following links to obtain installation instructions and downloads for the supported browsers and browser plug-ins.

- Firefox: www.mozilla.com/firefox/
- Internet Explorer: www.microsoft.com/windows/internet-explorer/
- Safari: www.apple.com/safari/
- Acrobat Reader: <http://get.adobe.com/reader/>
- Flash Player: www.adobe.com/products/flashplayer/
- Shockwave Player: www.adobe.com/products/shockwaveplayer/
- Java: www.java.com/getjava

Recommendations

To help you get started using WebAssign, follow these recommendations:

- Bookmark www.webassign.net or the appropriate Web address for your school.
- If you do not have either a username, institution code, and password, or a class key for self-enrollment, contact your instructor.
- Before starting WebAssign on a shared computer, such as a lab or library computer, exit all open Web browsers. Then, open a new browser session to ensure that any login information for a different person is cleared before you start using WebAssign.
- Set your browser to accept cookies. Follow the instructions for that browser to do so. WebAssign will work even if you do not set your browser to accept cookies. However, if an encrypted cookie is not saved to your computer during your session, you might have to log in more frequently. Once you log out and exit your browser, the cookie is deleted.
- Allow popups from the WebAssign Web site in the browser you use. Follow the instructions for that browser to do so.
- Protect your account. To ensure nobody else can access your account, be sure to click Logout and exit the browser completely after you finish working on your WebAssign assignments.

3

Getting Started

To use WebAssign to complete assignments for a class, you must be enrolled in the class in the WebAssign system, you must have a WebAssign user account, and you might also be required to purchase WebAssign access.

This section contains the following topics:

- Enrolling in a Class in WebAssign
- Logging in to WebAssign
- Viewing and Changing Your Email Address
- Changing Your Password
- Purchasing WebAssign Access and eBooks
- Understanding Your Home Page
- Logging Out

Enrolling in a Class in WebAssign

You can be enrolled in a WebAssign class in one of the following ways:

- If your class uses Instructor Enrollment, your instructor enrolls you in the class and provides you with a username, institution code, and initial password. You do not need to enroll in the class, but you do need to log in to WebAssign and change your password. You might also need to select a payment option within the specified grace period. See Logging in to WebAssign.
- If your class uses Self-Enrollment, your instructor provides you with a class key that you use to enroll yourself in the class. You can also create a new WebAssign account if you do not already have one. See Enrolling Yourself in a Class Using a Class Key.
- If your school has automatic enrollment, you might have a login page and instructions that are specific to your school. If this is the case, ask your instructor for information about how to log in to WebAssign.

Enrolling Yourself in a Class Using a Class Key

If your instructor gives you a WebAssign class key, you can enroll yourself in the WebAssign class roster. If you do not already have a WebAssign account, you can create one after verifying the class key.

✳ Important: An access code is not the same as a class key. You need a class key to enroll. You might need to pay student fees later with your access code.

To self-enroll for a class:

1. Go to the WebAssign login page (www.webassign.net), and click **I have a Class Key**.

The screenshot shows a web form titled "Class Key". The form contains the following text: "Enter the Class Key that you received from your instructor. You will only need to complete this once. After you have created your account, you can log in on the main page." Below this is a label "Class Key" followed by three input fields. A note below the fields states: "Class Keys generally start with an institution code, followed by two sets of four digits." At the bottom of the form is a "Submit" button.

2. Enter the Class Key your instructor gave you, and click **Submit**.
3. On the verification page, check the class information and determine whether or not the correct class and section is displayed.
 - If the correct class and section is listed, click **Yes, this is my class** and go to step 4.
 - If the listed class or section is not correct, click **No this is not my class**. Try entering your Class Key again, in case you might have mistyped a

character. If the correct class still does not display, contact your instructor.

4. If you have an existing WebAssign account, select **I already have a WebAssign account**, type the **Username, Institution, and Password** for your account, and click **Continue**. You are enrolled in the class and logged in to WebAssign using your existing account.
5. If you do not have an existing WebAssign account, you can create one now.
 - a. Select **I need to create a WebAssign account**, and then click **Continue**.

Log In Information

Required fields are marked with an asterisk (*).

Preferred Username *
Your username may contain letters, numbers, and the following characters: underscore (_), hyphen (-), period (.)

Institution Code **webassign**

Choose a Password *

Re-Enter Password *
Passwords are case-sensitive.

Student Information

Required fields are marked with an asterisk (*).

First Name *

Last Name *

Email Address *

Student ID Number

- b. Type the username that you would like to use for your WebAssign account in the **Preferred Username** field, and click **Check Availability** to see if the username that you want is available. Usernames are not case-sensitive, so BobSmith, bobSmith, and bobsmith are all the same username.
- c. After confirming the availability of your new username, type a password in both the **Password** and **Re-Enter Password** fields. Passwords are case-sensitive, so IAmCa3sar is not the same as iamca3sar.
- d. Enter your **First Name, Last name, and Email Address**, and optionally your **Student ID Number**.
- e. Click **Create My Account**.

WebAssign confirms that your account has been created. You can click **Log in now** to log in to the new user account and go to your home page. Remember your username and password, because you will need them each time you log in.

 **Tip:** If you forget your password, you can click the **Reset Password** link on the login page. If you forget your username, your instructor can look up your username for you.

You should only enroll in the class once. After enrolling, you might also need to provide an Access Code to verify payment for the class.

Logging in to WebAssign

If your class uses Instructor Enrollment, your instructor enrolls you in the class and provides you with a username, institution code, and initial password. You do not need to enroll in the class, but you will need to log in to WebAssign and change your password, and you might also need to select a payment option within 14 days of the start date for the class.

 **Tip:** If you already have an existing WebAssign account and your instructor creates a new account for you, you can link the accounts so you only need to use one username and password. See Using the Same Login for Different Accounts.

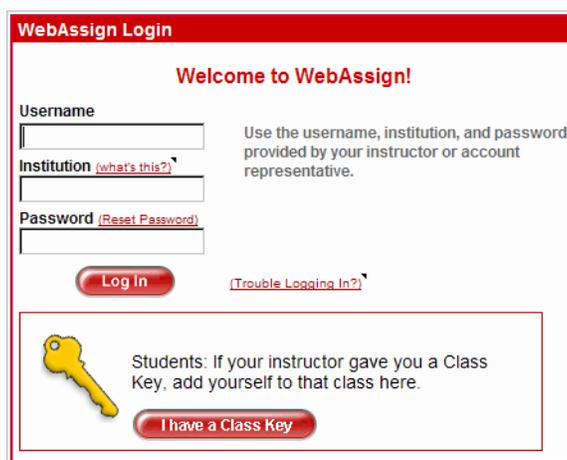
 **Note:** If your instructor provides you with a Class Key, complete the steps in Enrolling Yourself in a Class Using a Class Key before logging in to WebAssign.

To log in to WebAssign:

1. In your Web browser, go to www.webassign.net.

If you log in through your school's Web site, go to the Web address provided by your instructor.

The WebAssign login page has links to an electronic version of this Student Guide, the Support page, and technical support information.



WebAssign Login

Welcome to WebAssign!

Username

Institution [\(what's this?\)](#)

Password [\(Reset Password\)](#)

Use the username, institution, and password provided by your instructor or account representative.

[Log In](#) [\(Trouble Logging In?\)](#)

 Students: If your instructor gave you a Class Key, add yourself to that class here.

[I have a Class Key](#)

2. In the **Username** field, enter your username.

3. In the **Institution** field, enter your institution code. The institution code is a shortened form of your school's official name. It is displayed when you self-enroll in a class.

 **Tip:** If you do not know your institution code, click **what's this?** In the What's My Institution Code window that opens, type your school name, and then click **go**. A list of matching institutions and their institution codes is displayed. Note the code for your school, and then click **Close This Window**.

4. In the **Password** field, enter your password.

 **Tip:** If you have forgotten your password but have previously specified an email address for your WebAssign account, click **Reset Password** to request that the password be reset.

5. Click **Log In**.

 **Important:** The first time you log in to any WebAssign account, you should set your email address and change your password. If you have enrolled in a new class, you might also need to provide an Access Code to verify payment for the class.

Viewing and Changing Your Email Address

If your instructor has not entered a WebAssign email address for you, you should enter one. You can change your email address later if you need to.

 **Note:** Only your instructor and authorized WebAssign support personnel will be able to use your email address. WebAssign will not disclose your email address to third parties except as required by law. In no event will WebAssign violate the federal privacy rights of students as established by the Family Educational Rights and Privacy Act (FERPA) at 20 U.S.C. 1232g and 34 C.F.R. part 99. For more information about the use of your personal information, see the WebAssign privacy policy at www.webassign.net/info/privacy.html.

Once you add your email address to WebAssign, you can:

- Easily reset your password if you forget it
- Receive messages that your instructor sends you from their WebAssign pages
- Receive notifications of assignment due dates, announcement posts, and extension and help requests

To view or change your email address:

1. Click **My Options** in the upper right of your WebAssign page.
2. Click the **Personal Info** tab if not already selected.

The email address for your WebAssign account displays in the Email Address field.

My Options

Personal Info Settings Accounts

Username sarahjones

Institution WebAssign University (webassign)

Fullname Jones, Sarah

Email Address sarahjones@webassign.edu

Change Password

New Password

Re-enter New Password

If you made any changes above enter your current password here and then click save

Password Save

3. In **Email Address**, either edit or enter your email address.
4. Under **Password**, enter your password to the left of the Save button and click **Save**.

WebAssign sends a confirmation message to the email address you just entered.

5. Check the email address you entered for the confirmation message, and click the link in the message to confirm the email address change.

Your email address is updated in the WebAssign system only after you click the link in the confirmation message.

Changing Your Password

You should change your initial password to ensure the security of your WebAssign account.

Note: This procedure might not apply if you use your school's authentication server and you log in through your school's Web site. In that case, use your school's method for changing your password.

To change your password:

1. Click **My Options** in the upper right of your WebAssign page.
2. Click the **Personal Info** tab if not already selected.

The screenshot shows a web interface titled "My Options" with three tabs: "Personal Info", "Settings", and "Accounts". The "Personal Info" tab is active. The form contains the following fields and values:

- Username: sarahjones
- Institution: WebAssign University (webassign)
- Fullname: Jones, Sarah
- Email Address: sarahjones@webassign.edu
- Change Password section:
 - New Password: [masked with 8 dots]
 - Re-enter New Password: [masked with 8 dots]
- A note: "If you made any changes above enter your current password here and then click save"
- Password: [masked with 8 dots]
- Save button

3. Under **Change Password**, enter your new password in the **New Password** field.
4. In **Re-enter New Password**, enter your new password again.
5. In **Password**, enter your old password.
6. Click **Save**.

If the change was successful, a confirmation message displays stating your password has been changed.

Purchasing WebAssign Access and eBooks

If you are required to pay for WebAssign access to a class, you will have a 14-day grace period, beginning with the class start date, during which you can use WebAssign without purchasing access. Each time you log in to WebAssign, you will see a notice for any classes for which you have not yet purchased access.

WebAssign Notices

 According to our records you have not yet redeemed an access code for this class or purchased access online.

The grace period will end Monday, June 1, 2009 at 12:00 AM EDT. After that date you will no longer be able to see your WebAssign assignments or grades, until you enter an access code or purchase access online.

I would like to:

- purchase access online
- enter an access code (purchased with textbook or from a bookstore)
- continue my trial period (13 days remaining)

This notice indicates the number of days remaining in your grace period and provides options for purchasing access online, entering access codes, or continuing the trial period. After the grace period ends, you must purchase access online or enter a valid access code before you can continue using WebAssign.

WebAssign Notices

 You will not be able to access your WebAssign assignments or grades until you redeem an access code for this class or purchase access online.

Your grace period for access to WebAssign ended on Monday, June 1, 2009 at 12:00 AM EDT. According to our records you have not yet redeemed an access code for this class or purchased access online.

I would like to:

- purchase access online
- enter an access code (purchased with textbook or from a bookstore)

There are several options for payment:

- You can purchase access online directly from WebAssign using a Visa, MasterCard, American Express, or Discover card, or with a check and a valid PayPal account.
- Your purchase of a new textbook might include a WebAssign access code card for the course.
- You can purchase WebAssign access code cards at many campus bookstores.

 **Note:** Rarely, your instructor might need to change the textbooks used for your class after you have purchased access. If this occurs, your payment will be transferred automatically if an equivalent purchase option exists for the new textbooks. If no equivalent option exists, your payment will be refunded and you will need to purchase access to the class again.

This section contains the following topics:

- Choosing Between eBooks and Printed Textbooks
- Purchasing WebAssign Access and eBooks Online
- Entering Access Codes to Verify Purchase
- Requesting Refunds

Choosing Between eBooks and Printed Textbooks

Online textbooks—eBooks—are available for some courses in WebAssign. Depending on the course, the eBook might be included with WebAssign access, or it might be an optional purchase.

 **Note:** eBooks generally contain the complete text of the printed textbook. Some eBooks also contain additional features and content not available in the printed textbook.

If an eBook is available for any of your classes,  **My eBooks** is displayed in your toolbar in WebAssign. Click  **My eBooks** to display a list of the eBooks that are available.

The screenshot shows the WebAssign interface. At the top, it says 'WebAssign' and 'Friday, May 29, 2009 01:27 PM EDT'. Below that is a navigation bar with links: Home, My Assignments, Grades, Communication, Calendar, and My eBooks. The main content area has a 'Home' section and a 'My Assignments' section which says 'No Current Assignments'. A pop-up window titled 'My eBooks' is overlaid on the right. It shows the cover of a textbook titled 'PHYSICS' by Tipler and Mosca. Below the cover, it says 'Physics for Scientists and Engineers - 6e' and 'Tipler and Mosca'. A message reads 'You have not purchased access to this eBook.' and there is a button labeled 'Purchase eBook Access'.

If an eBook is available for your class, you should decide whether to purchase eBook access or the printed textbook before you purchase WebAssign access for the class. Each format has advantages and disadvantages, and you should determine which will work best for you.

You might want to review the following criteria:

Criteria	eBook	Printed Textbook
Content	<ul style="list-style-type: none"> Includes the full text along with all figures and tables. Often includes additional content which might be interactive. 	<ul style="list-style-type: none"> Includes the full text along with all figures and tables.
Features	<p>Varies by textbook, but usually includes many of the following:</p> <ul style="list-style-type: none"> Bookmarking Highlighting Annotating Printing pages Searching Opening from assignment Navigating using contents or page number Viewing glossary definitions for terms in context 	<ul style="list-style-type: none"> Bookmarking Highlighting Annotating <p>Highlighting or annotating a printed textbook might reduce its resale value or prevent you from being able to sell it.</p>
Convenience	<ul style="list-style-type: none"> With you wherever you have Internet access. 	<ul style="list-style-type: none"> With you wherever you carry it.
Instructor Preference	<ul style="list-style-type: none"> Check with your instructor. 	<ul style="list-style-type: none"> Check with your instructor.
Requirements	<ul style="list-style-type: none"> Most eBooks require either the free Flash plug-in or the free Adobe Reader. 	<ul style="list-style-type: none"> None.
Accessibility	<ul style="list-style-type: none"> eBooks can be zoomed to view as large text. Most eBooks are readable by screen readers. 	<ul style="list-style-type: none"> Printed textbook might be available in a Braille or audio edition.
Cost	<ul style="list-style-type: none"> Sometimes included with purchase of WebAssign access for your course. 	<ul style="list-style-type: none"> When new, sometimes includes WebAssign access for one or more terms.

Criteria	eBook	Printed Textbook
Resale	<ul style="list-style-type: none"> Cannot be transferred or sold. 	<ul style="list-style-type: none"> Can often be sold at end of term for a portion of the purchase price.
Lifetime	<ul style="list-style-type: none"> Usually available only while enrolled in a class using that edition of the textbook; some eBooks can be downloaded and saved indefinitely. 	<ul style="list-style-type: none"> Indefinitely.

Purchasing WebAssign Access and eBooks Online

You can purchase WebAssign access or eBooks for your classes online. If your textbook does not provide an access code card, or if you prefer to use an available eBook instead of a printed textbook, purchasing WebAssign access online is a fast, convenient, and secure option. You can purchase WebAssign access or eBooks using a Visa, MasterCard, American Express, or Discover card, or with a check and a valid PayPal account.

Note: If your course uses the Blackboard Learning System to access WebAssign, right-click the WebAssign link on your Blackboard course page to open WebAssign in a new window to purchase WebAssign access.

To purchase WebAssign access online:

1. Go to the WebAssign login page and log in to WebAssign: www.webassign.net.
2. If necessary, select your class.

WebAssign Notices

 According to our records you have not yet redeemed an access code for this class or purchased access online.

The grace period will end Monday, June 1, 2009 at 12:00 AM EDT. After that date you will no longer be able to see your WebAssign assignments or grades, until you enter an access code or purchase access online.

I would like to:

purchase access online

enter an access code (purchased with textbook or from a bookstore)

continue my trial period (13 days remaining)

3. On the notice that displays, select **purchase access online**.
4. Click **Continue**.

Select Purchases

MAT210



Calculus - 9e by Larson

ENHANCED  **LOE**

[Lifetime of Edition](#) Access to eBook and Homework BEST VALUE! \$ 100

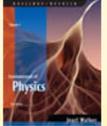
Single-term Access to eBook and Homework \$ 100
(price reflects a \$ 10 discount for purchasing these items together now)

Single-term Access to Homework \$ 100

[Lifetime of Edition](#) Access to Homework \$ 100

\$ 100

PHY101



Fundamentals of Physics - 8e by Halliday, Resnick, and Walker

WebAssign PLUS 

Single-term Access to eBook and Homework \$ 100

Single-term Access to Homework \$ 100

\$ 100

Total \$ 100

All of the classes for which you need to purchase access are listed. For some classes, you might be able to select among two or more options—for example, if you can purchase an optional eBook or Lifetime of Edition access.

 **Note:** Like printed textbooks, the cost of WebAssign access, eBooks, or other optional purchases can vary widely between classes. WebAssign pricing is based on many factors, including agreements with textbook publishers and the quantity and complexity of textbook materials and resources that are available for your instructors to use in your assignments.

Some of the available features of your textbook in WebAssign are indicated by icons that are displayed below the textbook. Your instructor might not choose to use all of the available features in your class.

Feature	Description
 eBook	<p>You have access to an online version of the textbook that might contain additional interactive features. You must be logged in and enrolled in a WebAssign course to access the eBook.</p> <p>For some textbooks, access to the eBook is an optional purchase.</p>
 Lifetime of Edition	<p>You are allowed unlimited access to WebAssign courses that use this edition of the textbook at no additional cost. This allows you to retake the course until you pass, or to take a multi-term course at no additional cost.</p>

Feature	Description
 Personal Study Plan Module	You can use chapter and section assessments to gauge your mastery of the material and generate individualized study plans for you that include various online, interactive multimedia resources.
 Textbook Resources	Additional instructional and learning resources are available with the textbook, and might include testbanks, slide presentations, online simulations, videos, and documents.
 Enhanced WebAssign	Includes advanced content including simulations and textbook examples, links to eBook, algorithmic solutions, for example, from Brooks/Cole Publishers. Specific features vary from book to book.
 WebAssignPLUS	Includes textbook specific end-of-chapter questions and tutorial exercises, interactive simulations, and hints and feedback to guide your learning from John Wiley & Sons, Inc. Publishers.
 Premium WebAssign	Includes interactive exercises with in-depth tutorials and interactive conceptual resources that allow you to visualize concepts and see cause-and-effect relationships through online simulations from W. H. Freeman Publishers.

5. Select the check box for each class you will purchase access for.
6. If needed, select optional purchases for your classes.
7. Click **Checkout**.

Items in your Cart

Please review all information before proceeding with your order
You will receive a confirmation email once your order is processed. You will have access to all items purchased upon confirmation of payment.

MAT210
<p><i>Calculus - 9e</i> by Larson Lifetime of Edition Access to eBook and Homework <input checked="" type="checkbox"/> I have read and agree to Cengage Learning eBook End User License Agreement</p> <p style="text-align: right;">\$85.00</p>
PHY101
<p><i>Fundamentals of Physics - 8e</i> by Halliday, Resnick, and Walker Single-term Access to eBook and Homework</p> <p style="text-align: right;">\$50.45</p>
Total \$135.45

If you find you need a refund, requests must be made within 14 days of purchase.

8. Review the items in your cart.

- If needed, read and confirm your agreement to any license agreements. Click the name of the license agreement to view it. Select the check box to confirm that you agree to its terms.
- If you need to make changes, click **Edit Cart**.
- If you are ready to purchase access, click **Continue**.

When you click **Continue**, a PayPal payment page opens.

9. In the PayPal page, provide all of the requested information to purchase the items you selected with a Visa, MasterCard, American Express, or Discover card.



Notes:

- The purchasing page is currently provided by PayPal and is subject to change without notice.
- To pay for WebAssign access using a check, you must create a PayPal account and log in. Use the instructions provided on the site to make your payment, and then continue with step 11.

- **Country:** Select your current country of residence.
- **First Name:** Type your first name exactly as it appears on your credit card.
- **Last Name:** Type your last name exactly as it appears on your credit card.
- **Credit Card Number:** Type your valid credit card number without spaces or punctuation. The Payment Type indicator is automatically selected based on the card number you type.
- **Expiration Date:** Type the two-digit month and two-digit year of your card's expiration date.
- **CSC:** Type the three- or four-digit security code displayed on your credit card. For MasterCard or Visa, this is the last three digits in the signature area on the back of your card. For American Express, this is the four digits on the front of the card.
- **Address:** The exact address information that is requested varies by country. Provide the complete address where your credit card statements are sent.
- **Home Telephone:** Type the telephone number where you prefer to be contacted in case of a problem with your transaction.
- **Email:** Type your email address.

When you have provided all of the requested information, click **Review Order and Continue**.

