WeBWorK Instructor's Quick Start Guide

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Department of Mathematics

Introduction to WeBWorK

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- WeBWorK's homework database is best used for single variable calculus.

Introduction to WeBWorK

- Since WeBWorK is not textbook based, you may not be able to find the exact problems as the ones in your textbook. Also, the library contains a large number of problems so browsing through them could be very time consuming. For example, a search on the chain rule returns over 370 problems.

WeBWorK Homework Models

- Therefore, to make the program easier to use, model courses with homework problems similar to those in your textbook have been created. You have the option to:

  - Use the model as is;

  - Modify the model in any way you like; or

  - Create your own assignments.

Before Classes Begin

- If your course uses WeBWorK, the Academic Coordinator will set up your WeBWorK course before classes begin.

- Once your WeBWorK course has been setup, you will receive an email notification with a link to your course as well as your login information.

Login Information

- Our WeBWorK courses are here:

- https://webwork.ucr.edu/webwork2

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- After logging in, you can change your password by clicking on the password/email link.

Editing Course Information

MATH_009A_DEMO_20F

Homework Sets

Name	Status
☐ **0.1 INTRODUCTION TO WEBWORK**	Will open on 12/27/2020 at 06:00am PST.
☐ **1.1 AN INTRODUCTION TO LIMITS**	Will open on 12/30/2020 at 06:00am PST.
☐ **1.2 EPSILON DELTA DEF OF A LIMIT**	Will open on 12/30/2020 at 06:00am PST.
☐ **1.3 FINDING LIMITS ANALYTICALLY**	Will open on 12/30/2020 at 06:00am PST.

Course Info **Edit**

Math 9A-001
Fall 2020

Welcome!

Editing Course Information

Course Information for course

Editing course information in file '[TMPL]/course_info.txt'

Problem Techniques	Math Objects	POD	PGLab	PGML

```
1  Math 9A-001 <br> Fall 2020 <br><br> Welcome!
```

Type in HTML format.
Use <br> for a line break

Adding Newly Enrolled Students

- During the first few days of class, the Academic Coordinator will update your roster daily.

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- Please feel free to direct your students to contact the Academic Coordinator directly for access or technical issues.

- Alternatively, if you like, you can also add the student(s) yourself.

Adding Newly Enrolled Students

Homework Sets
User Settings
Grades
Instructor Tools
~~Classlist Editor~~
Hmwk Sets Editor
Library Browser
Statistics
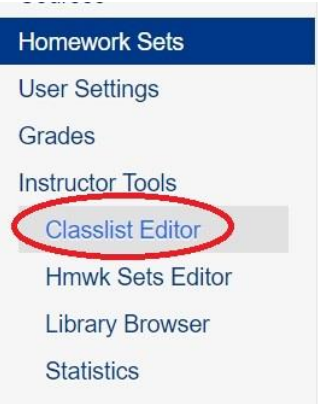
MATH_009A_DEM

Name

☐ 0.1 INTRODUCTION TO WEBWORK

☐ 1.1 AN INTRODUCTION TO LIMITS

Classlist Editor

Show/Hide Site Description

Select an action to perform:

| Filter | Sort | Edit | Password | Import | Export | Add | Delete |

Add how many students? 2

Take Action!

- To add students manually, click on "Classlist Editor" on the left-hand control panel of your homepage.
- Select the "Add" tab and enter the number of students you want to add.

Adding Newly Enrolled Students

- You can find your student's NetID and SID number from the Grade Center on iLearn.

- You only need to complete the first 4 boxes.

- You can assign homework to the new students on the same screen.

Last Name	First Name	Student ID*	Login Name*
Potter	Harry	SID Number	NetID
Granger	Hermione		

Select sets below to assign them to the newly-created users.

```
0.1_INTRODUCTION_TO_WEBWORK
1.1_AN_INTRODUCTION_TO_LIMITS
1.2_EPSILON_DELTA_DEF_OF_A_LIMIT
1.3_FINDING_LIMITS_ANALYTICALLY
1.4_ONE_SIDED_LIMITS
1.5_CONTINUITY
1.6_LIMITS_INVOLVING_INFINITY
2.1_2.2_THE_DERIVATIVE_AND_ITS_INTERPRETATIONS
2.3_BASIC_DIFFERENTIATION_RULES
2.4_THE_PRODUCT_AND_QUOTIENT_RULES
```

Add Students

Adding TA's on WeBWorK

- The TA's of your course are by default added to your WeBWorK roster when your course is created.

- Sometimes (for example, when TA's trade their sections) you may have to add a TA manually.

- First add your TA as a student by following the above procedures.

Adding TA's on WeBWorK

- Access your roster from the "Classlist Editor".