10. Review the displayed information and click **Pay Now**.

11. Click **Return to WebAssign** to display your payment receipt from WebAssign.

Click **Print Page** to print the receipt for your records. A copy of the receipt is sent to the email address you provided for your WebAssign account.



Notes:

- If you need to contact WebAssign customer support regarding this transaction, please provide the transaction ID from your receipt.
- If you drop a class, you can request a refund within 14 days of the purchase date. See Requesting Refunds on page 23.

12. Click **Finish** to return to your Home page for your class.

You have access to the classes or eBooks that you purchased for the duration of the terms for which you purchased them.

Entering Access Codes to Verify Purchase

If you purchased an access code card in your bookstore or an access code card was included with your textbook, you can enter it in WebAssign to verify payment for the class.



Important: Make sure that your access code card prefix is valid for your class before you open it. Check your access code card prefix or look up the access code card prefix you need before you purchase it at: webassign.net/user_support/student/cards.html.



Note: An access code is different from a Class Key. A Class Key is used to add yourself to a class roster, but does not indicate payment for the class.

Usually, an access code is valid only for one term and one class. Occasionally, a textbook includes a multi-term access code. Such a code typically includes either 2S or 3Q in the prefix, indicating two semesters or three quarters, respectively.

If your access code was provided on a card (either with your textbook or purchased from your school bookstore), scratch off the silver coating to reveal the access code. Access codes provided on these cards should begin with two or three letters followed by ten additional characters.

Some access codes come in a security envelope and begin with a longer prefix, such as McGraw-2S/3Q, followed by four sets of four characters. If you receive a security envelope access code card, open it to reveal the access code.



Card



Envelope

To enter your access code:

1. Go to the WebAssign login page and log in to WebAssign: www.webassign.net.
2. If necessary, select your class.

WebAssign Notices

⚠ According to our records you have not yet redeemed an access code for this class or purchased access online.

The grace period will end Monday, June 1, 2009 at 12:00 AM EDT. After that date you will no longer be able to see your WebAssign assignments or grades, until you enter an access code or purchase access online.

I would like to:

purchase access online

enter an access code (purchased with textbook or from a bookstore)

continue my trial period (13 days remaining)

Choose the appropriate prefix from the menu below. If your access code is not listed please contact your instructor.

WebAssign-S

3. On the notice that displays, select **enter an access code**.
4. Select your access code prefix from the **Choose your access code prefix** drop-down list.

If your prefix is not listed, your Access Code might not be valid for this class. Access Codes are *not* interchangeable from class to class. If you believe that you have a valid Access Code for your class and the prefix is not listed, either notify your instructor or send a help request by clicking **Help**, then the **Help Resources Online** tab, and then **Send Help Request**. Complete all the fields in the help request form and then click **Submit**.

5. Enter your access code in the boxes and click **Continue**.

If your access code is valid, a message confirms that you have successfully entered an access code. You will not see the notice about entering an access code again for this class.

Requesting Refunds

If you drop a class, you can request a refund within 14 days of the purchase date.

 **Note:** WebAssign cannot provide refunds for printed textbooks or access code cards purchased from your campus bookstore.

To request a refund if you drop a class:

1. Go to the WebAssign login page and log in to WebAssign:
www.webassign.net.
2. Click **Help**.
3. Click the **Help Resources Online** tab.
4. Click **Send Help Request**.
5. In the Submit Help Request form, enter each of the following fields:
 - Full Name
 - WebAssign Username
 - Email Address
 - Telephone
 - School (code or full name)
 - Status (Student, Faculty, or Other)
 - Class
 - Section
6. In the **How can we assist you** field, type "Refund Request" as the first line. Provide the transaction ID for your purchase and any additional information about your request in this field after the "Refund Request" line.
7. Click **Submit** to send your request.

Understanding Your Home Page

After you log in, you see your personalized WebAssign Home page. If you are listed on more than one class roster with the same username, or if you have linked multiple WebAssign accounts, you can select a class from the **My Classes** menu to go to the Home page for that class.



On your Home page for a particular class, you can see summary information for the class, including:

- Announcements from your instructor
- A list of your current assignments
- Links to calendar and communication pages
- Your posted grades for the class

At the top of the Home page, a menu provides quick access to pages for your assignments, grades, communication, calendar, notifications, help, and options.

Logging Out

When you finish working on your assignments, log out of WebAssign and exit the browser completely to ensure that nobody else can see your work or access your account.

To log out, click **Log out** at the top right.

Note: If you use a browser that is shared by others, make sure the browser does not save your password.

4

Working On Assignments

Assignments are the work you do for your class in WebAssign, and might include homework assignments, labs, quizzes, or tests, depending on your instructor.

This section contains the following topics:

- Viewing a List of Assignments
- Opening Assignments
- Submitting Answers
- Saving Your Work
- Viewing Scoring Details for a Question
- Viewing Your Previous Submissions for a Question
- Making Notes About a Question
- Getting Email Notifications About Assignments
- Working on Group Assignments
- Working on Timed Assignments
- Working on Assignments with LockDown Browser

Viewing a List of Assignments

You can view a summary of your current assignments and due dates on your Home page for a class, or you can view a detailed list of your current or past assignments on your My Assignments page.

 **Important:** Do not wait until the last minute to submit an assignment. Assignment cutoff times are determined by the clock of the WebAssign server, not by the clock on your computer. Every effort is made to ensure that these server clocks are accurate. If the assignment cutoff time is 10:00 P.M., you can not submit the assignment after 10:00 P.M. according to the WebAssign server, regardless of the time displayed on your computer.

To view a summary of your current assignments:

1. Click **Home**.
2. If necessary, select a class from the **My Classes** menu.

Your current assignments for the class are listed in the My Assignments panel along with due dates and icons indicating any assignment restrictions and whether the assignment is a group assignment:

Icon	Restriction	Description
	Conditional Assignment	If the icon is green, you can open the assignment. If gray, click the icon or the grayed-out assignment name to view the condition you need to meet on a prerequisite assignment in order to open this one. If you can not meet the condition, you might want to contact your instructor to see if you can be waived of the condition.
	Group Assignment	You and other group members can all work on the assignment; the assignment score is the same for all group members. See Working on Group Assignments on page 32.
	Timed	When you open this assignment, you will have a specified amount of time to complete the assignment. The remaining time will be displayed in the upper right corner while you are working on the assignment. See Working on Timed Assignments on page 32.
	Password Protected	You must enter an assignment password provided by your instructor in order to open this assignment.
	IP Address Restricted	You must log in to WebAssign from locations designated by your instructor in order to open this assignment.
	WebAssign LockDown Browser Required	You must use WebAssign LockDown browser for this assignment. See Working on Assignments with LockDown Browser on page 34.

To view a detailed list of your current or past assignments:

1. Click **Home**.
2. If necessary, select a class from the **My Classes** menu.

3. In the My Assignments panel, click either **Current Assignments** or **Past Assignments**.

Your current or past assignments for the class are listed in the My Assignments window. Each assignment includes the following information:

- The name of the assignment, such as Homework – Chapter 3.
- The assignment category, such as (Homework), in parentheses after the assignment name.
- Icons indicating any assignment restrictions and if the assignment is a group assignment.
- If the assignment is timed, the amount of time you have to complete the assignment.
- The date and time that the assignment is due.
- A description of the assignment, if one was provided by your instructor.
- The score you received on the assignment, if you submitted the assignment and your instructor chose to show you the score.

 **Note:** If a past assignment is not displayed on the list, it is no longer available for review. Contact your instructor to request access to the assignment.

Opening Assignments

You can open an assignment to view it or work on assignment questions from either your Home page or My Assignments page for a class.

To open an assignment:

1. From your Home page or My Assignments page for a class, click the name of the assignment you want to open.
2. If necessary, acknowledge any assignment restriction notices or enter the assignment password and click **Continue**.

 **Note:** If a conditional release icon  is displayed, you must meet a condition on a prerequisite assignment in order to access this one. If the icon is gray, you have not yet met the condition. Click the icon or assignment name for a description. If you need to access a conditional assignment but have not met the condition, contact your instructor. He or she might waive the condition for you.

The Assignment page opens, showing information about the assignment and the assignment questions.

At the top of the Assignment page, you can see summary information about the assignment, including your score for the entire assignment and for individual questions, the assignment due date and time, and any assignment instructions or access restrictions that have been added by your instructor.

The assignment questions are displayed in order after the summary information. For each question, the available and earned points are listed.

Depending on the options enabled by your instructor, you might be able to perform some of the following tasks in an assignment:

To do this	See
Answer a practice question	Working with Practice Questions on page 38
Answer questions of different types	Answering Questions on page 36
Ask your instructor a question about the assignment	Asking Your Teacher a Question About an Assignment on page 101
Ask your instructor for more time to complete the assignment	Asking Your Teacher to Extend the Due Date for an Assignment on page 102
Keep notes about related material for a question	Making Notes About a Question on page 30
Receive notifications about assignment changes	Getting Email Notifications About Assignments on page 31
Receive notifications about new announcements	Getting Email Notifications About Assignments on page 31
Receive notifications about upcoming assignment deadlines	Getting Email Notifications About Assignments on page 31
Save your work on an assignment without submitting it, so you can finish the assignment later	Saving Your Work on page 29
See all of the work you have saved for a specific question or for the whole assignment	Saving Your Work on page 29
See detailed score information for a question	Viewing Scoring Details for a Question on page 30
See your submitted answers for questions	Viewing Your Previous Submissions for a Question on page 30
Show your work for a question	Making Notes About a Question on page 30
Submit all assignment answers for scoring	Submitting Answers on page 28
Submit an answer for scoring	Submitting Answers on page 28

Submitting Answers

The main task that you perform for all assignments is answering the assignment questions.

 **Important:** To complete an assignment, you must submit your answers.

Depending on the question type and the options enabled by your instructor, you might use different tools to input your answers; you might need to provide answers to multiple parts of a question; and if your initial answer is incorrect, you might be allowed to submit answers multiple times. However, you complete your assignment only by submitting answers for each question.

- To answer an individual assignment question, enter answers in the provided fields for the question, and then click either **Submit New Answers to Question** or **Submit Whole Question**, depending on the submission options for the assignment.

 **Note:** Some assignments do not allow you to submit individual questions, but require instead that you submit the entire assignment at once.

- To answer all the assignment questions at once, enter answers to all questions, and at the bottom of the assignment, click either **Submit All New Answers** or **Submit All Questions**, depending on the submission options for the assignment.

Saving Your Work

Your instructor might allow you to save your work for assignment questions. This allows you to stop working and come back to complete the assignment at a later time.

 **Note:** Saving your work does not submit the work for grading. Your saved work does not count toward completion of an assignment, it does not use any of your allotted submissions, and your instructor cannot review it.

To do this	Do this
Save your work for an individual question	Click Save Work for that question.
Save your work for all questions	Click Save All Work at the bottom of the assignment.
View your saved work for an individual question	Select View Saved Work in the question heading.
View your saved work for all questions	Select View Saved Work in the assignment heading at the top of the assignment.
Submit your saved work for an individual question	<ol style="list-style-type: none"> 1. Select View Saved Work in the question heading. 2. Click either Submit New Answers to Question or Submit Whole Question, depending on the submission options for the assignment.
Submit your saved work for all questions	<ol style="list-style-type: none"> 1. Select View Saved Work in the assignment heading at the top of the assignment. 2. Click either Submit All New Answers or Submit All Questions, depending on the submission options for the assignment.

Viewing Scoring Details for a Question

To see submission and scoring details for a question, click the plus sign icon  for a question.

You see your score for each part of the question, how many points each part is worth, and how many submissions are allowed for each part, if you can submit each part separately.

Viewing Your Previous Submissions for a Question

If viewing your previous submissions is enabled for an assignment and you are allowed to make multiple attempts to answer a question, you can see your previous answers to a question.

- To view your most recent submitted answer for an individual question, select **View Last Response** in the question heading.
- To view your most recent submitted answer for all questions, select **View Last Response** in the assignment heading at the top of the assignment.
- To view all of your previous answers for a question, click **All Submissions** in the question heading. A new window opens, displaying all the answers you have submitted for the question.

Making Notes About a Question

You can make notes about questions. You can use notes to show your work for a question, to explain your answer, or to cite supporting information for your answer. Notes that you make about questions are viewable by your instructor.

To make a note about a question:

1. Click the **Notes** icon  in the question heading. The My Notes window opens.
2. Type your note in the **Notes** field, and click **Save**. The note is saved.
3. Click **Close this window** to close the My Notes window.

To view a note about a question:

If you have previously saved a note for a question, the notes icon changes to a representation of a notebook.

1. Click the **Notes** icon  in the question heading. The My Notes window opens and displays the saved note.
2. Click **Close this window** to close the My Notes window.

To edit a saved note about a question:

1. Click the **Notes** icon  in the question heading. The My Notes window opens and displays the saved note.
2. Click **Edit**.

3. Edit your note in the **Notes** field, and click **Save**. The note is saved.
4. Click **Close this window** to close the My Notes window.

Getting Email Notifications About Assignments

You can receive an email notification stating that an assignment due date is approaching, anywhere from 6 to 48 hours before the assignment is due.

You can also request email notifications to be sent to you when other changes occur, such as when a due date changes, when someone posts an announcement, or when your instructor responds to your extension request, private message, or help request.

Note: You need an email address to receive notifications. If you do not have a valid, confirmed email address on file in WebAssign, a message displays asking you to enter one.

To request email notifications:

1. From the menu, click **Notifications**.
2. On the **Settings** tab, select the number of hours before an assignment is due that you want to receive an email message. You can select more than one time frame.

The screenshot shows a settings window with two tabs: 'Settings' (selected) and 'Notification Contact Info'. Under the 'Settings' tab, there are two sections:

- Assignment is due reminders:** A heading followed by the text 'I would like to be reminded via email before an assignment is due.' Below this are five checkboxes:
 - 6 hours before
 - 12 hours before
 - 24 hours before
 - 30 hours before
 - 48 hours before
- Notify me immediately when...:** A heading followed by five checkboxes:
 - a due date changes.
 - an announcement is posted.
 - my instructor responds to an extension request.
 - my instructor responds to a private message.
 - my instructor responds to a help request.

3. Select when you would like to receive an immediate email message for other changes, such as due date changes, extension request responses, private messages, and help requests.
4. If you have not already entered a valid email address, click the **Notification Contact Info** tab and enter an email address.

Note: If you need to verify your email address, a **Verify this email address** button displays. Click it to verify the address and follow the instructions on the screen.

5. Click **Save** to apply your changes. The window indicates whether your changes have been successfully updated.

Working on Group Assignments

Some of your assignments might display the group assignment icon  to indicate that you will complete this assignment in collaboration with other students in your group.

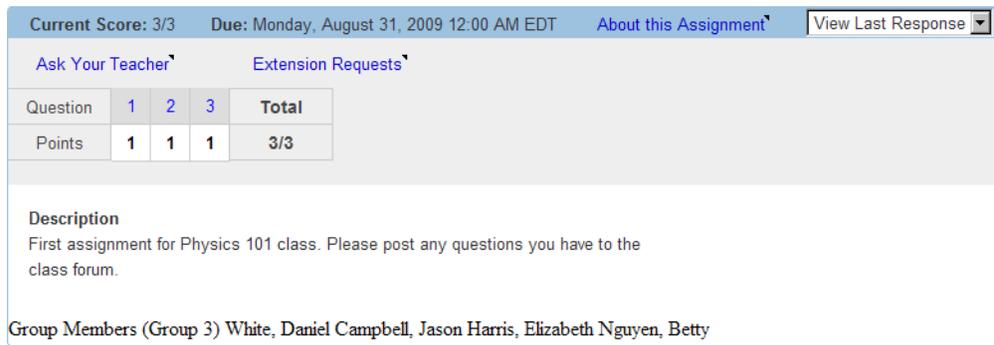
When you are working on group assignments:

- Any member of the group can work on the assignment.
- You will see any responses submitted by other group members.
- You will *not* see notes contributed by other group members.
- All members of the group receive the same score for the assignment, regardless of their individual contributions.

To complete a group assignment:

1. From your Home page or My Assignments page for a class, click the name of the assignment you want to open.
2. Read the notice describing any assignment restrictions.
3. If necessary, enter the assignment password.
4. Click **Continue**.

The assignment opens. Your group members for the assignment are listed below the assignment description.



Current Score: 3/3 Due: Monday, August 31, 2009 12:00 AM EDT About this Assignment View Last Response

Ask Your Teacher Extension Requests

Question	1	2	3	Total
Points	1	1	1	3/3

Description
First assignment for Physics 101 class. Please post any questions you have to the class forum.

Group Members (Group 3) White, Daniel Campbell, Jason Harris, Elizabeth Nguyen, Betty

5. Work on the assignment questions and submit your responses.

Working on Timed Assignments

Some of your assignments might display the timed assignment icon  to indicate that once you start the assignment, you will have only a limited amount of time to complete it.

To complete a timed assignment:

1. From your Home page or My Assignments page for a class, click the name of the assignment you want to open.

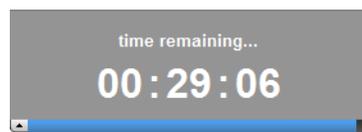
2. Read the notice indicating how much time you will have and describing any assignment restrictions.

✿ Important:

- Only start a timed assignment if you expect to be able to complete the entire assignment without interruption.
- You cannot “pause” a timed assignment after you start it.
- For timed assignments, the time you have to complete the assignment is always the lesser of the allotted time for the assignment and the time remaining until the assignment is due.

3. If necessary, enter the assignment password.
4. Click **Continue**.

The assignment opens. The time remaining is displayed in the top right corner of your browser window.



The timer bar at the bottom of the timer displays a graphical representation of the remaining time relative to the total time allowed for the assignment.

If you need to click something behind the timer, click the timer bar. The timer text is hidden and only the timer bar is displayed.



To display the timer text, click the timer bar again.

5. Work on the assignment questions and submit your responses. If you are working on the assignment when the time remaining for the assignment reaches zero, all of your responses are automatically submitted so you do not lose any points for unsubmitted responses.

Note: As with other assignments, if you log out of WebAssign or close your browser, your work is *not* automatically submitted.

Working on Assignments with LockDown Browser

Some of your assignments might display the LockDown Browser icon  to indicate that you must install and use WebAssign LockDown Browser to complete the assignment.

✿ Important: WebAssign LockDown Browser requires you to have one of the following operating system/browser combinations installed:

- Windows XP or later with Microsoft Internet Explorer, version 7 or later
- Mac OS X 10.4 or later with Apple Safari, version 3 or later

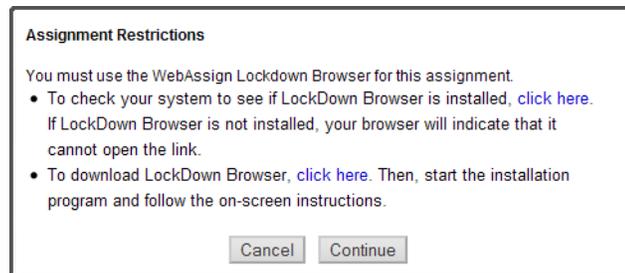
The listed browser versions will be used when you open assignments with LockDown Browser even if you normally use a different browser to access WebAssign.

You cannot complete assignments requiring LockDown Browser on any other platforms. To check your system for LockDown Browser or to install LockDown Browser, go to www.webassign.net/user_support/student/system_requirements.html.

While you are working on an assignment that requires LockDown Browser, you cannot use other applications, view other Web sites, copy, or print. These restrictions help to provide a fair testing environment for all students. The restrictions are lifted when you close the assignment by clicking **Close LockDown Browser**.

To complete an assignment that requires the WebAssign LockDown Browser:

1. From your Home page or My Assignments page for a class, click the name of the assignment you want to open.



2. In the Assignment Restrictions message, click the link to check your system to see if LockDown Browser is installed.
 - If you see a confirmation page indicating that WebAssign LockDown Browser is installed, go to step 3.
 - If you do *not* see a confirmation page — you might see a browser message that it cannot open the address associated with the ldb protocol — install LockDown Browser as described below.

To install WebAssign LockDown Browser on Windows:

- a. Click the link to download LockDown Browser.

- b. Click **Download**.
- c. Click **Save** to save the installation file to your computer.
- d. Run the downloaded installation file (InstallWebAssignLDB.exe) and follow the instructions in the InstallShield Wizard.

To install WebAssign LockDown Browser on Mac:

- a. Click the link to download LockDown Browser.
 - b. Click **Download** and save the zip file.
 - c. Double-click the downloaded zip file (InstallWebAssignLDB.zip) to extract the package file.
 - d. Run the extracted package file (Install_WebAssign_LockDown_Browser.pkg).
 - e. Acknowledge the security warning, and then follow the instructions in the installer.
3. If necessary, enter the assignment password.
 4. Click **Continue**.
The assignment opens.
 5. Work on the assignment questions and submit your responses.
 6. When you are finished with the assignment, click **Close LockDown Browser**.

 **Tip:** If the assignment is timed, click the timer to collapse it, and then click **Close LockDown Browser**.

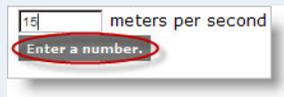
5

Answering Questions

You can answer most questions in WebAssign using standard text entry, multiple-choice, or multiple-select fields that are similar to those used in other computer applications. This section describes the various ways that you can enter answers in WebAssign.



Tip: Because most of your responses are graded automatically, pay close attention to any instructions about the form of your answers. If enabled by your instructor, you might see an answer format tip below the answer field for a question. The answer format tip is displayed when you click the field or select it using the keyboard.



The answer format tip can provide information about the kind of answer that is expected (for example, a mathematical expression or a number).

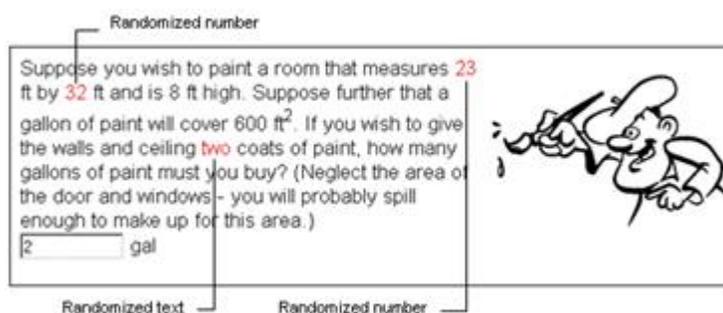
This section contains the following topics:

- Working with Randomized Text or Numbers
- Working with Practice Questions
- Answering Multiple-Choice Questions
- Answering Multiple-Select Questions
- Answering Fill-In-The-Blank Questions
- Answering Questions that Are Scored Manually
- Answering Numerical or Math Questions
- Answering NumberLine Questions
- Answering Graphing Questions
- Answering Chemistry Questions
- Answering physPad Questions
- Answering Poll Questions

Working with Randomized Text or Numbers

Some questions might include text or numbers that are displayed in red. This happens when the text or number has been randomized. Your classmates might receive different versions of the question.

*** Important:** The question might use text or numbers that remain the same every time you log in, or the text and numbers might be different every time you open the assignment. It depends on how your instructor sets up the assignment. Be sure to review your work to make sure your answers are based on the information in the question at the time you submit the assignment.



Your instructor can allow you to submit an assignment several times. If your instructor allows you to use multiple submissions, you can make corrections to previously submitted answers that are marked incorrect.

Working with Practice Questions

Your instructor might give you practice questions either before or after the due date. If you see Practice Another Version, you can work with similar problems without using up your allowed submissions.

When you click **Practice Another Version**, a window opens with the same question that has different values, allowing you to try the question again with another set of values.

Answering Multiple-Choice Questions

Multiple-choice questions can have either option buttons beside the possible answers or drop-down menus for selecting your answer.

To answer a multiple-choice question:

Select your response under each question by selecting an answer from a drop-down list or an option button. You can only select one answer. To change your answer, select another one. Doing so clears your original selection.

Geography Use the map below to determine what time it is in each city if it is 6:00 P.M. in New York City.

(a) Hong Kong

(b) Los Angeles

(c) Rio de Janeiro

(d) Bombay

Tip: When you submit a correct answer to a multiple-choice question that has option buttons, you will see a green outline around the option buttons in addition to the correct answer icon. Incorrect answers are surrounded by a red outline.

Correct answers are displayed as illustrated in the following figure:

7×10^5 tuners
 7×10^4 tuners
 7×10^2 tuners
 7×10^3 tuners
 7×10^1 tuners

Incorrect answers are displayed as illustrated in the following figure:

8×10^4 balls
 8×10^3 balls
 8×10^6 balls
 8×10^7 balls
 8×10^5 balls

Answering Multiple-Select Questions

Multiple-select questions in WebAssign use check boxes. You can select more than one answer for this type of question.

To answer a multiple-select question:

Select one or more check boxes for your response. To clear a check box, click the checked box again.

2. 4/6 points Last Response | [Show Details](#)

Multiselect Questions
Classify the following numbers. (Select all that apply.)

31 -42 9.7 1/3 8500 -3

natural numbers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	✓
whole numbers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	✓
integers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	✓

Answering Fill-In-The-Blank Questions

You can enter short text answers in fill-in-the-blank questions.

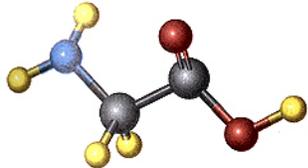
To answer a fill-in-the-blank question:

Enter a response in each answer box. Spelling counts, so check your answers before submitting the assignment.

Depending on your instructor, capitalization and extra spaces might not matter, but sometimes they do. For chemistry questions, for example, **na** is not the correct chemical symbol of sodium; you must enter **Na**.

4. [+ / -1 points](#) [Notes](#) Question: Chang6 2.P.043.

Write the molecular formula of glycine, an amino acid present in proteins. The color codes are gray (carbon), blue (nitrogen), red (oxygen), and yellow (hydrogen). (Type your answer using the notation CH₄ for CH₄.)



[Submit New Answers To Question 4](#) [Save Work](#)

Answering Questions that Are Scored Manually

Some questions cannot be scored automatically by WebAssign; however, you still submit them through WebAssign so your instructor can evaluate them and enter your scores.

The following question types are scored manually outside of WebAssign:

- Essay questions
- Questions you upload files to answer
- pencilPad questions

This section contains the following topics:

- Answering Essay Questions
- Uploading Files for Questions
- Answering pencilPad Questions

Answering Essay Questions

Answer essay questions by entering your response under each question. After your instructor scores essays, your scores and instructor comments are displayed on the assignment, if enabled.

8. --/10 points No Response | [Show Details](#)

Essay
Robert Frost said, "Good fences make good neighbors." Do you agree or disagree and why?
(note: There is no incorrect answer to the first part.)

Agree
 Disagree

Explain why.

*** Important:** By default, you get full credit after submitting your answer. After your instructor grades your answer your score can change. For example, if there are 5 points in an essay question, you might see that you have 5 out of 5 points when you first submit it. If your score is actually 4 out of 5 points, you will see the score change after the instructor enters the correct score of 4 points in WebAssign.

Uploading Files for Questions

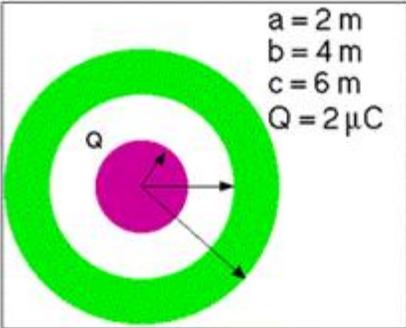
Answer questions that require you to upload a file by first preparing the requested file in the needed format.

To upload your file to a question:

1. Click **Browse** to find and select your file. If necessary, select **All Files** from the Files of Type menu.

Unless your instructor tells you differently, your file should be smaller than 100 K.

Charged spheres



$a = 2 \text{ m}$
 $b = 4 \text{ m}$
 $c = 6 \text{ m}$
 $Q = 2 \mu\text{C}$

The solid purple spherical conductor is given a net charge Q .

(a) Plot the electric field from the center to $r = 9 \text{ m}$.
 (b) Plot the electric potential from the center to $r = 9 \text{ m}$.

Make your plots in Excel and save them. Your grade will depend on the accuracy of your results, labelling of your graphs and documentation of your method. Organization, layout of information, and neatness will count.

Upload your Excel file here. (Label your file with your group number, for example, EVplotC3.xls for EVplot from group C3)

2. Click **Open**. The location of your file is entered into the answer space.
3. When you have finished answering the question, click **Submit**. When you do so, your instructor can view and grade your file.

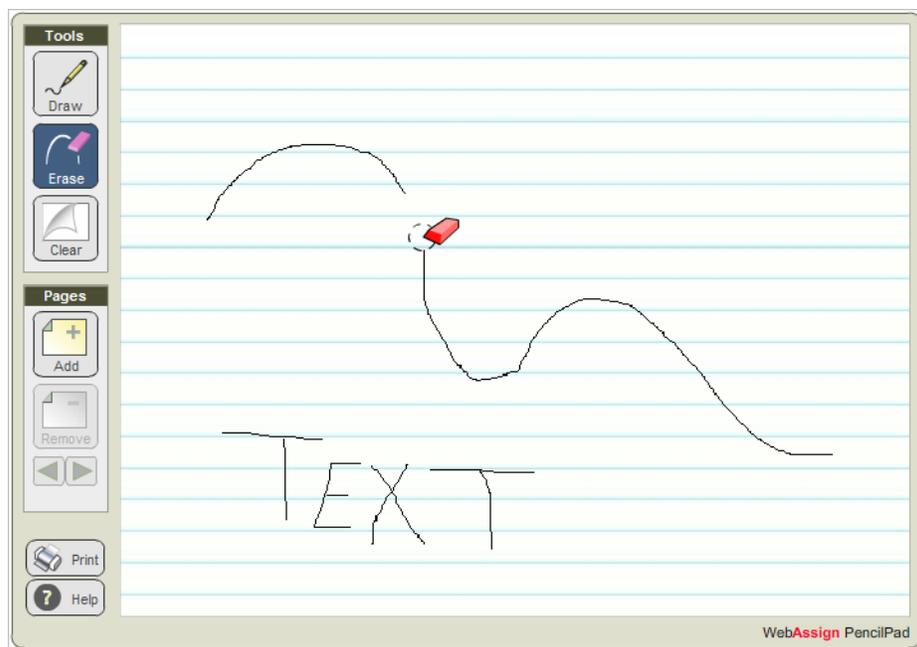
If you submit an assignment with a file upload question more than once, and are satisfied with the file already submitted, leave the file upload box empty. If you want to change the file you uploaded to another file, click **Browse** and repeat these steps.

Answering pencilPad Questions

Some questions include pencilPad so that you can write or draw using your mouse or tablet.

To draw or write using pencilPad:

1. Click the draw tool. The pointer is displayed as a pencil. Move the pointer to form the object or words you want.



2. You can do any of the following:
 - Click **Erase** to erase part or all of your drawing or text. The pointer is displayed as an eraser.
 - Click **Clear** to delete everything on the page.
 - Click **Add** to add a new page.
 - Click **Remove** to delete the page.
 - Click the arrows to go to the previous or next page.
 - Click **Print** to print all pages of your work.
3. When you are done, click **Save** or **Submit**. Blank pages are removed.

Answering Numerical or Math Questions

Many questions in WebAssign require you to answer with a numeric value or a mathematical expression. There are four types of these questions:

- **Numerical** questions require a numeric value. Numerical questions can also require you to enter a unit, and can check your answer for the correct number of significant figures.
- **Symbolic** questions require you to enter a mathematical expression using calculator notation. Often, you can preview your answer in correctly formatted math notation.
- **mathPad** questions display the mathPad palette when you click in the answer box and allow you to enter your answer in correctly formatted math notation. mathPad facilitates entry of standard math notation, and is generally used for math classes through algebra.
- **calcPad** questions display the calcPad palette when you click in the answer box and allow you to enter your answer in correctly formatted math

notation. calcPad facilitates entry of more advanced math notation, and is generally used for precalculus and higher math classes.

This section contains the following topics:

- Answering Numerical Questions
- Answering Symbolic Questions with Calculator Notation
- Answering mathPad Questions
- Answering calcPad Questions

Answering Numerical Questions

Numerical questions require you to enter a number for the answer. The question might also require you to enter units or to specify the correct number of significant figures. The kind of answer that is expected should be clear from the question.

If your instructor has enabled answer format tips, numerical questions are also indicated by an answer format tip that instructs you to enter a number. The exact text of the answer format tip might vary, depending on the required form of the answer and whether significant figures or units will be checked.

A 20.9 g quantity of dry ice (solid carbon dioxide) is allowed to sublime (evaporate) in an apparatus like the one shown in Figure 6.10. Calculate the expansion work done against a constant external pressure of 1.030 atm and at a constant temperature of 20°C. Assume that the initial volume of dry ice is negligible and that CO₂ behaves like an ideal gas.

4.0 ✓ -1.16 kJ

Enter a number with the correct number of significant figures.

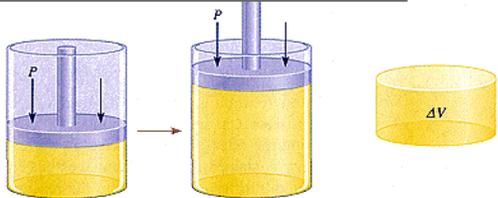


Figure 6.10.

If your instructor has enabled it, the sigfig icon  is displayed beside the answer box for questions that check for significant figures.

To answer a numerical question:

To answer a numerical question, type a number using the following notation:

Notation	Example
A decimal number	304.5
A fraction	3045/100
Scientific ("e") notation	3.045e2

Each of the examples in this table are equivalent expressions. Do not use commas or spaces to separate digits in your answer.

Unless otherwise indicated, many numerical questions also allow you to enter the following simple arithmetic expressions:

Notation	Example
A sum (+)	300+4.5
A difference (-)	404.5-100
A product (*)	30.45*10
A quotient (/)	3045/100
An exponent (**)	3.045*10**2

The standard order of operations is observed: parenthetical expressions are evaluated first, followed by exponents, products and quotients, and then sums and differences.

 **Tip:** By default, numerical questions require the answer to be within 2% of the correct value. However, particular questions, classes, or instructors might require greater accuracy, and will usually inform you if that is the case.

To answer a numerical question with units:

If the question requires you to specify units in your answer, type a number followed by a space and a unit, for example, 2500 meters.

You can use standard abbreviations for units, and you can specify any compatible unit. For example, the responses 2500 meters, 2.5 km, and 2.5e+6 mm are all equivalent. Be sure to spell the unit or abbreviation correctly.

 **Tip:** Your instructor might award partial credit if you specify the correct units, even if your answer is not correct.

To answer a numerical question that checks significant figures:

If the question checks for significant figures, type a number with the correct number of significant figures for your answer. The rules WebAssign uses to determine the number of significant figures in a number are shown in the examples below:

Example	Significant Figures
1234	4
500	1
5.0e2	2
500.	3
13000	2
2.000	4
140E-001	2
8.20000e3	6

Example	Significant Figures
101.001	6
41003	5

To express a number like 1000 to 2 or 3 significant figures, you must use scientific notation, for example, 1.0e3 or 1.00e3.

If it is displayed, you can click the sigfig icon  to list the rules used for significant figures in WebAssign.

 **Tip:** Your instructor might award partial credit if you specify the correct value, even if you do not specify the correct number of significant figures.

To answer answer-dependent numerical questions:

Some numerical questions have multiple parts that require you to enter estimated or measured values and then perform calculations based on the values you entered. These questions are often used for lab classes to record the results of an experiment and perform analysis of the data. For these questions, the answer boxes for analyses are not enabled and are displayed with a gray background until you have entered the required values first.

What is the length L of your pendulum? $L =$ \pm 

What is the amount of time t_{20} required for your pendulum to go through 20 complete oscillations?
 $t_{20} =$ \pm 

What is the period T of your pendulum?
 $T =$ \pm 

Based on the period and length of your pendulum, what is the acceleration of gravity g ?
 $g =$ \pm 

If you click an answer box that is not enabled, a message is displayed indicating that you must complete other answer boxes first.

1. Enter the requested values, specifying units or significant figures if required.

After the required values have been entered, answer boxes for calculations dependent on those values are enabled and are displayed with a white background.

What is the length L of your pendulum? $L =$ \pm 

What is the amount of time t_{20} required for your pendulum to go through 20 complete oscillations?
 $t_{20} =$ \pm 

What is the period T of your pendulum?
 $T =$ \pm 

Based on the period and length of your pendulum, what is the acceleration of gravity g ?
 $g =$ \pm 

2. Enter your calculations in the appropriate answer boxes, specifying units or significant figures if required.

For these questions, your answers are scored based on the expected range for the question and your analyses are scored based on the values you provided.

- Your answers are marked correct if they are within the expected range and correctly specify units or significant figures, if required.

If your answers are not within the expected range, they are marked incorrect; a prompt might also be displayed indicating why the values were not acceptable.

- Your analyses are marked correct only if your answers are within the expected range and you have performed the calculations correctly, including units and significant figures, if required.

If your answers are not within the expected range but your calculations were correct for the values you provided, a caution mark ⚠ is displayed to let you know that your procedure was correct; however, no points are awarded unless both the values and the calculations are correct.

See Also:

- www.webassign.net/sigfigs.html

Answering Symbolic Questions with Calculator Notation

Symbolic questions require you to enter a mathematical expression for the answer, but do not display a tool for entering math notation. Instead, you type your answer using calculator notation.

If your instructor has enabled answer format tips, symbolic questions are indicated by one of the following answer format tips when you click in the answer box:

- Enter a mathematical expression
- Enter a mathematical expression or equation with exact values

Symbolic questions are often displayed with the symbolic formatting help button  [symbolic formatting help](#). You can click this button to see the allowed notation.

Any response that is equivalent to the answer formula will be graded as correct. For example, $4x+12$ would be equivalent to $(x+3)4$. You can enter an asterisk (*) for multiplication or use implicit multiplication with variables.

To answer a symbolic question:

1. Type your answer using calculator notation and the exact variables specified in the question. Unless the question asks for your answer to be in a specific form, any mathematically correct expression that is equivalent to the key will be accepted as correct.

A dozen donuts costs 49¢ less than twelve individual donuts. If d is the cost of a dozen donuts in dollars, what is the formula for the cost of a single donut in cents?

[symbolic formatting help](#)

- Click the preview button  to see the expression you entered in formatted mathematical notation. This is often important in order to see if you have placed your parentheses correctly.

Clicking the preview button in the above question would display the following formatted notation:

$$\frac{100d + 49}{12}$$

- Edit your response and preview it again if needed. Submit your response only when the formatted notation is correct.

Notes:

- Angles for trigonometric functions are expressed in radians.
- Answers are case-sensitive; x and X are not the same.
- Do not type commas in numbers; 5,280 is not correct.

Examples: Answering Symbolic Questions with Calculator Notation

The following examples illustrate entry of some common expressions.

Expression	Type this	Click the preview button  to display this
A simple expression with integers	$2x+52500$	$2x + 52500$
A polynomial with a fractional coefficient	$(1/2)x^2+4x+2$	$\left(\frac{1}{2}\right)x^2 + 4x + 2$
A simple inequality	$x>=-4$	$x \geq -4$
A square root	$\text{sqrt}(x)$	\sqrt{x}
A cube root	$\text{root3}(x)$	$\sqrt[3]{x}$
An expression involving pi and Euler's number	$\text{pi}+\text{exp}(2)$	$\pi + \text{exp}(2)$
The natural logarithm of an absolute value	$\ln(\text{abs}(x))$	$\ln(x)$
An inverse tangent in radians	$\text{atan}(x)$	$\text{atan}(x)$

See Also:

- www.webassign.net/symbolic2.html

Answering mathPad Questions

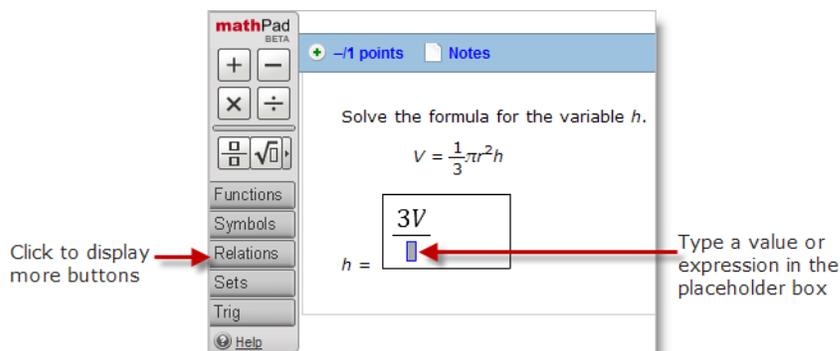
WebAssign mathPad questions are displayed with a rectangular answer box similar to answer boxes used for other question types, but when you click a mathPad-enabled answer box, the mathPad palette opens, allowing you to answer the question with a correctly formatted mathematical expression.

Notes:

- mathPad requires Flash 10 or higher. You can obtain the free Flash plug-in from www.adobe.com/products/flashplayer/.
- You cannot use the keyboard to move the insertion point to a mathPad-enabled answer box. You must use the mouse.
- The mathPad palette stays open until you click outside of the answer box.

To answer a mathPad question:

Click the mathPad buttons or type a mathematical expression to answer the question. The expression is displayed in the answer box as you enter it. If necessary, the answer box becomes larger to fit your answer.



Some mathPad buttons insert blue-bordered placeholder boxes to show you where you can type numbers, variables, or expressions. For example, if you insert a fraction, placeholder boxes are displayed for both the numerator and denominator. Use the keyboard or mouse to navigate to each placeholder box, and insert the values or expressions you need to complete your answer.

You can add math notation using the keyboard and mathPad buttons, and edit your response in the answer box.

To do this	Do this
Enter math notation.	Click mathPad buttons and type.
Enter variables.	Type the variable name using the case and spelling specified in the question. Variables are automatically italicized.

To do this	Do this
Enter lowercase or uppercase Greek letters.	Type either the lowercase or capitalized name of the letter, for example, delta to insert δ or Delta to insert Δ .
Display or hide additional mathPad buttons.	Click Functions, Symbols, Relations, Sets, or Trig.
Move the insertion point in the answer box.	Press the HOME, END, and arrow keys.
Select part of the expression.	Press either SHIFT+LEFT ARROW or SHIFT+RIGHT ARROW
Select the entire expression.	Press CTRL+A
Copy the selected part of the expression.	Press CTRL+C
Cut the selected part of the expression.	Press CTRL+X
Paste into the expression. You can only paste in the same answer box that you copied or cut from.	Press CTRL+V
Delete the character to the left of the insertion point, the selected expression, or notation such as fractions.	Press BACKSPACE
Delete the character to the right of the insertion point, the selected expression, or notation such as fractions.	Press DELETE

For a complete list of notation you can enter for mathPad questions, see Entering Math Notation in mathPad, calcPad, and physPad on page 118.



Notes:

- Typing + on the numeric keypad inserts =. To insert the plus sign using the numeric keypad, press SHIFT+PLUS SIGN.
- Some characters cannot be entered from the keyboard when using Firefox on a Mac. These include <, >, and |. Use the buttons to insert these characters.
- Angles for trigonometric functions are expressed in radians.
- Answers are case-sensitive; x and X are not the same.
- Do not type commas in numbers; 5,280 is not correct.

Examples: Entering Math Notation with mathPad

The following examples illustrate entry of some common expressions.