- Go to the "Edit" tab and select the user who is your TA.

Filter   Sort   Edit   Password   Import   Export

Edit Which Users?: selected users ▼

Take Action!

Showing 6 out of 6 users

	Login Name	Login Status	Assigned Sets	First Name	Last Name
☐	dchen001 ✎	*Inactive*	4/21	Diane	Chen
☐	hgran001 ✎	*Inactive*	4/21	Hermione	Grange
☐	rlam004 ✎	**Active**	21/21	Robert	Lam
☐	alope001 ✎	*Inactive*	4/21	Anna	Lopez
☑	hpott001 ✎	*Inactive*	4/21	Harry	Potter
☐	rweas001 ✎	*Inactive*	4/21	Ron	Weasle

19
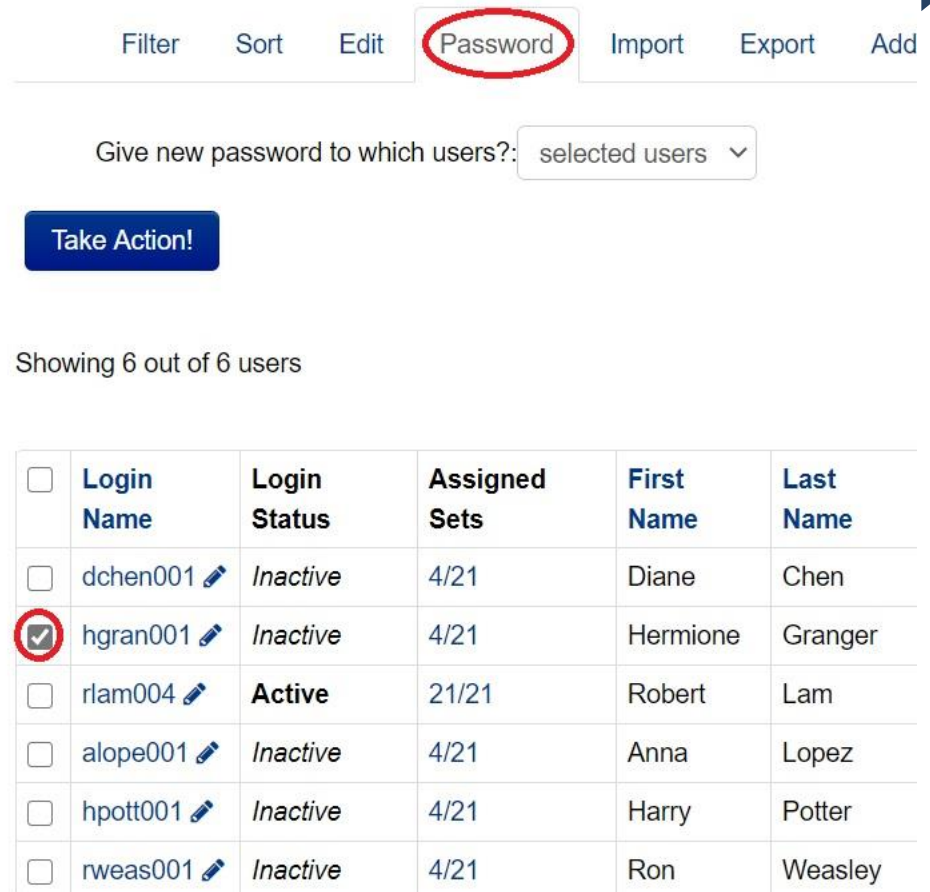
Adding TA's on WeBWorK

- Click on the drop-down menu on the far-right column and change the permission level from student to TA.

Resetting Passwords

- If your students or TA's forget their passwords, you can reset them in the "Password" tab of the "Classlist Editor".

Filter   Sort   Edit   Password   Import   Export   Add

Give new password to which users?: selected users ⌄

Take Action!

Showing 6 out of 6 users

	Login Name	Login Status	Assigned Sets	First Name	Last Name
☐	dchen001 ✏	*Inactive*	4/21	Diane	Chen
☑	hgran001 ✏	*Inactive*	4/21	Hermione	Granger
☐	rlam004 ✏	**Active**	21/21	Robert	Lam
☐	alope001 ✏	*Inactive*	4/21	Anna	Lopez
☐	hpott001 ✏	*Inactive*	4/21	Harry	Potter
☐	rweas001 ✏	*Inactive*	4/21	Ron	Weasley

Resetting Passwords

Save Password   Cancel Password

Save changes

Take Action!

Showing 1 out of 6 users

If a password field is left blank, the student's current password will be maintaine

New Password	Login Name	First Name	Last Name
New Password: New_Password	hgran001	Hermione	Granger

Resetting Passwords

- If you (the instructor) forget your password, you'll have to contact the Academic Coordinator to have him reset it for you.