Expression	Do this	To display this
A simple expression with integers	Type $2x+52500$	$2x + 52500$
A polynomial with a fractional coefficient	1. Type 1/2 and press the RIGHT ARROW key 2. Type x^2 and press the RIGHT ARROW key 3. Type $+4x+2$	$\frac{1}{2}x^2 + 4x + 2$
A simple inequality	Type $x \geq -4$	$x \geq -4$

Expression	Do this	To display this
A square root	Type sqrt(x)	\sqrt{x}
A cube root	<ol style="list-style-type: none"> 1. Click Functions >  2. Type 3 and press the RIGHT ARROW key 3. Type x 	$\sqrt[3]{x}$
An expression involving pi and Euler's number	<ol style="list-style-type: none"> 1. Type pi+ 2. Click Functions >  3. Type 2 	$\pi + e^2$
The natural logarithm of an absolute value	Type either of the following: ln(x) ln(abs(x))	$\ln(x)$
A complex number	<ol style="list-style-type: none"> 1. Type 2+3 2. Click Symbols >  	$2 + 3i$

See Also:

- Entering Math Notation in mathPad, calcPad, and physPad

Answering calcPad Questions

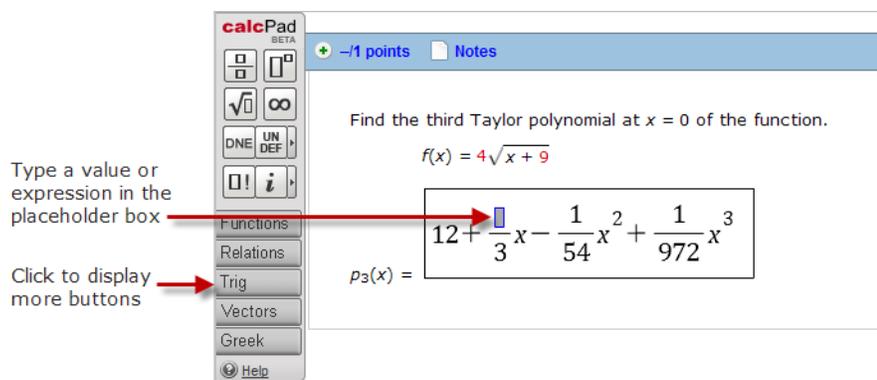
WebAssign calcPad questions are displayed with a rectangular answer box similar to answer boxes used for other question types, but when you click a calcPad-enabled answer box, the calcPad palette opens, allowing you to answer the question with a correctly formatted mathematical expression.

**Notes:**

- calcPad requires Flash 10 or higher. You can obtain the free Flash plug-in from www.adobe.com/products/flashplayer/.
- You cannot use the keyboard to move the insertion point to a calcPad-enabled answer box. You must use the mouse.
- The calcPad palette stays open until you click outside of the answer box.

To answer a calcPad question:

Click the calcPad buttons or type a mathematical expression to answer the question. The expression is displayed in the answer box as you enter it. If necessary, the answer box becomes larger to fit your answer.



Some calcPad buttons insert blue-bordered placeholder boxes to show you where you can type numbers, variables, or expressions. For example, if you insert a fraction, placeholder boxes are displayed for both the numerator and denominator. Use the keyboard or mouse to navigate to each placeholder box, and insert the values or expressions you need to complete your answer.

You can add math notation using the keyboard and calcPad buttons, and edit your response in the answer box.

To do this	Do this
Enter math notation.	Click calcPad buttons and type.
Enter variables.	Type the variable name using the case and spelling specified in the question. Variables are automatically italicized.
Enter lowercase or uppercase Greek letters.	Type either the lowercase or capitalized name of the letter, for example, delta to insert δ or Delta to insert Δ .
Display or hide additional calcPad buttons.	Click Functions , Relations , Trig , Vectors , or Greek .
Move the insertion point in the answer box.	Press the HOME, END, or arrow keys.
Select part of the expression.	Press either SHIFT+LEFT ARROW or SHIFT+RIGHT ARROW
Select the entire expression.	Press CTRL+A
Copy the selected part of the expression.	Press CTRL+C
Cut the selected part of the expression.	Press CTRL+X
Paste into the expression. You can only paste in the same answer box that you copied or cut from.	Press CTRL+V
Delete the character to the left of the insertion point, the selected expression, or notation such as fractions.	Press BACKSPACE
Delete the character to the right of the insertion point, the selected expression, or notation such as fractions.	Press DELETE

For a complete list of notation you can enter for calcPad questions, see Entering Math Notation in mathPad, calcPad, and physPad on page 118.



Notes:

- Typing + on the numeric keypad inserts =. To insert the plus sign using the numeric keypad, press SHIFT+PLUS SIGN.
- Some characters cannot be entered from the keyboard when using Firefox on a Mac. These include <, >, and |. Use the buttons to insert these characters.
- Angles for trigonometric functions are expressed in radians.
- Answers are case-sensitive; x and X are not the same.
- Do not type commas in numbers; 5,280 is not correct.

Examples: Entering Math Notation with calcPad

The following examples illustrate entry of some common expressions.

Expression	Do this	To display this
A simple expression with integers	Type $2x+52500$	$2x + 52500$
A polynomial with a fractional coefficient	1. Type $1/2$ and press the RIGHT ARROW key 2. Type x^2 and press the RIGHT ARROW key 3. Type $+4x+2$	$\frac{1}{2}x^2 + 4x + 2$
A simple inequality	Type $x \geq -4$	$x \geq -4$
A square root	Type $\text{sqrt}(x)$	\sqrt{x}
A cube root	1. Click Functions >  2. Type 3 and press the RIGHT ARROW key 3. Type x	$\sqrt[3]{x}$
An expression involving pi and Euler's number	1. Type $\pi+$ 2. Click Functions >  3. Type 2	$\pi + e^2$
The natural logarithm of an absolute value	Type either of the following: $\ln(x)$ $\ln(\text{abs}(x))$	$\ln(x)$
A complex number	1. Type $2+3$ 2. Click 	$2 + 3i$

Expression	Do this	To display this
A vector in vector bracket form	1. Click Vectors >  2. Type 12, 15, 22	$\langle 12, 15, 22 \rangle$
A vector in i-j-k form	1. Type 5 2. Click Vectors >  3. Type +24 4. Click Vectors >  5. Type +4 6. Click Vectors > 	$5\mathbf{i} + 24\mathbf{j} + 4\mathbf{k}$

See Also:

- Entering Math Notation in mathPad, calcPad, and physPad

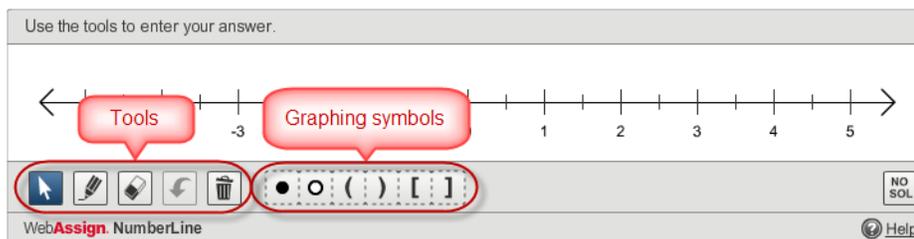
Answering NumberLine Questions

The NumberLine tool lets you solve two types of number line questions: one in which you locate points or graph intervals and inequalities on a real number line graph, which is the default mode, and another where you indicate point positions on a number line graph, which is points mode.

 **Note:** The NumberLine tool requires Flash 8 or higher. You can obtain the free Flash plug-in from www.adobe.com/products/flashplayer/.

Default Mode

The NumberLine tool in this mode includes a formatted display area in the middle and a row of buttons at the bottom. The first five buttons are tool buttons. The next six are graphing symbols.



To answer a number line question in this mode:

Use the NumberLine tool to graph the objects that represent your answer, or if there is no solution, and click the **No Solution** button. A correct or incorrect icon is displayed in the lower right corner of the NumberLine tool after your answer has been graded.

Task	Tool or graphing symbol	Steps
Graph a closed circle		<ol style="list-style-type: none"> 1. Click the Select tool. 2. From the graphing symbols palette, drag the closed circle symbol onto the appropriate location on the number line graph.
Graph an open circle		<ol style="list-style-type: none"> 1. Click the Select tool. 2. From the graphing symbols palette, drag the open circle symbol onto the appropriate location on the number line graph.
Graph a left parenthesis		<ol style="list-style-type: none"> 1. Click the Select tool. 2. From the graphing symbols palette, drag the left parenthesis symbol onto the appropriate location on the number line graph.
Graph a right parenthesis		<ol style="list-style-type: none"> 1. Click the Select tool. 2. From the graphing symbols palette, drag the right parenthesis symbol onto the appropriate location on the number line graph.
Graph a left bracket		<ol style="list-style-type: none"> 1. Click the Select tool. 2. From the graphing symbols palette, drag the left bracket symbol onto the appropriate location on the number line graph.
Graph a right bracket		<ol style="list-style-type: none"> 1. Click the Select tool. 2. From the graphing symbols palette, drag the right bracket symbol onto the appropriate location on the number line graph.
Draw a line between two objects		<ol style="list-style-type: none"> 1. Click the Draw tool. 2. Place your cursor anywhere between the two objects and click.
Create a ray or fill the entire real number line		<ol style="list-style-type: none"> 1. Click the Draw tool. 2. Place your cursor anywhere between the endpoint and the infinity arrow or both infinity arrows and click.
Indicate that no solution exists		Click the No Solution button.
Delete an object		<ol style="list-style-type: none"> 1. Click the Erase tool. 2. Click the object you want to delete. <p>Note that any lines that are touching the object are also erased.</p>

Task	Tool or graphing symbol	Steps
Delete all objects		1. Click the Clear All tool. A message is displayed confirming you want to clear all placed objects. 2. Click OK .
Undo the last action		Click the Undo tool.
View help for the NumberLine tool		Click Help in the lower right corner of the NumberLine tool.

Note: You cannot completely overlap a symbol with another symbol.

Tip: You can use the Select tool to place a symbol on the number line graph by clicking on the number line graph. When you do this, the symbol style drawer opens above the symbol. Use the symbol style drawer to change the type of symbol that is displayed.

Points Mode

The NumberLine tool in points mode includes a set of points at the top, a formatted display area in the middle, and a row of tool buttons at the bottom.

Click and drag each point to its appropriate position. Some points might be unused.

$-\pi$

4

15.2

$\sqrt{3}$

Points









Tools

[]

NO SOL

WebAssign. NumberLine 

To answer a number line question in this mode:

In the NumberLine tool, drag the points from above the number line graph to the correct location on the number line graph, or if there is no solution, click the **No Solution** button. A correct or incorrect icon is displayed in the lower right corner of the NumberLine tool after your answer has been graded.

Task	Tool or graphing symbol	Steps
Place a point on the number line graph		<ol style="list-style-type: none"> 1. Click the Select tool. 2. From the holding area above the number line, drag the point to the appropriate location on the number line graph.
Indicate that no solution exists		Click the No Solution button.
Delete an object		<ol style="list-style-type: none"> 1. Click the Erase tool. 2. Click the object you want to delete.
Delete one or all placed points		<ol style="list-style-type: none"> 1. Click the Clear All tool. A message is displayed confirming you want to clear the placed points. 2. Click OK.
Undo the last action		Click the Undo tool.
View help for the NumberLine tool		Click Help in the lower right corner of the NumberLine tool.

 **Note:** You cannot completely overlap two points.

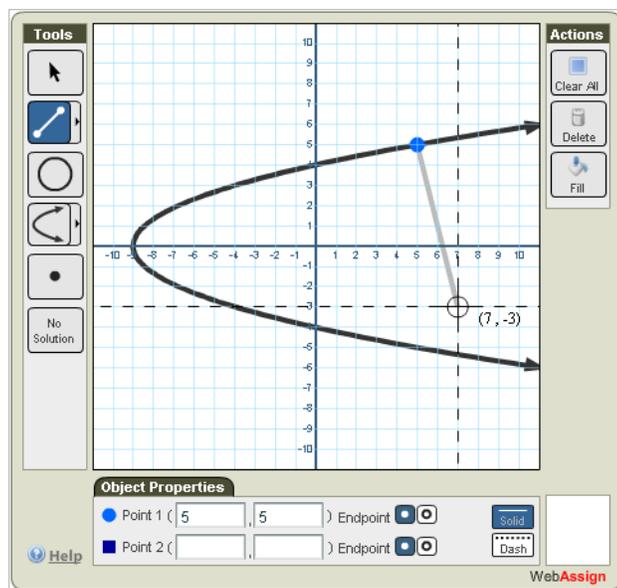
Answering Graphing Questions

The WebAssign graphing tool lets you graph one or more mathematical elements directly on a set of coordinate axes. Your graph is then scored automatically by WebAssign when you submit the assignment for grading.

The WebAssign graphing tool currently supports points, rays, segments, lines, circles, and parabolas. Inequalities can also be indicated by filling one or more areas.

 **Note:** The WebAssign graphing tool requires Flash 8 or higher. You can obtain the free Flash plug-in from www.adobe.com/products/flashplayer/.

When you work on a graphing question, the WebAssign graphing tool displays below the question.



Depending on the question, the graphing tool might display both x and y axes, or only the x axis. If only the x axis is displayed, you can specify only x coordinates; the y coordinate will always be 0. The maximum and minimum allowed values on the graph in the graphing tool are also dependent on the question.

To answer a graphing question:

Use the WebAssign graphing tool to graph the objects that represent your answer, and then click either **Submit New Answers to Question** or **Submit Whole Question**, depending on the submission options for the assignment. A correct or incorrect icon displays in the lower right corner of the graphing tool.

Task	Tool	Steps
Graph a point		<ol style="list-style-type: none"> 1. Click the Point tool. 2. Click a location in the graph.
Graph a line		<ol style="list-style-type: none"> 1. Expand the line tools, and click the Line tool. 2. Click the location of the first point on the line. 3. Click the location of a second point on the line.
Graph a ray		<ol style="list-style-type: none"> 1. Expand the line tools, and click the Ray tool. 2. Click the location of the endpoint of the ray. 3. Click the location of a second point on the ray.
Graph a line segment		<ol style="list-style-type: none"> 1. Expand the line tools, and click the Line Segment tool. 2. Click the location of one endpoint of the line segment. 3. Click the location of the second endpoint of the line segment.
Graph a circle		<ol style="list-style-type: none"> 1. Click the Circle tool. 2. Click the of the center of the circle. 3. Click the location of a point on the circle.

Task	Tool	Steps
Graph a parabola with horizontal symmetry		<ol style="list-style-type: none"> 1. Expand the parabola tools, and click the parabola tool with horizontal symmetry. 2. Click the location of the vertex of the parabola. 3. Click the location of another point on the parabola.
Graph a parabola with vertical symmetry		<ol style="list-style-type: none"> 1. Expand the parabola tools, and click the parabola tool with vertical symmetry. 2. Click the location of the vertex of the parabola. 3. Click the location of another point on the parabola.
Indicate that no solution exists		<ol style="list-style-type: none"> 1. Click the No Solution tool. 2. If any objects are currently on the graph, a confirmation dialog displays. Click Yes to confirm that you want to clear the graph.
Select an object to change		<ol style="list-style-type: none"> 1. Click the Selection tool. 2. Click the object in the graph that you want to change.
Change an object's coordinates		<ol style="list-style-type: none"> 1. Select an object in the graph. 2. In the Object Properties below the graph, enter values for the object's center, vertex, or points. 3. Enter the coordinates precisely. You can type decimal values, or you can type fractional values using the forward slash character, as in $2/3$. 4. The graphing tool does not accept values that are outside of the displayed coordinate grid.
Move an object with the mouse		<ol style="list-style-type: none"> 1. Select an object in the graph. 2. Click and drag the object to a new location.
Move an object with the keyboard		<ol style="list-style-type: none"> 1. Select an object in the graph. 2. Press the cursor keys to move the object by single units up, down, left, or right.
Reshape an object with the mouse		<ol style="list-style-type: none"> 1. Select an object in the graph. 2. Click and drag the center, vertex, or specified point to a new location.
Fill a region of the graph to specify inequality		<ol style="list-style-type: none"> 1. Graph one or more boundaries for the inequality. 2. Click the Fill tool. 3. Click a location in the region that should be filled.
Clear a filled region of the graph		<ol style="list-style-type: none"> 1. Click the Fill tool. 2. Click a location in the filled region that should be cleared.
Set an open endpoint for a ray or line segment		<ol style="list-style-type: none"> 1. Select a ray or line segment in the graph. 2. Click the Open Endpoint tool for the endpoint that should be open.
Set a closed endpoint for a ray or line segment		<ol style="list-style-type: none"> 1. Select a ray or line segment in the graph. 2. Click the Closed Endpoint tool for the endpoint that should be closed.
Set a dashed line style to specify inequality		<ol style="list-style-type: none"> 1. Select an object in the graph. 2. Click the Dash tool to graph the object as a dashed line or curve.
Set a solid line style		<ol style="list-style-type: none"> 1. Select an object in the graph. 2. Click the Solid tool to graph the object as a solid line or curve.

Task	Tool	Steps
Delete an object		<ol style="list-style-type: none"> 1. Select an object in the graph. 2. Click Delete or press Delete on the keyboard.
Delete all objects		<ol style="list-style-type: none"> 1. Click Clear All. 2. If any objects are currently on the graph, a confirmation dialog is displayed. Click Yes to confirm that you want to clear the graph.
View help for the graphing tool		<ol style="list-style-type: none"> 1. Click Help in the lower left corner of the graphing tool.

**Tips:**

- When you are setting or moving a point on the graph, dashed coordinate lines and coordinate values are displayed to help you.
- You can specify coordinates for objects when you are creating them by typing values in the Object Properties section of the graphing tool.
- You can click the endpoint of an unselected ray or line segment to toggle it between closed and open.
- You can print a graph by using your browser's print function.

See Also:

- [Tutorial: Graphing on Number Lines at www.webassign.net/watutorials/graphpad/tutorial-1.swf](http://www.webassign.net/watutorials/graphpad/tutorial-1.swf)
- [Tutorial: Graphing Parabolas at www.webassign.net/videos/GraphPad%20Parabolas.swf](http://www.webassign.net/videos/GraphPad%20Parabolas.swf)
- [Tutorial: Graphing Circles at www.webassign.net/videos/GraphPad%20Circles.swf](http://www.webassign.net/videos/GraphPad%20Circles.swf)
- [Tutorial: Graphing Lines at www.webassign.net/videos/GraphPad%20Lines.swf](http://www.webassign.net/videos/GraphPad%20Lines.swf)
- [Tutorial: Graphing Inequalities at www.webassign.net/videos/GraphPad%20D%20Inequalities.swf](http://www.webassign.net/videos/GraphPad%20D%20Inequalities.swf)
- [Tutorial: Graphing Systems of Equations at www.webassign.net/videos/GraphPad%20Systems.swf](http://www.webassign.net/videos/GraphPad%20Systems.swf)

Answering Chemistry Questions

Some questions in WebAssign provide tools for entering chemical formulas or drawing chemical structures.

- chemPad questions display correctly formatted chemical notation as you type your response.
- MarvinSketch and JME (Java Molecular Editor) questions allow you to draw chemical structures for your response.

Some questions in chemistry are numerical questions, usually requiring you to specify the correct number of significant figures. See Answering Numerical or Math Questions on page 43 for information about answering these questions.

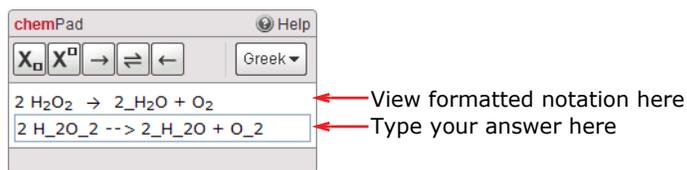
This section contains the following topics:

- Answering chemPad Questions
- Answering MarvinSketch Questions
- Answering JME Questions

Answering chemPad Questions

Use WebAssign's chemPad to enter responses that are automatically displayed in correct chemical notation.

The chemPad tool includes a row of buttons at the top, a formatted display area in the middle, and a text entry box at the bottom.



To answer a chemPad question:

Type your answer or click buttons to formulate your response in the text entry box. chemPad automatically updates the display area to show the formatted chemical notation.

The formatted chemical notation in the display area helps you to know that what you are typing represents the chemical formula or equation you intend to submit for your response.

Use the chemPad buttons as a way to enter some kinds of notation. You can pause the pointer over any button to see its description.

To enter this	Click this	Type this
Subscript		_ (underscore)
Superscript		^ (caret)
Forward Reaction Arrow		-->
Equilibrium Reaction		<=>
Reverse Reaction Arrow		<--
Lowercase Greek letters such as α , β , δ		The lowercase name of the letter, such as alpha, beta, delta
Uppercase Greek letters such as Δ , Σ , Ω		The capitalized name of the letter, such as Delta, Sigma, Omega
Stacked Fraction		/
Dot (·)		. (period) or *

 **Notes:**

- chemPad is designed to minimize your need to add formatting to your answer. For most questions, you do not need to indicate to chemPad where to end a subscript or superscript, or to specifically delimit special symbols like arrows.
- Type spaces where they belong in your notation, such as between quantum levels in an electron configuration and between chemical formulas and arrows or plus signs in reaction equations.
- Typing an alphabetic character or a space ends a subscript or superscript. For example, type H_20 to display H₂O, or Na^+ + Cl^- to display Na⁺ + Cl⁻.
- To type advanced notation such as general formulas and equilibrium equations, enclose the content of a superscript or subscript in braces {}. For example, type K_{c} = [CO_2] to display $K_c = [CO_2]$.
- The same rules are used to display the formatted notation and to score your response, so ensure that your formatted notation represents the answer you want to submit.

Examples: Using chemPad to Enter Common Notation

The following examples illustrate entry of some common notation.

Subject	Scenario	Type this	To display this
Molecules	Using subscripts to format molecular ratios in chemical formulas	H_20	H ₂ O
Simple Ions	Entering charges	Ca^2+	Ca ²⁺
Molecular or Compound Ions	Entering charges and molecular ratios	SO_4^2-	SO ₄ ²⁻
Complex Ions	Grouping with subscripts and superscripts	[Co(SCN)_2(H_2O)_4]^+	[Co(SCN) ₂ (H ₂ O) ₄] ⁺
Isotope	Entering an isotopic mass number in the so-called M/A or M/Z format	^233_91Pa	²³³ ₉₁ Pa
Chemical Reactions	Entering a combination of correctly formatted chemical formulas and symbols	2 H_2O_2 --> 2 H_2O + O_2	2 H ₂ O ₂ → 2 H ₂ O + O ₂
Chemical Reactions with States of Matter	Entering a combination of correctly formatted chemical formulas with their respective states of matter and symbols	CH_4(g) + 4 S(s) --> CS_2(l) + 2 H_2S(g)	CH ₄ (g) + 4 S(s) → CS ₂ (l) + 2 H ₂ S(g)
Electron Configuration	Using complete notation	1s^2 2s^2 2p^5	1s ² 2s ² 2p ⁵

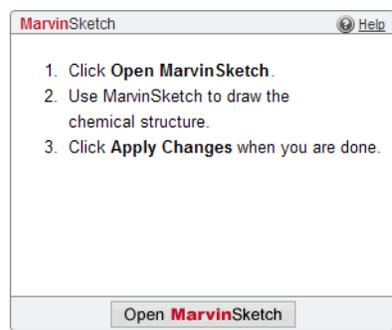
Subject	Scenario	Type this	To display this
Electron Configuration	Using noble gas notation	[He] 2s ² 2p ⁵	[He] 2s ² 2p ⁵
Equilibrium Expressions	Including a stacked fraction and multiplication dots	$K_c = \frac{[\text{COCl}] * [\text{Cl}]}{[\text{CO}] * [\text{Cl}_2]}$	$K_c = \frac{[\text{COCl}] \cdot [\text{Cl}]}{[\text{CO}] \cdot [\text{Cl}_2]}$

Answering MarvinSketch Questions

Some questions require you to use MarvinSketch to draw chemical structures that are automatically scored in WebAssign.

Note: Java is required to answer MarvinSketch questions. See System Requirements for WebAssign on page 4.

In your assignments, MarvinSketch questions display a labeled frame. If the question defines an initial drawing, or if you have created a drawing to answer the question, it is displayed in the frame. Otherwise, the frame lists basic instructions for getting started.

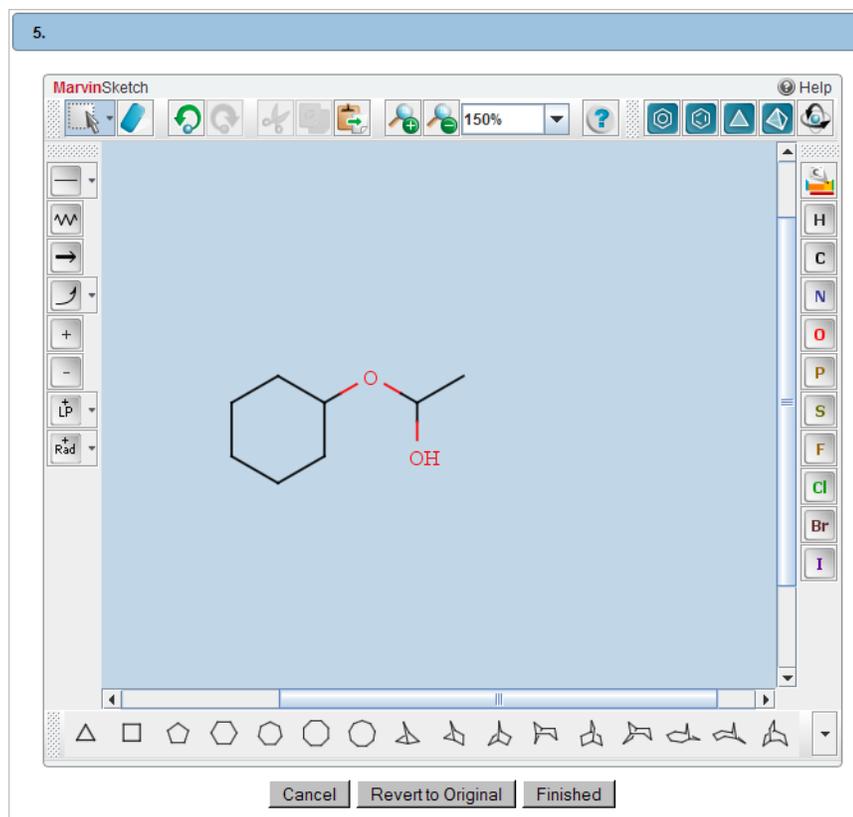


To answer a MarvinSketch question:

1. Click **Open MarvinSketch**, or click anywhere in the MarvinSketch frame.

Important: Displaying MarvinSketch might take a minute or so. You might see a Java logo while MarvinSketch is being loaded. Do not close this window before MarvinSketch has displayed or your browser might shut down unexpectedly, causing you to lose any unsaved work.

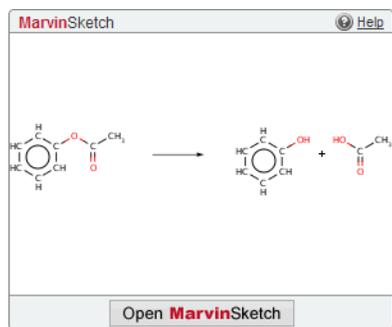
When you open MarvinSketch to answer a question, the MarvinSketch editor opens in a new window.



2. Use the toolbars to draw a chemical structure.

- To cancel any work you have done in the current MarvinSketch window, click **Cancel**. The window closes and your answer in the assignment is not changed.
- If the question started with an initial drawing, click **Revert to Original** to cancel all of your work for the question and revert to the initial drawing.

3. When you are finished, click **Finished**. The window closes and your answer is displayed in the assignment.



Drawing Chemical Structures in MarvinSketch

The following table describes how to draw and edit chemical structures and reactions in marvinSketch.

Task	Steps
Add an atom of one of the following elements: H, C, N, O, P, S, F, Cl, Br, I	<ol style="list-style-type: none"> 1. Click the element symbol. 2. Click in the drawing area.
Add any atom	<ol style="list-style-type: none"> 1. Click . 2. Click the element symbol in the periodic table. 3. Close or move the Periodic System window. 4. Click in the drawing area.
Add a special atom type or node, such as Q, M, X, and LP	<ol style="list-style-type: none"> 1. Click . 2. Click the Advanced tab. 3. Click the symbol on the Advanced page. 4. Close or move the Periodic System window. 5. Click in the drawing area.
Add an atom and its bond to an existing atom	<ol style="list-style-type: none"> 1. Click the element symbol for the new atom. 2. Drag from the existing atom until the symbol for the new atom is displayed under the pointer.
Add two bonded carbon atoms	<ol style="list-style-type: none"> 1. Click the bond tool . 2. Click in the drawing area.
Add a chain of carbon atoms	<ol style="list-style-type: none"> 1. Click . 2. Drag in the drawing area until the number of carbon atoms you want to insert is displayed under the pointer.
Replace an atom	<ol style="list-style-type: none"> 1. Click the element symbol for the new atom. 2. Click the atom to be replaced.
Add a single bond between existing atoms	<ol style="list-style-type: none"> 1. Click the bond tool . 2. Drag from one atom to another.
Add a double bond between existing atoms	<ol style="list-style-type: none"> 1. Click the arrow on the right side of the bond tool  and select Double. 2. Drag from one atom to another.
Change a bond type	<ol style="list-style-type: none"> 1. Click the arrow on the right side of the bond tool  and select the new bond type. 2. Click the bond to be changed.
Draw a reaction arrow (adds + signs among reactants and products; treats structures and names above arrow as agents)	<ol style="list-style-type: none"> 1. Click the reaction arrow tool . 2. Drag the pointer in the drawing area in the direction the arrow should point.
Add agent names to a reaction arrow	<ol style="list-style-type: none"> 1. Click . 2. Click the Advanced tab. 3. Click Pseudo on the Advanced page. 4. Type the agents in Value (subscripts are automatically formatted for values like H₂O). 5. Close or move the Periodic System window. 6. Click above the reaction arrow.

Task	Steps
Draw a graphical arrow	<ol style="list-style-type: none"> 1. Click the graphical arrow tool . 2. Drag the pointer in the drawing area in the direction the arrow should point.
Add a single electron (monovalent radical) to an atom	<ol style="list-style-type: none"> 1. Click the radical tool . 2. Click an atom.
Add lone pairs to an atom	<ol style="list-style-type: none"> 1. Click the arrow on the right side of the lone pairs tool  and select the number of lone pairs to add. 2. Click an atom.
Draw a curved harpoon to show the movement of a single electron	<ol style="list-style-type: none"> 1. Click the arrow on the right side of the electron flow tool  and select 1 Electron. 2. Click the source atom for the electron. 3. Click the target atom for the electron, or to create a bond, click the the midpoint between atoms.
Draw a curved arrow to show the movement of two electrons	<ol style="list-style-type: none"> 1. Click the arrow on the right side of the electron flow tool  and select 2 Electrons. 2. Click the source atom for the electrons. 3. Click the target atom for the electrons, or to create a bond, click the the midpoint between atoms.
Set the charge for an atom	<ol style="list-style-type: none"> 1. Right-click the atom. 2. Select Charge > value, where <i>value</i> is the charge you want to use.
Decrease an atom's charge	<ol style="list-style-type: none"> 1. Click . 2. Click an atom.
Increase an atom's charge	<ol style="list-style-type: none"> 1. Click . 2. Click an atom.
Select a single item	<ol style="list-style-type: none"> 1. Click the arrow on the right side of the selection tool  and select Rectangle Selection. 2. Click the item you want to select.
Select an entire structure	<ol style="list-style-type: none"> 1. Click the arrow on the right side of the selection tool  and select Structure Selection. 2. Click any part of a structure.
Select items in a rectangular region	<ol style="list-style-type: none"> 1. Click the arrow on the right side of the selection tool  and select Rectangle Selection. 2. Drag the pointer diagonally across the drawing area to select items.
Select items in an arbitrary region	<ol style="list-style-type: none"> 1. Click the arrow on the right side of the selection tool  and select Lasso Selection. 2. Drag the pointer to draw a boundary around the items you want to select.

Task	Steps
Select multiple items	<ol style="list-style-type: none"> Click the arrow on the right side of the selection tool  and select Rectangle Selection. Click the first item you want to select. Hold the SHIFT key and click any additional items you want to select.
Copy selected items to the clipboard	Click  or press CTRL+C.
Paste items from the clipboard	<ol style="list-style-type: none"> Click  or press CTRL+V. Click in the drawing area where you want to paste the clipboard items.
Delete selected items	Click  or press DELETE.
Delete items by clicking	<ol style="list-style-type: none"> Click . Click the items you want to delete.
Move an atom	<ol style="list-style-type: none"> Drag the atom to a new location.
Move selected items	<ol style="list-style-type: none"> Move the pointer toward the center of the selection until a square is displayed. Drag the selection to a new location.
Undo your last change	Click  or press CTRL+Z.
Set a mapping number for an atom	<ol style="list-style-type: none"> Right-click the atom you want to change. Select Map > M# where # is the mapping number to set.
Transform selected structure or entire drawing to aromatic representation	Click  .
Transform selected structure or entire drawing to non-aromatic representation	Click  .
Clean a two-dimensional drawing or selected structure	Click  .
Rotate a structure to align a bond horizontally	<ol style="list-style-type: none"> Right-click a bond in the structure. Select Align > Horizontally.
Rotate a structure to align a bond vertically	<ol style="list-style-type: none"> Right-click a bond in the structure. Select Align > Vertically.
Rotate selected items in 2 dimensions	<ol style="list-style-type: none"> Move the pointer toward the center of the selection until a rotation cue  is displayed. Drag the selection to rotate it around its center.
Rotate the drawing in 3 dimensions	<ol style="list-style-type: none"> Click . Drag the pointer to rotate the drawing.

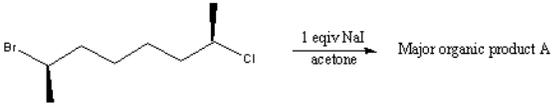
Task	Steps
Rotate selected structure in 3 dimensions	<ol style="list-style-type: none"> 1. Move the pointer toward the center of the selection until a square is displayed. 2. Right-click in the square and select Transform > Rotate in 3D. 3. Drag the pointer to rotate the structure.
Clean drawing in 2 dimensions	Click  . Standardizes bond lengths and angles to improve appearance. The drawing is converted to a 2-dimensional drawing if needed.
Clean drawing in 3 dimensions	Click  . Standardizes bond lengths and angles to improve appearance. The drawing is converted to a 3-dimensional drawing if needed.
Zoom in	Click  .
Zoom out	Click  .
Zoom to a specific magnification	<ol style="list-style-type: none"> 1. Select a zoom level from the zoom level list <input type="text" value="200%"/> or type a new zoom level in the box.

Answering JME Questions

Some instructors teaching organic chemistry use questions that require you to draw structures. The Java Molecular Editor (JME) helps you do that.

a) Open the editor below and draw the skeletal structure of the major organic product for the following reaction.

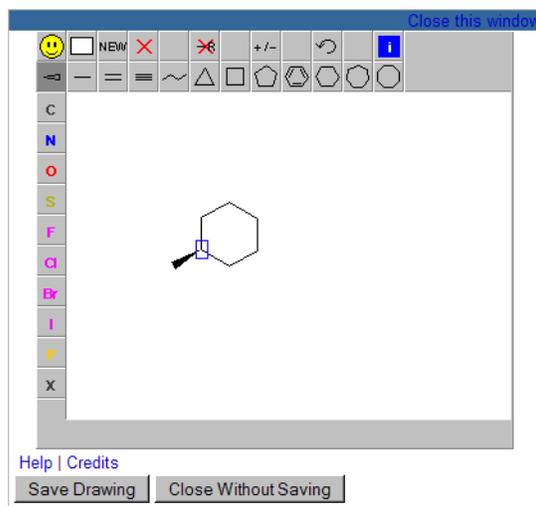
[? Organic Formatting Help](#)



A

To answer a JME question:

1. Click **Open JME Editor**.
2. Select the needed structure and click anywhere on the blank area.
3. Select the next needed structure and attach it to the correct location on the first structure.



4. Continue attaching structures until your drawing is complete.
5. When you are done, click **Save Drawing**.
6. The JME Editor closes and your drawing is entered in the answer space in text form (SMILES string).
7. Click **Submit**.

Answering physPad Questions

WebAssign physPad questions are displayed with a rectangular answer box similar to answer boxes used for other question types, but when you click a physPad-enabled answer box, the physPad palette opens, allowing you to answer the question with correctly formatted physics notation.

Notes:

- physPad requires Flash 10 or higher. You can obtain the free Flash plug-in from www.adobe.com/products/flashplayer/.
- You cannot use the keyboard to move the insertion point to a physPad-enabled answer box. You must use the mouse.
- The physPad palette stays open until you click outside of the answer box.

To answer a physPad question:

Click the physPad buttons or type an expression to answer the question. The expression is displayed in the answer box as you enter it. If necessary, the answer box becomes larger to fit your answer.

Some physPad buttons insert blue-bordered placeholder boxes to show you where you can type numbers, variables, or expressions. For example, if you insert a fraction, placeholder boxes are displayed for both the numerator and denominator. Use the keyboard or mouse to navigate to each placeholder box, and insert the values or expressions you need to complete your answer.

You can add notation using the keyboard and physPad buttons, and edit your response in the answer box.

To do this	Do this
Enter physics notation.	Click physPad buttons and type.
Enter variables.	Type the variable name using the case and spelling specified in the question. Variables are automatically italicized.
Enter lowercase or uppercase Greek letters.	Type either the lowercase or capitalized name of the letter, for example, delta to insert δ or Delta to insert Δ .
Display or hide additional physPad buttons.	Click Vectors , Math , Trig , Relations , Symbols , or Greek .
Move the insertion point in the answer box.	Press the HOME, END, and arrow keys.
Select part of the expression.	Press either SHIFT+LEFT ARROW or SHIFT+RIGHT ARROW
Select the entire expression.	Press CTRL+A
Copy the selected part of the expression.	Press CTRL+C
Cut the selected part of the expression.	Press CTRL+X
Paste into the expression. You can only paste in the same answer box that you copied or cut from.	Press CTRL+V
Delete the character to the left of the insertion point, the selected expression, or notation such as fractions.	Press BACKSPACE
Delete the character to the right of the insertion point, the selected expression, or notation such as fractions.	Press DELETE

Notes:

- Typing + on the numeric keypad inserts =. To insert the plus sign using the numeric keypad, press SHIFT+PLUS SIGN.
- Some characters cannot be entered from the keyboard when using Firefox on a Mac. These include <, >, and |. Use the buttons to insert these characters.
- Angles for trigonometric functions are expressed in radians.
- Answers are case-sensitive; x and X are not the same.
- Do not type commas in numbers; 5,280 is not correct.

Examples: Entering Physics Notation with physPad

The following examples illustrate entry of some common expressions.

Expression	Do this	To display this
An expression with numbers and subscripted variables	<ol style="list-style-type: none"> 1. Type 1/2 and press the RIGHT ARROW key 2. Type m_2 and press the RIGHT ARROW key 3. Type +4m_3 	$\frac{1}{2}m_2 + 4m_3$
A square root	Type sqrt(gh)	\sqrt{gh}
A cube root	<ol style="list-style-type: none"> 1. Click Math >  2. Type 3 and press the RIGHT ARROW key 3. Type m_1 and press the RIGHT ARROW key 4. Type m_2 and press the RIGHT ARROW key 5. Type m_3 and press the RIGHT ARROW key 	$\sqrt[3]{m_1 m_2 m_3}$
An expression involving Euler's number	<ol style="list-style-type: none"> 1. Click Functions >  2. Type 2 	e^2
An expression involving hbar (\hbar)	<ol style="list-style-type: none"> 1. Type 3 2. Click Symbols >  3. Type ^2 	$3\hbar^2$
A vector in hatted i-j-k form	<ol style="list-style-type: none"> 1. Type 5 2. Click Vectors >  3. Type i and press the RIGHT ARROW key 4. Type +24 5. Click Vectors >  6. Type j and press the RIGHT ARROW key 7. Type +4 8. Click Vectors >  9. Type k 	$5\hat{i} + 24\hat{j} + 4\hat{k}$
A vector in bold i-j-k form	<ol style="list-style-type: none"> 1. Type 5 2. Click Vectors >  3. Type +24 4. Click Vectors >  5. Type +4 6. Click Vectors >  	$5\mathbf{i} + 24\mathbf{j} + 4\mathbf{k}$
A vector in vector bracket form	<ol style="list-style-type: none"> 1. Click Vectors >  2. Type 5, 24, 4 	$\langle 5, 24, 4 \rangle$

Answering Poll Questions

Poll questions gather information. All responses are scored correct. Poll questions can be any type of question.

1.  -1 points  Notes

What grade do you expect to receive in this course?

- A
- B
- C
- D
- F

2.  -1 points  Notes

What is your favorite color?

6

Submitting Assignments

When you complete part or all of an assignment, you can save or submit it according to what your instructor allows.

This section contains the following topics:

- Saving and Submitting Work
- Understanding Feedback
- Understanding Partial Credit

Saving and Submitting Work

If your instructor allows you to save your work without submitting it while you are working on an assignment, the **Save Work** button is displayed next to the **Submit** button.

*** Important:** Saving your work is possible if the instructor allows it; however, saving your work does not submit it for grading. You need to click the **Submit** button to actually submit the work.

If you save your work, you might need to select **View Saved Work** when you return to an assignment you previously saved.

You can use the **Save Work** button periodically to save your work as you go along, and you can also save your work so that you can stop working on an assignment and continue working on it later. You can see and change your saved answers the next time you open the assignment.

To do this	Do this
Find out how many submissions you are allowed or have remaining for a question	Click the plus sign icon  for a question.
Save your work for all questions without submitting it	Click Save All Work at the bottom of the assignment.
Save your work for an individual question without submitting it	Click Save Work in the question.
See what your submission options are	Click About this Assignment at the top of the assignment.
See your saved answers for an individual question	Select View Saved Work in the question heading.
See your saved work for all questions	Select View Saved Work in the assignment heading at the top of the assignment.
Submit your answers for a single question (unless your assignment is set up to require submission of the entire assignment)	Click either of the following buttons for the question: Submit New Answers To Question or Submit Whole Question .
Submit your answers for all assignment questions	Click one of the following buttons at the end of the assignment: Submit All New Answers or Submit All Questions .

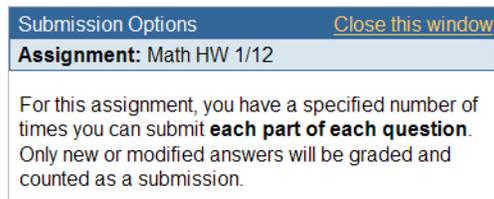
Depending on how your instructor set up the assignment, you might receive feedback immediately.

You might also see your score for each question or your whole assignment. Although typically only after the due date, you might also see what you answered incorrectly and what the correct answer was.

Submissions are counted differently, depending on whether your instructor allows you to submit each question separately, or requires you to submit the entire assignment at once.

Submitting Parts of Questions

If you are working on an assignment where you can submit each question part separately, the Submission Options window displays the following description when you click **About this Assignment**:



Some basic rules:

- Only new answers or answers modified *since the last submission* will be resubmitted.
- Your instructor sets the number of submissions allowed; this number can be different for each part of a question. Click the plus sign icon  to see the number of submissions for each part.
- If your instructor allows submissions for each question part, the first time you enter an answer and submit it, will count as your first submission of that question part.
- If you make a change to the answer and resubmit the question, it counts as your second submission.
- If you do not make a change to an answer, subsequent submissions of the answer do not count as additional submissions.

For example, if a question allows submission of parts, and you...

do this	and your answer is	the total submissions counted is	because
Submit with no answer		0	you did not enter an answer
Submit first answer	2.01	1	you entered an answer
Change your answer and resubmit	20.1	2	you changed your answer
Do not change your answer and resubmit	20.1	2	you did not change your answer
Resubmit first answer	2.01	3	your answer was modified from your last submission

The following example shows the scoring details for a question after you have submitted various parts of the question.

10. [1/3 points](#) [All Submissions](#) [Notes](#) Question: HoltPhys06 1.P.018.

Question part	1	2	3	Total
Points	1	0/1	0/1	1/3
Submissions	1/2	2/2	1/2	

The value of the speed of light is now known to be $2.997\,924\,58 \times 10^8$ m/s. Express the speed of light to each of the following levels of precision.

(a) with **five** significant figures
 ✓ m/s

(b) with **four** significant figures
 ✗ m/s

(c) with **eight** significant figures
 ✗

[Submit New Answers To Question 10](#) [Save Work](#) [Practice Another Version](#)

The scoring details are listed in a table with each question part corresponding to a numbered column. Note that when the scoring details are viewed, the part numbers are displayed beside the answer field for the corresponding part of the question. In this example, question part 1 corresponds to (a), part 2 to (b), and part 3 to (c).

The Points row of the scoring details table shows the points you earned for each question part out of the possible points for the part, and in the Total column also indicates the total points you earned out of the total possible points.

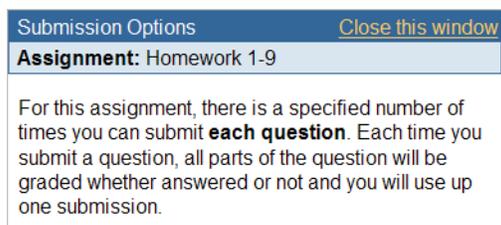
The Submissions row of the scoring details table shows the number of submissions out of the allowed submissions for each question part.

So, in the illustration above, the following information can be learned for each question part:

- (a) is question part 1. You earned 1 point out of 1 possible point, and submitted different answers 1 out of 2 possible times. Since 1 submission remains, the answer field is still active.
- (b) is question part 2. You earned 0 points out of 1 possible point, and submitted different answers 2 out of 2 possible times. Because you have used all possible submissions, the answer field is not active.
- (c) is question part 3. You earned 0 points out of 1 possible point, and submitted different answers 1 out of 2 possible times. Since 1 submission remains, the answer field is still active.

Submitting Whole Questions

When an assignment requires submission of each question, the Submission Options window displays the following description when you click **About this Assignment**:



When you click **Submit Whole Question**, all parts of the question are graded whether answered or not, and you use up one submission.

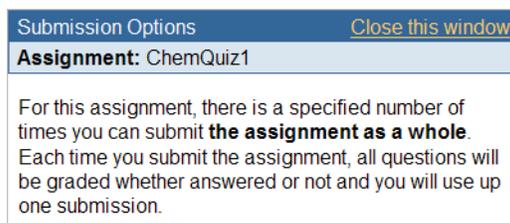
Important reminders:

- An empty answer box counts as a response and will be marked incorrect.
- If you submit part of the question, all parts are scored.
- Even if the answer is not changed and you submit the whole question, it counts as a submission.

To find out how many submissions you are allowed and have remaining, click the plus sign icon .

Submitting Entire Assignments

When an assignment requires submission of the entire assignment, the Submission Options window displays the following description when you click **About this Assignment:**



If you see the **Submit All Questions** button at the end of your assignment, your instructor requires that you submit the entire assignment at once, and does not allow submission of single questions.

 **Important:** Each time you click **Submit All Questions** it counts as a submission of all questions, whether you change an answer or not. The answer will be scored as incorrect if left blank.

Understanding Feedback

After you submit a question, question part, or assignment for grading, WebAssign records and grades your work. Depending on the question and the options that are enabled for the assignment, you will often see various kinds of feedback on your submitted work. Some feedback might be available only after the due date has passed for the assignment.

✳ Important: The kinds of feedback that are displayed for any particular question are dependent on both the question itself and on the options that your instructor enabled for the assignment.

WebAssign's feedback includes assignment scores, question and question part scores, marks identifying your correct and incorrect answers, answer keys, hints that provide guidance when answering the question, and solutions describing how the correct answer is obtained.

Current Score: 1/2 Due: Friday, February 27, 2009 10:30 AM EST About this Assignment View Last Response

Question	1	2	Total
Points	1/2	0/4	1/2

1. 1/2 points All Submissions Notes

Question part	1	2	Total
Points	1	0/1	1/2
Submissions	4/5	3/5	

Your firm has decided to convert from the English to the metric system of measurement. Your chief product, the Impressive Gizmo, has a length of 16.0 inches and mass of 13.2 ounces. Calculate the metric equivalents using the following conversion values:

1 in. = 2.54 cm
 1 oz. = 28.35 g

length = ✓ cm
 mass = ✗ g

Use multiplication.

Solution or Explanation

Multiply the length in inches by the number of centimeters per inch.
 Multiply the mass in ounces by the number of grams per ounce.

Assignment Scores

The assignment score and total possible points for the assignment are displayed in the assignment heading.

Question Scores

The score and total possible points for the question are displayed in the question heading.

Question Part Scores

If you click the plus sign icon in the question heading, the score and total possible points for each part of the question are displayed just below the question heading. Each question part is identified numerically with a label.

Correct and Incorrect Marks

Correct and incorrect marks indicate whether the most recent answer you submitted was correct or incorrect.

Mark	Meaning
✓	The submitted answer was correct.
✗	The submitted answer was incorrect.
⊙	The last submitted answer was correct, but you have changed the answer and have not submitted the question again.
⊗	The last submitted answer was incorrect, but you have changed the answer and have not submitted the question again.

 **Note:** Marks are never shown for essay, file-upload, and pencilPad questions, since these are graded manually.

Previous Responses

If enabled, you can see your previous responses to a question, with their correct and incorrect marks, by clicking **All Submissions** in the question heading.

Hints

Some questions provide hints. The hint might be enabled after a certain number of submissions, or only if your answer demonstrates a partial understanding of the question.

Keys

Keys identify the “correct” answer that is provided by the question. Depending on the question, other responses might also be graded as correct. Usually, keys are available only after the assignment due date or after you have used all of your submissions. After the key is provided, it is very unlikely that your instructor will grant an extension for the assignment.

 **Note:** After the due date, the key, if provided, comes with a warning that you will probably not get an extension for the assignment. Only your instructor can grant an extension.

Solutions

Some questions provide a solution that describes how the correct answer is obtained. As with keys, solutions are usually displayed only after you have used all of your submissions or after the assignment due date.

Understanding Partial Credit

An instructor can give partial credit. For example, you might get partial credit if you enter the wrong number and a dimensionally-correct unit, or if you enter an incorrect number of significant figures.

An instructor might also give you partial credit for entering a unit with the correct dimensionality and an incorrect number. Some instructors use the student's notes to decide whether to give partial credit.

7

Viewing Resource Materials

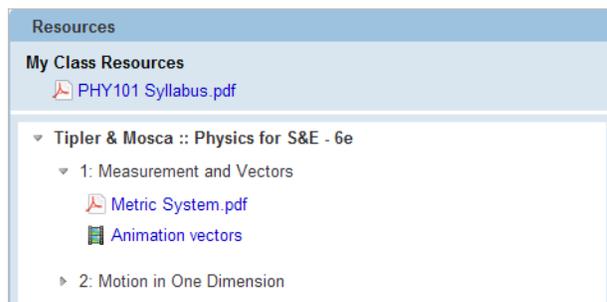
If your instructor has shared resource materials with you in WebAssign, you can view them from your class Home page.

- Informational resources provide you with information you need to know about your class. Examples include syllabi, grading rubrics, or instructions for answering questions.
- Learning resources help enhance or reinforce your understanding of the course content. Examples include supplemental reading materials, video files to aid in learning a topic, or reference materials such as a table of formulas and constants.

To view resource materials for a class:

1. Click **Home**.
2. If necessary, select a class from the **My Classes** menu.

Any resources your instructor has made available to you are displayed on your Home page for your class in the Resources panel.



The list of resources might include sections that can be expanded or collapsed.

- To expand part of the resources list, click the ▶ right arrow icon. The items under the expanded heading are listed.
 - To collapse part of the resources list, click the ▼ down arrow icon. The items under the collapsed heading are no longer displayed.
3. To view a resource, click its title in the Resources panel. Depending on your browser settings, you might have to choose to save or to open the resource. You might also have to choose an application to use when opening the resource.

8

Viewing eBooks

Online textbooks—eBooks—are available for some courses in WebAssign. Depending on the course, the eBook might be included with WebAssign access, or it might be an optional purchase.

eBooks generally contain the complete text of the printed textbook. Many eBooks also contain additional features and content not available in the printed textbook.

This section contains the following topics:

- Opening eBooks
- Using eBook Features
- Closing eBooks

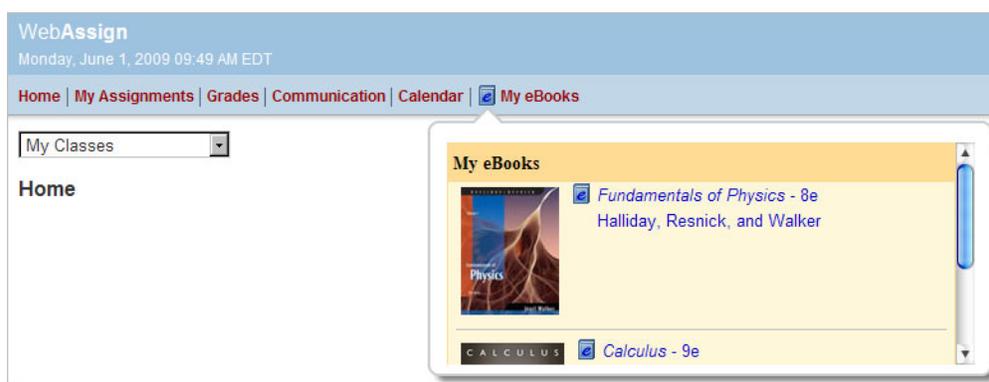
Opening eBooks

After you have purchased an eBook or WebAssign access for a class that includes an eBook at no additional charge, you can view the eBook whenever you are logged in to WebAssign for the duration of the class.

Note: Access to eBooks is *not* included with WebAssign access during your grace period. You can access eBooks for your classes only after purchasing WebAssign access.

To open an eBook you have purchased:

1. Click  **My eBooks** in your toolbar to display a list of the eBooks that are available.



2. Click the title of any eBook you have purchased to open it.
Your eBook opens in a new browser window or tab.

Tip: You can also open a purchased eBook by clicking its title when it is displayed on your class Home page. Some assignment questions might also contain links to the relevant sections of the eBook.

See Also:

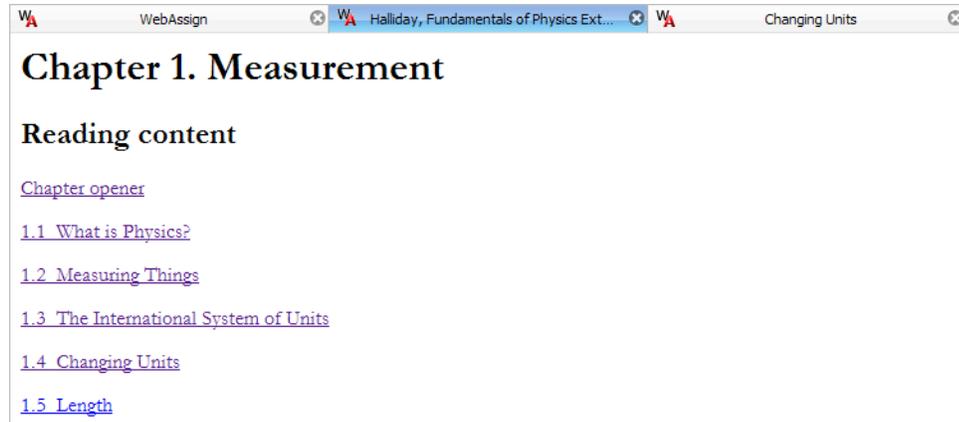
- Purchasing WebAssign Access and eBooks Online

Using eBook Features

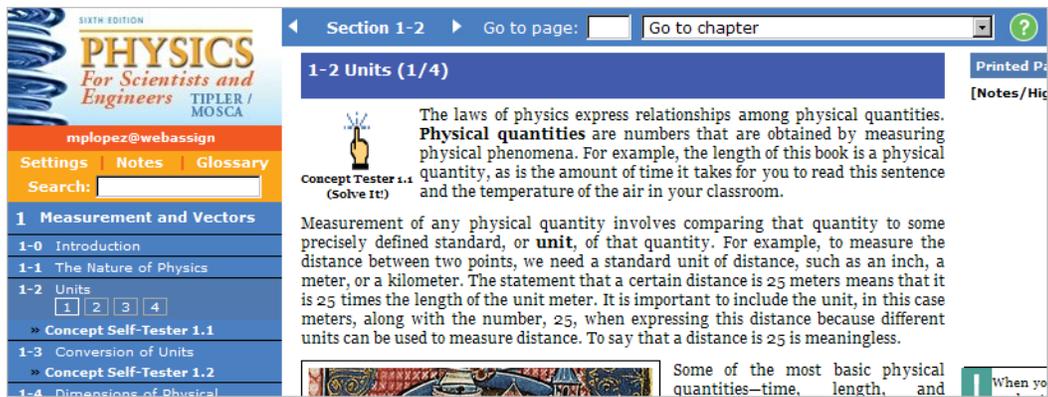
The features and implementation of each eBook is dependent on the publisher. Some eBooks are distributed as Web pages, some are PDF documents, and some use the free Adobe Flash player. Many eBooks include help information from the publisher that describes how to use the features that are available for that eBook.

The following three figures illustrate some of the differences among eBooks.

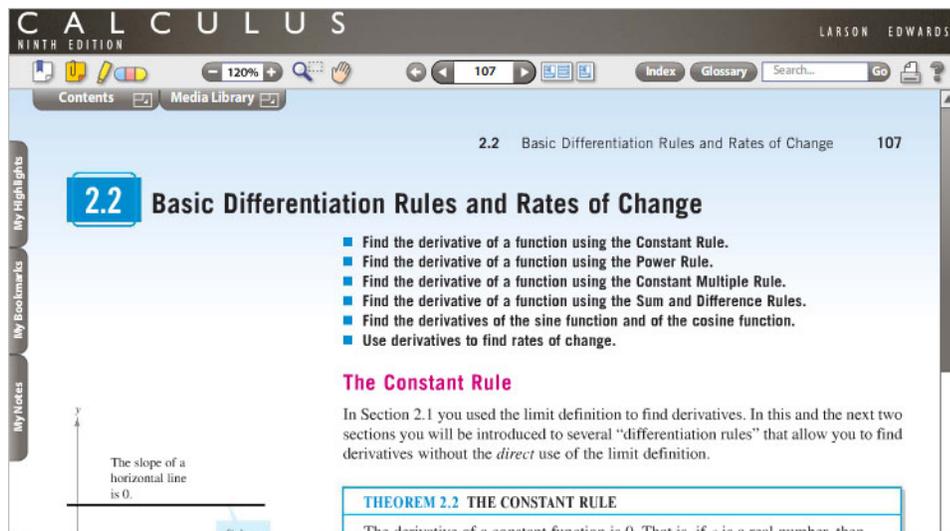
An eBook that opens each section in a separate window or browser tab:



An eBook that includes the navigation, content, search, and other features on a single Web page:



An eBook that uses Adobe Flash to provide features like annotating, bookmarking, and highlighting:



Many eBooks share some of the following characteristics:

- eBooks generally include the complete text of the printed textbook, along with all figures and illustrations.
- eBooks usually have a table of contents that you can click to navigate to specific chapters or sections.
- You can usually search for text in eBooks.
- You can usually navigate to a specific page number by typing the page number in a text box.
- You can often bookmark pages in the eBook.
- You can often add highlighting and notes to the eBook. Your highlighting and notes are saved between sessions and are available to you anytime you when you open the eBook.
- You can usually zoom in and out when viewing the eBook.
- You can sometimes click on links in the eBook which open media such as videos. Some of these additional media are interactive.
- You can usually print pages from the eBook.
- You can sometimes save the eBook to your computer for offline viewing.
- eBooks sometimes require either the free Adobe Reader or the free Adobe Flash Player.
- You can sometimes use an interactive glossary or click on certain terms in the text to view the glossary definition.
- Often the eBook will have a toolbar for navigating the eBook and implementing its various features.

See Also:

- System Requirements for WebAssign

Closing eBooks

When you are finished viewing an eBook, remember to close it.

 **Note:** When you log out of WebAssign, all of your open eBooks are automatically closed.

If your browser session is inactive for 5 hours, all of your open eBooks are automatically closed. A message is displayed 5 minutes before this happens to let you know that your eBooks will be closed. If your eBooks are closed, a message is displayed to let you know.

9

Mastering Concepts with the Personal Study Plan

The Personal Study Plan is a tool that provides you with practice exercises you can use to assess your skills to make sure you have the prerequisite or current skills you need to succeed in your course.

Using the plan, you can quickly gauge if you are prepared for an upcoming quiz or exam, and you can see the areas you need to improve upon. There are many different ways your instructor might set up a Personal Study Plan for your class. It is available with only some textbooks. Since your instructor sets up your plan, what you see may vary greatly in different classes you take.

The image displays several screenshots of the WebAssign Personal Study Plan interface. The top-left screenshot shows a 'Practice It' window with a pie chart titled 'How many households rent a house?' with data: Rent house 12%, Own home 31%, Rent apartment 47%, and Other 10%. The top-right screenshot shows the 'Personal Study Plan - Overview' page for 'MAT 101, section 101, Fall 2009' by Thomas Johnson. The bottom-left screenshot shows a 'Teach Me' section for '1.4 Adding Real Numbers, Properties of Addition' with a progress bar at 15% and a 'Try Again' button. The bottom-right screenshot shows a progress bar chart for various topics like 'Language of Algebra' (100%), 'Properties of Addition' (100%), 'Numbers' (100%), 'Order of Operations' (5%), 'Expressions Using Properties of Real Numbers' (62%), and 'Systems of Equations and Inequalities' (Not Attempted).

Some examples of how you might use the Personal Study Plan for your class are as follows:

- As a study guide to refresh your knowledge of supporting or prerequisite material when you are enrolled in a class that builds on that framework. Examples of this include math skills you might need from a beginning math course, such as pre-calculus, when you are currently enrolled in a calculus class.
- As proof of mastery, where you meet your instructor's mastery level for skills taught in your current course by answering a certain number of questions correctly on a chapter and/or section quiz of the plan (such as 80%) without any effect on your class grade.
- As credit toward your class grade, where you take the plan as you would for proof of mastery, with one important difference: your best score counts toward your class grade.

Your instructor lets you know how you should use the plan, and whether it counts for credit toward your final grade.

This section contains the following topics:

- Understanding your Personal Study Plan
- Determining if a Personal Study Plan is Set Up for Your Class
- Gaining the Most Benefit from Your Personal Study Plan
- Taking a Personal Study Plan for Credit
- Using a Personal Study Plan as a Study Tool
- Using the Personal Study Plan as a Refresher
- Taking the Personal Study Plan
- Using Personal Study Plan Online Resources
- Understanding Personal Study Plan Pages
- Identifying Which Sections You Need to Work On

Understanding your Personal Study Plan

A Personal Study Plan is more than just a simple, static tutorial that everyone takes the same way to get ready for a test or a quiz.

It is a targeted learning tool that tracks and displays your individual performance so you can get the most out of the plan and quickly find out what you need to learn.

Use your Personal Study Plan to sharpen your skills, increase your knowledge, and learn the key concepts of your course by focusing on the resources available to you and the subject matter that you need to work on the most.

Once you identify an area you need to focus on, you can then use the online resources in the Personal Study Plan to learn what you need.

Online resources, which are variations of different materials you can use to review the relevant subject matter, comprise a large part of the Personal Study Plan.

Each textbook offers different resources that help you learn the material.

The screenshot shows the WebAssign interface for a course titled "MAT 101, section 101, Fall 2009". The main content area displays a "Personal Study Plan - Teach Me" for the textbook "Tussy & Gustafson :: Elementary Algebra - 4e". The plan is divided into sections, with the first section being "1: An Introduction to Algebra". A "Teach Me" video player is overlaid on the screen, showing a handwritten solution for a word problem: "RACING PROGRAMS One month before a stock car race, the sale of ads for the official race program was slow. Only 12 pages, or just 30% of the available pages, had been sold. Find the total number of pages devoted to advertising in the program." The solution shows the equation $12 = 0.30 \cdot X$, which is then solved to find $X = 40$.

If your plan is not for credit, you can ignore the topics that you have already mastered and focus only on those topics where you need more review. If it counts for credit, of course, you need to go through the entire plan to receive credit.

Determining if a Personal Study Plan is Set Up for Your Class

If your instructor has set up a Personal Study Plan for your class, an overview section is displayed on your Home page for the course.

See Viewing your Personal Study Plan from Your Home Page for more information.

Personal Study Plan - Tussy & Gustafson :: Elementary Algebra - 4e	
Overview	0 / 5 Completed
1: An Introduction to Algebra	0 / 9
2: Equations, Inequalities, and Problem Solving	0 / 7
3: Linear Equations And Inequalities In Two Variables; Functions	0 / 8
4: Systems Of Linear Equations And Inequalities	0 / 5
5: Exponents and Polynomials	0 / 8

Gaining the Most Benefit from Your Personal Study Plan

How often you use your study plan and how much you gain from it is up to you. The main purpose of a Personal Study Plan is to improve your understanding of the material, and ultimately, your grade in the class.

You can use your Personal Study Plan to:

- Determine which areas you need to work on the most by viewing color-coded status indicators and icons that help guide you along the way.
- Access online resources such as videos, interactive tutorials, and reading material to help you master the material.
- Quickly view your progress, including your best and first scores, which the plan automatically tracks for you.
- Take practice tests on the material you need to master as many times as you want, until you gain the necessary skills and knowledge.
- Test yourself on one or more sections or chapters that you choose under test-like conditions, such as setting yourself a time limit at home, so you can be fully prepared for an upcoming test.
- Go through a section or a chapter of your Personal Study Plan whenever your schedule allows.
- Show your instructor that you are working toward meeting the learning objectives for your course. Your instructor can view your scores, see your progress, and use your results to see where you might need additional instruction.

Taking a Personal Study Plan for Credit

Although Personal Study Plans are always scored, your instructor has the option of setting it up to count toward your final grade, or for you to use for study purposes only.

If a Personal Study Plan is for credit, your instructor will let you know that your scores count as a part of your class grade, perhaps even as extra credit. Exactly how much the plan factors into your class grade is your instructor's choice.

You can take a Personal Study Plan as many times as you want in order to improve your score, whether it counts toward your grade or not. Your goal is always to complete each section of your plan by reaching or exceeding the mastery level your instructor set for you.

You can view the mastery level set for your Personal Study Plan on your Overview page. See Working with the Personal Study Plan Overview Page for more information.

The following is one way you might want to use a Personal Study Plan when it counts as credit toward your class grade:

1. Start by taking each section-level quiz in sequential order, starting with 1.1. (See Taking the Personal Study Plan.)
2. Identify the sections of the chapter where you need more work. (See Identifying Which Sections You Need to Work On.)
3. Use the plan resources to learn more information. (See Opening Online Resources on the Teach Me Page.)
4. Retake each section-level quiz on which you scored below the mastery level set by your instructor until you meet or exceed that level. (See Retaking a Personal Study Plan Quiz to Improve Your Score.)

Using a Personal Study Plan as a Study Tool

One of the ways you can use your plan is as a study tool to prepare for upcoming tests. You can quickly see what you need to work on, access resources to help you gain those skills, and take the quizzes for practice until you reach the necessary mastery level that indicates you should be sufficiently prepared for your upcoming exam.

You could even simulate test conditions at home by setting a timer and taking a quiz to see how you score within a certain period of time.

The following is one way you might want to use a Personal Study Plan as a study tool:

1. Start by taking the chapter-level quiz so you can take a quick inventory of your skills. (See Taking the Personal Study Plan.)
2. Identify the sections of the chapter where you need more work. (See Identifying Which Sections You Need to Work On.)
3. Use the resources to learn more information. (See Opening Online Resources on the Teach Me Page.)
4. Retake each section-level quiz on which you scored below the mastery level set by your instructor until you are comfortable with your scores. (See Retaking a Personal Study Plan Quiz to Improve Your Score.)

Using the Personal Study Plan as a Refresher

Depending on how your instructor has set up your class, your Personal Study Plan might be for a subject that has supporting material for or prerequisite material to the class you are now taking.

Example: You are enrolled in a calculus class that has a pre-calc Personal Study Plan so you can reference that material whenever you need to, focusing only on the sections you need to work on the most.

This type of plan is typically used for study purposes only, and might not count toward your final grade.

One way you might want to use a Personal Study Plan as a study tool is this:

1. Start by taking the chapter-level quiz so you can take a quick inventory of your skills. (See Taking the Personal Study Plan.)
2. Identify the sections of the chapter where you need more work. (See Identifying Which Sections You Need to Work On.)
3. Use the resources to learn more information. (See Opening Online Resources on the Teach Me Page.)
4. Retake each section-level quiz you scored low on until you are comfortable with the knowledge you have, since your current class builds upon those skills. (See Retaking a Personal Study Plan Quiz to Improve Your Score.)

Taking the Personal Study Plan

When you are ready to begin working on your Personal Study Plan you can start from your Overview page.

To start the Personal Study Plan:

1. Go to your Home page for the class that has the Personal Study Plan. A Personal Study Plan section is displayed.

Personal Study Plan - Tussy & Gustafson :: Elementary Algebra - 4e	
Overview	0 / 5 Completed
1: An Introduction to Algebra	0 / 9
2: Equations, Inequalities, and Problem Solving	0 / 7
3: Linear Equations And Inequalities In Two Variables; Functions	0 / 8
4: Systems Of Linear Equations And Inequalities	0 / 5
5: Exponents and Polynomials	0 / 8

2. Click **Overview** to open your Overview page. This page shows information about the plan and your progress in each chapter.

Tussy & Gustafson :: Elementary Algebra - 4e

About: The Personal Study Plan is a tool designed to provide a set of practice exercises for each chapter of your current course. Use the study plan as a review, or use it to help you assess your skills by following a personalized path through additional resources such as videos, practice problems, and passages from the text to help you build your foundation of knowledge.

Instructions: There are many ways to work your way through this material. You can begin by clicking the Start button for each chapter to take an inventory of your skills. Once you have submitted the results of the chapter-level quiz and returned to the Overview page, the progress bars show you where you need additional work. Your instructor has set the position of the green line on the progress bars to indicate the level of proficiency you should achieve before you begin the next chapter. The Teach Me pages contain exercises designed to help you improve your knowledge in that area.

<div style="border-bottom: 1px solid #ccc; padding: 5px 0;"> ■ 1: An Introduction to Algebra <div style="float: right; text-align: right;"> <input type="text" value="Not Attempted"/> Start </div> </div> <div style="padding: 5px 0 5px 20px;"> 1.1: Introducing the Language of Algebra <div style="float: right; text-align: right;"> Teach Me <input type="text" value="Not Attempted"/> Start </div> </div> <div style="padding: 5px 0 5px 20px;"> ■ 1.2: Fractions <div style="float: right; text-align: right;"> Teach Me <input type="text" value="Not Attempted"/> Start </div> </div>
--

3. Do one of the following:
 - To begin a chapter-level quiz, click **Start**.
 - To begin a section-level quiz, expand the chapter and click **Start** for that section. (You can also click **Teach Me** to open online resources that are related to the material you need to know before you begin the quiz.)
 - To retake a quiz, click **Try Again**.
4. On the quiz that opens in your window, answer the questions.
5. Click **Submit All Questions** when you are finished taking the quiz. A Questions section is displayed showing your Most Recent Score, Highest Score, and Initial Score.
6. Do one of the following:
 - Click **Overview** to open the Overview page.
 - Click **Teach Me** to open the Teach Me page and use online resources to learn the relevant material before you retake the quiz.
 - Click **Try Again** to retake the quiz.

Using Personal Study Plan Online Resources

Online resources, which are materials you can use to learn the subject matter, comprise a large part of the Personal Study Plan.

Each textbook offers different resources that help you master the material.

 **Note:** Resources are displayed on the Teach Me page. See Opening Online Resources on the Teach Me Page for more information.

The online resources include online tutorials, videos, and other resources. These resources further help you to focus on exactly what you need to learn so you can be more successful in your course.

Available Personal Study Plan Resources

The types of resources that are available vary by textbook and publisher. Some of the resources you might see on a Teach Me page are:

- Videos
- Interactive Tutorials
- Textbook Sections for Quick Reading
- Audio Files
- Practice Questions

Identifying Resource File Types

Each resource that is displayed has an associated icon that identifies what type of file it is.

Icon	Description
	Flash paper (typically for reading text)
	Video
	Audio Recording
	Interactive Tutorial (may or may not be in Flash)

Understanding Personal Study Plan Pages

When you work with your Personal Study Plan, there are a few main pages that you will use often.

This section discusses the following:

- Viewing your Personal Study Plan from Your Home Page
- Working with the Personal Study Plan Overview Page
- Opening Online Resources on the Teach Me Page
- Rating Resources and Adding Feedback

Viewing your Personal Study Plan from Your Home Page

If the plan is enabled for a book you use in your class, a Personal Study Plan section is displayed on your Home page for that class.

Personal Study Plan - Tussy & Gustafson :: Elementary Algebra - 4e	
Overview	0 / 5 Completed
1: An Introduction to Algebra	0 / 9
2: Equations, Inequalities, and Problem Solving	0 / 7
3: Linear Equations And Inequalities In Two Variables; Functions	0 / 8
4: Systems Of Linear Equations And Inequalities	0 / 5
5: Exponents and Polynomials	0 / 8

The section shows the name of the book that is associated with the plan, the chapter numbers and titles, the number of sections you have completed in each chapter, and the numbers of chapters you have completed so far.

You can click **Overview** to view the Overview Page, or you can click a chapter name to open that chapter of the book only.

Use the overview section to:

- View information from your instructor about what the plan is and how you can use it.
- View your progress for all of the chapters in your Personal Study Plan.
- See which sections and chapters you have completed.
- Open your Overview page by clicking either the chapter title or the **Overview** heading.

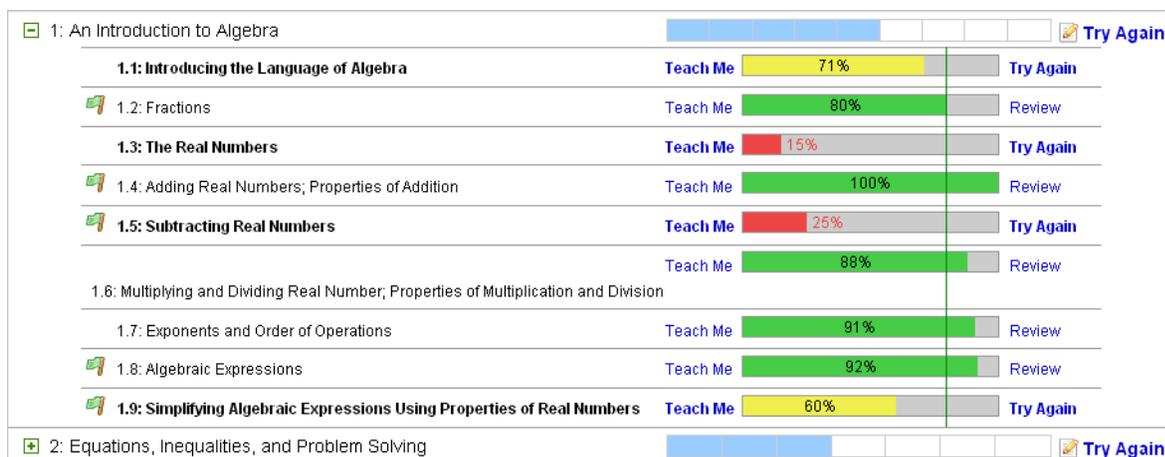
Working with the Personal Study Plan Overview Page

The Overview page contains detailed information to track your progress. Your actual quiz scores are shown in a color-coded progress bar. Scoring is like this if the mastery level is set to 80%:

- If you have met or exceeded the mastery score, the progress bar is green.
- If you have scored between the mastery level score and 60%, it is yellow.
- If you have scored below 60%, it is red.
- A white bar with the words "Not attempted" is displayed if you have not started working on the material.

Note: If the mastery level is set to a percentage different than 80% your results are displayed differently. For example, if the mastery level is set at 60%, the bar is displayed as red until you reach the mastery level of 60%, where it turns green. No yellow bar is displayed.

Note that the best score you have received on your quizzes is always displayed as your current Chapter Quiz score.



You can do any of the following from this page:

- Begin working on a section by clicking **Start** to begin the quiz.
- Retake a quiz by clicking **Try Again**.
- Retake a quiz for a section or a chapter for which you have met or exceeded the mastery level by clicking **Review**. This is useful for test preparation.
- Access specific online resources designed to help you learn the material you need to know by clicking the **Teach Me** link. This is especially helpful if you use this link before taking a quiz so you are more prepared.
- View your progress for sections you have worked on in relation to the green line of mastery, which is displayed vertically through all of the sections on

the page. The green line is the mastery score your instructor set for this class, which in the above example is 80%.

- See how many sections of a chapter you have reached the mastery rate for by viewing the blue bars in the chapter-level bar. Once you reach the mastery level, the chapter is marked as complete and one of the section bars for the chapter is filled in with the color blue. There is one bar for each section. A blue section bar is filled in for each completed section regardless of the order in which you complete it.

Example: In the above graphic, five blue bars are filled in on the chapter-level bar because this student completed five sections: 1.2, 1.4, 1.6, 1.7, and 1.8.

- See which sections contain key concepts your instructor wants you to focus on. Each key concept is indicated by a green flag to the left of the section number so you can quickly see which sections are the most important.

Opening Online Resources on the Teach Me Page

Use the Teach Me page to open online resources such as videos, tutorials, audio files, and reading material. You can use these resources as many times as you need to regardless of whether or not the plan counts toward your final grade.

These materials are there for one reason only: to give you the supporting learning material you need to be successful in the course. The more you use them, the more you learn.

The screenshot shows the WebAssign interface. At the top, it says 'WebAssign' and 'Logged in as [username]@webassign.com'. Below that, there are navigation links: 'Home | My Assignments | Grades | Communication | Calendar | My eBooks'. The main content area is titled 'Personal Study Plan - Teach Me' and shows a progress bar for '1.4. Adding Real Numbers, Properties of Addition' with a mastery score of 83%. A 'Teach Me' button is highlighted. Below the progress bar, there are 'Suggestions' and 'Additional Resources' sections. A video player is open, showing a math problem: '12 is 30% of what number?' with the handwritten solution: '12 = 0.30 * X', '0.30 0.30', '= X'. The background shows the 'Master It' section for 'SECTION 2.3 Applications of Percent' with objectives and a grid.

To open the Teach Me page:

1. Go to your Home page for the class that has the Personal Study Plan. A Personal Study Plan section is displayed.

Personal Study Plan - Tussy & Gustafson :: Elementary Algebra - 4e		
Course Summary	0 / 5 Completed	
1: An Introduction to Algebra		5 / 9
2: Equations, Inequalities, and Problem Solving		2 / 7
3: Linear Equations And Inequalities In Two Variables; Functions		6 / 8
4: Systems Of Linear Equations And Inequalities		2 / 5
5: Exponents and Polynomials		0 / 8

2. Click **Overview** or the chapter title to open your Overview page, which includes instructions from your instructor and shows your progress in each chapter.
3. Ensure the chapter is expanded so you can see all of the sections in that chapter.

2: Equations, Inequalities, and Problem Solving				
	2.1: Solving Equations Using Properties of Equality	Teach Me	100%	Review
	2.2: More About Solving Equations	Teach Me	86%	Review
	2.3: Applications of Percent	Teach Me	43%	Try Again
	2.4: Formulas	Teach Me	50%	Try Again

4. Click **Teach Me**.

Tussy & Gustafson :: Elementary Algebra - 4e

1: An Introduction to Algebra

1.9: Simplifying Algebraic Expressions Using Properties of Real Numbers Teach Me 60%

The items listed as Suggestions cover concepts related to questions you missed in this section. The Additional Resources relate to questions you answered correctly. After reviewing the Suggestions, click Try Again, above, and see if you can improve your score.

Suggestions (based on your answers)

<p> Read It Rating 1 0</p>	<p> Master It Multiply a sum of fractions which includes a variable. Rating 0 0</p>	<p> Practice It Simplifying Algebraic Expressions Using Properties of Real Numbers Rating 0 0</p>	<p> Watch It Multiply a sum of fractions which includes a variable. Rating 0 0</p>
<p> Watch It Simplify by combining like terms. Rating 0 1</p>	<p> Watch It Application: Write an algebraic expression for the perimeter of a flag. Rating 1 0</p>		

Additional Resources

Master It Multiply a difference which includes a variable.	Rating 0 0
Master It Simplify by combining like terms.	Rating 1 0

5. Click the resource you want to open.
6. If the feedback window is displayed when you close a resource, rate each item in the Feedback window. (See Rating Resources and Adding Feedback on page 98 for more information.)

7. When you are finished viewing resources, do one of the following:

- To return to the Overview page, click **Overview**.
- To retry the quiz for the section you just reviewed resources for, click **Try Again** for that section.
- To retry the quiz for the entire chapter, click **Try Again** for the chapter.

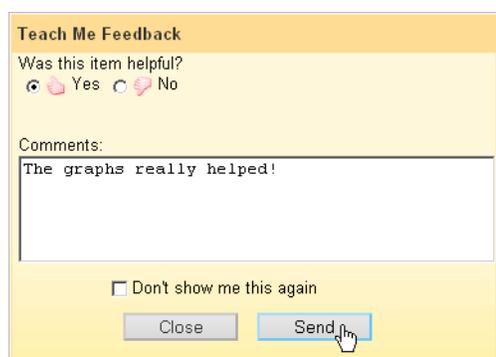
Rating Resources and Adding Feedback

The ratings are displayed for each resource on the Teach Me page for everyone to help them determine if the information is useful. Rate an item to help your fellow students determine if the resource was indeed helpful.

When the window is displayed, give the material you used a thumbs up for positive feedback or a thumbs down for negative feedback, add a comment, and click **Send**.

If you do not want to rate the material or add a comment, click **Close**.

If you select **Don't show me this again**, the Feedback window is not displayed. Instead, a "Rate This" link is displayed to the right of the item which you can use to enter feedback.



Identifying Which Sections You Need to Work On

When your instructor set up your Personal Study Plan, he or she determined what percentage correct you need to achieve for a chapter or section-level quiz in order to successfully complete a class objective.

Once you do so, you have achieved what is called the mastery level for that section. That mastery level is displayed as a vertical green line that goes through all of the chapter sections on your Overview page.

See Working with the Personal Study Plan Overview Page for more information on working with this page.

1: An Introduction to Algebra		Try Again
1.1: Introducing the Language of Algebra	Teach Me 71%	Try Again
1.2: Fractions	Teach Me 80%	Review
1.3: The Real Numbers	Teach Me 15%	Try Again
1.4: Adding Real Numbers; Properties of Addition	Teach Me 100%	Review
1.5: Subtracting Real Numbers	Teach Me 25%	Try Again

Progress bars are displayed at both the chapter and section level. You can view these bars to find out what areas you need to work on some more:

- If you have met or exceeded the mastery score, the progress bar is green.
- If you scored between 60% and the mastery level score, it is yellow.
- If you scored below 60%, it is red.
- For sections that have scores below the mastery level, the section title is also in bold.

Note: If the mastery level is set to a percentage different than 80% your results are displayed differently. For example, if the mastery level is set at 60%, the bar is displayed as red until you reach the mastery level of 60%, where it turns green. No yellow bar is displayed.

Once you have identified a topic to work on you can:

- Click **Teach Me** to open the Teach Me page and use online resources such as tutorials, videos, reading materials, and more. Use this information to learn material that is targeted at what you need to learn before you take the quiz again.
- Click **Try Again** to retake the quiz. Remember, your best score is always listed as your current score. For example, if your score is 71% the first time you take the quiz and 68% the second time you take it, your current score is 71% because that is the best score you received.

Retaking a Personal Study Plan Quiz to Improve Your Score

You can always retake any section or chapter-level quiz in your Personal Study Plan to improve your score, whether the plan counts toward your final grade or is for your personal study only. The higher your score, the more prepared you are for an upcoming quiz or exam.

See Taking the Personal Study Plan for steps you can follow to retake a quiz.

10

Getting Instructor Assistance

In addition to the usual help provided by your school, such as tutoring by teaching assistants and consultation with your instructor, you can also communicate with your instructor through WebAssign.

If your instructor enabled these features, you can:

- Send a private message to your instructor
- Send an Ask Your Teacher message about a specific assignment
- Request more time to complete an assignment

This section contains the following topics:

- Sending Your Teacher a Private Message
- Asking Your Teacher a Question About an Assignment
- Asking Your Teacher to Extend the Due Date for an Assignment

Sending Your Teacher a Private Message

A private message is a message that you can send to your instructor. The message might also be delivered to someone the instructor designated to read and respond to them, such as a Teaching Assistant.

You can send these messages from your Communication page in WebAssign. The instructor knows that the message came from you, and they know which class the message is about.

This feature is displayed as a "New Message For" link in the Private Messages section of your Communication page.

If the link is not displayed and you would like to have the option to send your instructor messages from this location, ask your instructor to enable private messages in WebAssign.

To send a private message:

1. Select a class from the My Classes drop-down menu.
2. From the menu bar, click **Communication**.
3. Under Private Messages, click **New Message for instructor**.

	Unread	Total
Inbox	0	4
Sent		6

4. Enter a subject and your message, and click **Send**.

You are returned to your Communication page, and the message is added to your Sent total. You can click the **Sent** link to view message details.

Subject	Recipient	Sent
Reason for absence	Lopez, Dr. Michael	Tue, Mar 31, 2009 10:58 AM EDT
Question about my grade	Lopez, Dr. Michael	Tue, Mar 31, 2009 10:57 AM EDT

Asking Your Teacher a Question About an Assignment

If your instructor enabled the Ask Your Teacher feature, you can send your instructor a message to ask a question about the assignment you are working on. To do so, click the **Ask Your Teacher** link at the top or bottom of the assignment.

Home My Assignments Ask Your Teacher Extension Request

To send an Ask Your Teacher message:

1. Navigate to the top or bottom of the assignment you are working on.
2. Click **Ask Your Teacher**.
3. Type your message. Provide as much detail as you can so your instructor can give you useful advice. Enter any specific concerns you might have.
4. Click **Save**, and a confirmation message displays the date and time you sent the request.

To view responses to your Ask Your Teacher messages:

1. Navigate to the top or bottom of the assignment from which you sent an Ask Your Teacher message.
2. Click **Ask Your Teacher**. Your message and any responses are displayed in the Ask Your Teacher window.

Asking Your Teacher to Extend the Due Date for an Assignment

If your instructor allows you to request more time or more submissions for an assignment, an Extension Request link is displayed at the end of your assignments.

Your instructor can allow automatic or manual extension requests for all assignments, for some assignment categories, or for no assignments.



Note: Only your instructor can give you extensions, change your score, allow extra submissions, or help you with the content of your assignments — not the WebAssign support staff.

Making a Manual Extension Request

To make a manual extension request, if allowed:

1. While working on your assignment, click **Extension Request**.
2. Click the **Manual** tab.
3. Enter your message and click **Submit**.

Extension Request Close this window

Intro to Physics, section 1, Spring 2009
Assignment 2

Automatic Manual

Message to Instructor:

I am requesting an extension until 4/4.
The reason for my request is, I had appendicitis and was hospitalized until yesterday.

Submit Cancel

Your instructor will review your request and can choose to approve it, deny it, or request additional information from you before making a decision.

To check the status of your extension request:

1. While working on your assignment, click **Extension Request**.
Any responses your instructor has made to your request are displayed. Your instructor might provide you with information about penalties that apply to the extension or explain why your request is denied.
If your instructor grants your request, your Current Assignments will display a new due date for the assignment, but you can see additional information about the extension only in the Extension Request window.
Your instructor also might ask you to provide additional information before they make a decision about your request.
2. If your instructor has requested additional information, type a message and click **Submit**.

Making an Automatic Extension Request

To make an automatic extension request, if allowed:

1. While working on your assignment, click **Extension Request**.
2. Click the **Automatic** tab, if necessary.
3. Pay particular attention to the Penalty that is displayed under Settings to find out what penalty, if any, applies.
4. Do one of the following:
 - If you accept the terms of the extension, click **Accept Automatic Extension**. You can then begin working on the past due assignment.
 - If you do not want to accept the extension, click **Cancel**. For example, a penalty might apply to each automatic extension request and you might decide not to accept the extension.

Extension Request		Close this window
Intro to Physics, section 1, Spring 2009		
Assignment 2		
Automatic Manual		
You have the option to receive an automatic extension or to request a manual extension from your instructor.		
Settings		
Maximum Requests:	3 more extensions	
Penalty:	2 points from total score	
Time		
Additional Time Allowed:	New Due Date: Tuesday, Mar 31, 2009 05:00 PM EDT after you click accept	
Extension Announcement		
You will receive a 2-point penalty when you submit this extension request.		
<input type="button" value="Accept Automatic Extension"/> <input type="button" value="Cancel"/>		

11

Viewing Scores and Grades

On your **My Assignments** page, you see all of your scores for your assignments within WebAssign. You might also see scores for assignments that you took outside of WebAssign.

On the **Grades** page, you see all of your raw scores and grades that your instructor posts.

The page might also include the class average, minimum and maximum scores, the standard deviation, and a histogram of scores for each category of assignment and for individual assignments. It might have your average for each category of assignments as well as the scores for individual assignments. Your instructor will let you know which scores and grades will be posted for your course.

To see your scores and grades:

1. From the menu bar, click **Grades**.
2. If your instructor enabled all of the options, your **Grades** page might look like this:

Overall Grade		Class Statistics	
A ⁺	93.33 	Class Average	77.62
Category Grades		Minimum	28.05
Homework (14)	57.76 	Maximum	92.37
Test (3)	100 	Standard Deviation	16.00
Lab (1)	100 		
Exam (1)	100 		
Quiz	--		
HW 03	--		
Midterm/Final	--		
name	--		

Grades were last updated on Jul 8, 2008 at 01:00 PM EDT.
Next automatic gradebook update Jul 11, 2008 at 01:00 PM EDT.

[My Scores Summary](#) 

The Overall Grade gives information about your grade in the class as calculated from the various categories of assignments, such as Homework, Test, In Class, Quiz, Lab, and Exam. Your instructor might have different categories. The Category Grades show the contribution to your overall grade from each of the categories. Class Statistics shows you how the rest of the class is doing.

3. To see how a number was calculated, click a grade that is a link.
4. To see a summary of all of your raw scores and the class statistics for each assignment, if your instructor has posted these, click **My Scores Summary**.

My Scores Summary								Close this window
Scores for Peg Bate								
Class: Chemistry 121, section 02								
Raw Scores								
Category / Assignment	My Scores			Class Statistics				
	Score	Max Possible	%	Average	Min	Max	St Dev	
Homework (7)	17	103	16.5	10.2	0	49	11.6	
Quiz (1)	9	11	81.8	6.93	0	9	3.10	
Test (2)	169	200	84.5	174	109	197	21.4	
Exam (2)	95	110	86.4	88.1	65	100	10.1	
In Class (1)	89	100	89	88.3	74	99	7.32	
Homework for 2nd 9 (1)	4	4	100	--	--	--	--	--

[Collapse All](#) | [Expand All](#)

12

Participating in Forums

Forums are for discussions with all of the members of your class. If your instructor creates a forum, you can then create topics within the forum or contribute to a current topic.

If you do not see any forums and you would like them, ask your instructor to set up forums in WebAssign.

To participate in a forum:

1. From the menu bar, click **Communication**.
2. Under Public Forums, click the forum you want to participate in.
3. To start a new topic, click **New Topic**.

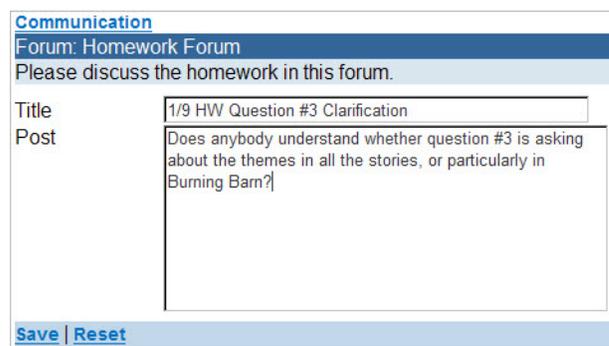


[Communication](#)
Forum: Homework Forum
Please discuss the homework in this forum.

[New Topic](#)

Topic	Posts	Most Recent
1/8 HW: reading list?	1	Mon, Jan 12, 2009 11:43 AM EST
1/9 HW Question #3 Clarification	1	Mon, Jan 12, 2009 11:42 AM EST

4. Enter a title and message, and click **Save**.



[Communication](#)
Forum: Homework Forum
Please discuss the homework in this forum.

Title

Post

[Save](#) | [Reset](#)

13

Using your Calendar

When an instructor gives an assignment, it is automatically displayed on your calendar. Your calendar shows all of your assignments on their due dates. It also shows class start and end dates as well as any personal calendar events you have added.

To view your calendar, or add or edit an event:

1. From the menu bar, click **Calendar**.

The screenshot shows a calendar for January 2009. The calendar is organized into a grid with columns for each day of the week (Sun, Mon, Tue, Wed, Thu, Fri, Sat) and rows for each week. The dates are numbered from 28 to 31. Several events are listed:

- Monday, Jan 29:** Recital (08:00 PM EST)
- Monday, Jan 4:** Homework 1 (11:59 PM EST)
- Monday, Jan 12 (Today):** Homework 1/0 (11:59 PM EST)
- Wednesday, Jan 14:** Homework 1/0 (11:26 AM EST), Homework 1-9 (11:14 AM EST), and a link for +1 more.
- Monday, Jan 19:** Homework 1/0 (12:00 AM EST)
- Friday, Jan 30:** Math HW 1/12 (12:00 AM EST)

2. To enter your own event, click any date and click **New Event**. Enter the details of your event and click **Save**.
3. To edit one of your events, click the event and edit the details.

Monday, [December 29, 2008](#) [\[change\]](#)

Last Saved: Jan 12, 2009 04:18 PM EST

[Save](#) | [Reset](#) | [Cancel](#) | [Delete](#)

Title

Time duration

No specific Time

Description

[Save](#) | [Reset](#) | [Cancel](#) | [Delete](#)

14

Managing Your WebAssign Accounts

You can update your email address and password for a WebAssign account or link multiple WebAssign accounts to use a single username and password.

This section contains the following topics:

- Changing Your Email Address
- Using the Same Login for Different Accounts
- Changing Your Password
- Resetting your Password

Changing Your Email Address

To view or change your email address:

1. Click **My Options** in the upper right of your WebAssign page.
2. Click the **Personal Info** tab if not already selected.

The email address for your WebAssign account is displayed in the Email Address field.

The screenshot shows the 'My Options' interface with the 'Personal Info' tab selected. The fields are as follows:

- Username: sarahjones
- Institution: WebAssign University (webassign)
- Fullname: Jones, Sarah
- Email Address: sarahjones@webassign.edu
- Change Password section:
 - New Password: [password field]
 - Re-enter New Password: [password field]
- At the bottom, there is a note: "If you made any changes above enter your current password here and then click save" followed by a Password field and a Save button.

3. In **Email Address**, either edit or enter your email address.
4. Under **Password**, enter your password to the left of the Save button and click **Save**.

WebAssign sends a confirmation message to the email address you just entered.

5. Check the email address you entered for the confirmation message, and click the link in the message to confirm the email address change.

Your email address is updated in the WebAssign system only after you click the link in the confirmation message.

Using the Same Login for Different Accounts

If you have more than one WebAssign account for the same institution, you can link them so you can log in to all of them using any of your usernames and passwords. This way, you do not need to remember a separate login for each WebAssign account you have.

Note: If you log in through your school's Web site instead of www.webassign.net, it is unlikely that you have more than one WebAssign account. However, if this is the case, you will not be able to link your accounts.

The information you have in different accounts remains separate when you link accounts — the only thing that changes is that all of the classes for all of your linked WebAssign accounts will be displayed whenever you log in to any of those accounts.

To link your accounts:

1. Log in to WebAssign using one of your username and password combinations.
2. Click **My Options** in the menu bar.
3. Click the **Accounts** tab.

4. Under **Link Accounts**, enter the username and password of the WebAssign account you are linking to. You can link more than one account.
5. Enter the password for the account you are logged in with, and click **Save** to save your changes.

Example: One of your WebAssign accounts has a username you cannot easily remember, such as **zh7yz123**. The login information for the account you are signed into right now (**sarahjones**) is the one you want to use for all of your accounts.

In this example, you would enter the username **zh7yz123** and the password for **zh7yz123** in the Link Accounts section, and then you would enter the password for the current account (**sarahjones**) in the **Password** field at the bottom of the window and click **Save**.

Changing Your Password

You should change your initial password to ensure the security of your WebAssign account.

Note: This does not apply if you use your school's authentication server and you log in through your school's Web site. In that case, use your school's method for changing your password.

To change your password:

1. Click **My Options** in the upper right of your WebAssign page.
2. Click the **Personal Info** tab if not already selected.

The screenshot shows the 'My Options' interface with the 'Personal Info' tab active. The form contains the following fields and values:

Username	sarahjones
Institution	WebAssign University (webassign)
Fullname	Jones, Sarah
Email Address	sarahjones@webassign.edu
Change Password	
New Password	••••••••
Re-enter New Password	••••••••
<i>If you made any changes above enter your current password here and then click save</i>	
Password	••••••••

A 'Save' button is positioned to the right of the 'Password' field.

3. Under **Change Password**, enter your new password in the **New Password** field.
4. In **Re-enter New Password**, enter your new password again.
5. In **Password**, enter your old password.
6. Click **Save**.

If the change was successful, a confirmation message is displayed stating your password has been changed.

Resetting your Password

If you forget your password and you have an email account on file in WebAssign, you can reset your password.

To reset your password:

1. Go to the WebAssign login page: www.webassign.net.
Or, if WebAssign uses your institution's authentication server, use your school's method for changing your password.
2. Click the **Reset Password** link that is displayed to the right of the Password field.
3. Type your username and institution.
4. Type your email address exactly as it is recorded in your WebAssign account.

5. Click **Submit**.

If your username, institution, and email address match the entries in your WebAssign account, you receive an email with instructions for resetting your password.

 **Note:** If WebAssign does not recognize your email address, contact your instructor, who can reset your password or your email address if needed. Only your instructor can reset your password and email address.

15

Troubleshooting

Because WebAssign relies on Web browsers and related technology, technical problems can occasionally occur. The suggestions that follow can help you avoid technical problems and best handle them if they do occur.

This section contains the following topics:

- Different Name or Institution Displays at the Top of Your WebAssign Page
- You Cannot Access WebAssign
- You Cannot Submit an Assignment

Different Name or Institution Displays at the Top of Your WebAssign Page

This occurs if the browser is logged in with a different person's WebAssign account. Make sure you always log in using your account so you get credit for your work.

If you notice that you are not in your account, write down your answers and log out of the other person's account. Then, log back in using your username, institution, and password.

When you log in correctly, your username and school display in the "logged in as" message. Also, your full name and institution display in the box in the upper right of your WebAssign pages.

You Cannot Access WebAssign

Check the following:

- Your hardware is functioning correctly
- You are able to connect to other Internet sites
- You are using the most updated versions of your operating system, Web browser, and browser-related plug-ins (Flash and Java)

After you have verified the previous items, you can report your problem by submitting a help request at www.webassign.net/user_support/student/. Provide as much of the following information as possible for the time the problem occurred/occurs:

- Username, school, and any classes you are enrolled in
- Assignment and question you are having difficulty with
- Date and time the problem occurred
- Operating system used when the problem occurred
- Antivirus program you are using
- Anti-spyware program you are using
- Name of the Web browser you are using

 **Important:** Please note that using WebAssign to submit your assignments does not change any provisions of your institution's honor code or affect in any way guidelines provided by your instructor about completing or submitting work.

Attempts to abuse, misuse, or otherwise violate the integrity of the WebAssign site might not only be considered violations of the honor code, but might also be prosecuted under existing state and federal laws.

You Cannot Submit an Assignment

When you attempt to submit an assignment, WebAssign indicates that the assignment is past due, even though your clock indicates that it is not yet time for the assignment to be due.

WebAssign assignment due dates and times are determined by the clocks of the WebAssign servers, not by the date and time indicated on your computer. Every effort is made to ensure that these server clocks are accurate.

To avoid this problem, be sure to submit assignments well before the last minute. Note that the time displayed at the top of the page in WebAssign is the WebAssign server time when the page was loaded into your browser and might not reflect the current time on the WebAssign server.



Entering Math Notation in mathPad, calcPad, and physPad

The following tables list the notation you can enter to answer math questions that use either mathPad or calcPad.

- General Math
- Bases, Exponents, Roots, and Logarithms
- Algebraic Notation
- Set and Interval Notation
- Trigonometric Functions
- Vector Notation

General Math

The following notation can be entered for mathPad, calcPad, and physPad questions unless otherwise indicated.

Notation	Keyboard	Group and Button	Notes
Decimal number	0123456789.		
Fractions	/		
Addition	+	mathPad: 	To enter the plus sign using the numeric keypad, press SHIFT+PLUS SIGN.
Subtraction	-	mathPad: 	
Multiplication	*	mathPad: 	
Division		mathPad: 	mathPad only. Express as fractions in calcPad and physPad.
Parentheses	()	mathPad: Sets 	
Equal	=	Relations 	To enter the equal sign using the numeric keypad, press the PLUS SIGN key.
Greater than	>	Relations 	You cannot enter the > character from the keyboard when using Firefox on a Mac. Use the button instead.
Greater than or equal to	>=	Relations 	To enter the equal sign using the numeric keypad, press the PLUS SIGN key. You cannot enter the > character from the keyboard when using Firefox on a Mac. Use the button instead.
Less than	<	Relations 	You cannot enter the < character from the keyboard when using Firefox on a Mac. Use the button instead.
Less than or equal to	>=	Relations 	To enter the equal sign using the numeric keypad, press the PLUS SIGN key. You cannot enter the < character from the keyboard when using Firefox on a Mac. Use the button instead.
Absolute value	n	mathPad, calcPad: Functions  physPad: Math 	You cannot enter the character from the keyboard when using Firefox on a Mac. Use the button instead.
pi	pi	mathPad: Symbols  calcPad, physPad: Greek 	

Notation	Keyboard	Group and Button	Notes
Infinity		mathPad, physPad: Symbols  calcPad: 	
Imaginary unit		mathPad, physPad: Symbols  calcPad: 	
Factorial	$n!$	calcPad:  physPad: Math 	
Script I		physPad: Symbols 	physPad only.
Script E		physPad: Symbols 	physPad only.
hbar	\hbar	physPad: Symbols 	physPad only.
Perpendicular		physPad: Symbols 	physPad only.
Parallel		physPad: Symbols 	physPad only.

Bases, Exponents, Roots, and Logarithms

The following notation can be entered for mathPad, calcPad, and physPad questions.

Notation	Keyboard	Group and Button	Notes
Exponent	\wedge		
Base or subscript	$_$	mathPad, calcPad: Functions  physPad: 	
Exponent of a subscript	n_b RIGHT ARROW $\wedge x$	mathPad, calcPad: Functions  physPad: 	
Square root	$\text{sqrt}(n$	mathPad, calcPad: Functions  physPad: Math 	

Notation	Keyboard	Group and Button	Notes
nth root		mathPad, calcPad: Functions  physPad: Math 	
Exponential function	e^n	mathPad, calcPad: Functions  physPad: Math 	
Natural logarithm	$\ln(n)$	mathPad, calcPad: Functions  physPad: Math 	Function names are displayed in roman type.
Power of 10	10^n	mathPad, calcPad: Functions  physPad: Math 	
Logarithm (base 10)	$\log(n)$	mathPad, calcPad: Functions  physPad: Math 	Function names are displayed in roman type.
General Log	\log_b RIGHT ARROW (n)	mathPad, calcPad: Functions 	Function names are displayed in roman type.

Algebraic Notation

The following notation can be entered for mathPad, calcPad, and physPad questions unless otherwise indicated.

Notation	Keyboard	Group and Button	Notes
No solution	NO SOLUTION	Relations 	
Undefined	UNDEFINED	mathPad: Symbols  calcPad: 	mathPad and calcPad only.
Does not exist	DNE		calcPad only.
Variables	Type variables exactly as specified in the question.		Variable names are displayed in italics. Variables are case-sensitive. You cannot substitute x for X .

Notation	Keyboard	Group and Button	Notes
Lowercase Greek letter	Name of the letter in lowercase, for example, alpha, beta, gamma.	calcPad, physPad:  Greek	
Uppercase Greek letter	Capitalized name of the letter, for example, Alpha, Beta, Gamma.	calcPad, physPad:  Greek	
theta	theta	mathPad: Symbols  calcPad, physPad: Greek 	

Set and Interval Notation

The following notation can be entered for mathPad, calcPad, and physPad questions unless otherwise indicated.

Notation	Keyboard	Group and Button	Notes
Set delimiters (braces)	{ }	mathPad: Sets 	
Closed interval (brackets)	$[a, b]$	mathPad: Sets 	
Open interval (parentheses)	(a, b)	mathPad: Sets 	
Half-closed interval (half-open interval)	$[a, b)$ $(a, b]$		
Empty set	EMPTY	mathPad: Sets  calcPad: 	mathPad and calcPad only.

Trigonometric Functions

The following notation can be entered for mathPad, calcPad, and physPad questions unless otherwise indicated



Notes:

- Angles for trigonometric functions are expressed in radians.
- Function names are displayed in roman type.

Notation	Keyboard	Group and Button	Notes
Degrees		mathPad: Symbols  calcPad: 	mathPad and calcPad only.
Sine	$\sin(n)$	Trig 	
Cosine	$\cos(n)$	Trig 	
Tangent	$\tan(n)$	Trig 	
Cosecant	$\csc(n)$	Trig 	
Secant	$\sec(n)$	Trig 	
Cotangent	$\cot(n)$	Trig 	
Inverse sine (arcsine)	\sin^{-1} RIGHT ARROW (n) $\arcsin(n)$	Trig 	
Inverse cosine (arccosine)	\cos^{-1} RIGHT ARROW (n) $\arccos(n)$	Trig 	
Inverse tangent (arctangent)	\tan^{-1} RIGHT ARROW (n) $\arctan(n)$	Trig 	
Inverse cosecant (arccosecant)	\csc^{-1} RIGHT ARROW (n) $\operatorname{arccsc}(n)$	Trig 	
Inverse secant (arcsecant)	\sec^{-1} RIGHT ARROW (n) $\operatorname{arcsec}(n)$	Trig 	
Inverse cotangent (arccotangent)	\cot^{-1} RIGHT ARROW (n) $\operatorname{arccot}(n)$	Trig 	
Hyperbolic cosine	$\cosh(n)$	calcPad: Trig 	
Hyperbolic cotangent	$\coth(n)$	calcPad: Trig 	
Hyperbolic cosecant	$\operatorname{csch}(n)$	calcPad: Trig 	
Hyperbolic secant	$\operatorname{sech}(n)$	calcPad: Trig 	
Hyperbolic sine	$\sinh(n)$	calcPad: Trig 	
Hyperbolic tangent	$\tanh(n)$	calcPad: Trig 	
Inverse hyperbolic cosine (area hyperbolic cosine)	\cosh^{-1} RIGHT ARROW (n) $\operatorname{arccosh}(n)$	calcPad: Trig 	
Inverse hyperbolic cotangent (area hyperbolic cotangent)	\coth^{-1} RIGHT ARROW (n) $\operatorname{arccoth}(n)$	calcPad: Trig 	
Inverse hyperbolic cosecant (area hyperbolic cosecant)	csch^{-1} RIGHT ARROW (n) $\operatorname{arccsch}(n)$	calcPad: Trig 	
Inverse hyperbolic secant (area hyperbolic secant)	sech^{-1} RIGHT ARROW (n) $\operatorname{arcsech}(n)$	calcPad: Trig 	

Notation	Keyboard	Group and Button	Notes
Inverse hyperbolic sine (area hyperbolic sine)	\sinh^{-1} RIGHT ARROW (n) $\operatorname{arcsinh}(n)$	calcPad: Trig 	
Inverse hyperbolic tangent (area hyperbolic tangent)	\tanh^{-1} RIGHT ARROW (n) $\operatorname{arctanh}(n)$	calcPad: Trig 	

Vector Notation

The following notation can be entered only for calcPad and physPad questions.

Notation	Keyboard	Group and Button	Notes
Bold vector		Vectors 	
Vector bracket		Vectors 	
i unit vector		Vectors 	
j unit vector		Vectors 	
k unit vector		Vectors 	
Arrow vector		Vectors 	
Unit vector (hat vector)		Vectors 	