Viewing the Problems of a HW Set

Homework Sets

Name	Status
☐ 0.1 INTRODUCTION TO WEBWORK	Will open on 12/27/2020 at 06:00am PST.
☐ 1.1 AN INTRODUCTION TO LIMITS	Will open on 12/30/2020 at 06:00am PST.
☐ 1.2 EPSILON DELTA DEF OF A LIMIT	Will open on 12/30/2020 at 06:00am PST.
☐ 1.3 FINDING LIMITS ANALYTICALLY	Will open on 12/30/2020 at 06:00am PST.
☐ 1.4 ONE SIDED LIMITS	Will open on 12/30/2020 at 06:00am PST.
☐ 1.5 CONTINUITY	Will open on 12/30/2020 at 06:00am PST.
☐ 1.6 LIMITS INVOLVING INFINITY	Will open on 12/30/2020 at 06:00am PST.
☐ 2.1 2.2 THE DERIVATIVE AND ITS INTERPRETATIONS	Will open on 12/30/2020 at 06:00am PST.
☐ 2.3 BASIC DIFFERENTIATION RULES	Will open on 12/30/2020 at 06:00am PST.

Click on a link to view the exercises of a homework set

Printing a Homework Set

☐ **3.4 CONCAVITY AND THE 2ND DERIVATIVE**   Will open on 12/30/2020 at 06:00am PST.

☐ **3.5 CURVE SKETCHING**   Will open on 12/30/2020 at 06:00am PST.

☐ **4.2 RELATED RATES**   Will open on 12/30/2020 at 06:00am PST.

☐ **4.4 DIFFERENTIALS**   Will open on 12/30/2020 at 06:00am PST.

☐ **6.7 L HOPITALS RULE**   Will open on 12/30/2020 at 06:00am PST.

Clear

Download PDF or TeX Hardcopy for Selected Sets

Click on the "Download PDF" button at the bottom of the homepage.

Printing a Homework Set

Printing a Homework Set

2.5_THE_CHAIN_RULE
2.6_IMPLICIT_DIFFEREN
2.7_DERIVATIVES_OF_IN
3.1_EXTREME_VALUES
3.2_THE_MEAN_VALUE_
3.3_INCREASING_AND_C
3.4_CONCAVITY_AND_TI
3.5_CURVE_SKETCHING
4.2_RELATED_RATES
4.4_DIFFERENTIALS

You may choose to show any of the following data. Correct answers, hints, and solutions are only available to privileged users

Show: ☐ Student answers ☐ Correct answers ☐ Hints ☐ Solutions

Hardcopy Format ⦿ Adobe PDF ○ TeX Source

Hardcopy Theme : ○ pdfLaTeX - English - One Column ⦿ pdfLaTeX - English - Two Columns
○ XeLaTeX-Hebrew-oneColumn ○ XeLaTeX-Hebrew-twoColumn

Generate hardcopy for selected sets and selected users

Homework Management

- All your homework managements are done in the "Homework Sets Editor" located on the control panel on the left-hand side of your screen.

Create a New Homework Set

- <u>To create a new homework set</u>, go to the "Create" tab and create "a new empty set". Enter the name of the assignment under "Name of the new set". Please note that spaces are *not* allowed, and you need to use underscores for spaces, for example, "The_Chain_Rule".

Changing the Dates of a HW Set

- Click on the pencil icon on that set and then change the dates and times on the next screen.

Edit Set Data	Edit Problems	Edit Assigned Users	Visible	Open Date	Close Date	Answer Date
0.1 INTRODUCTION TO WEBWORK ✏	7	6/6	Yes	12/27/2020 at 06:00am	12/27/2020 at 06:00am	12/27/2020 at 06:00am
1.1 AN INTRODUCTION TO LIMITS ✏	15	6/6	Yes	12/30/2020 at 06:00am	12/30/2020 at 06:00am	12/30/2020 at 06:00am
1.2 EPSILON DELTA DEF OF A LIMIT ✏	2	6/6	Yes	12/30/2020 at 06:00am	12/30/2020 at 06:00am	12/30/2020 at 06:00am
1.3 FINDING LIMITS ANALYTICALLY ✏	21	6/6	Yes	12/30/2020 at 06:00am	12/30/2020 at 06:00am	12/30/2020 at 06:00am
1.4 ONE SIDED LIMITS ✏	12	1/6	Yes	12/30/2020 at 06:00am	12/30/2020 at 06:00am	12/30/2020 at 06:00am
1.5 CONTINUITY ✏	15	1/6	Yes	12/30/2020 at 06:00am	12/30/2020 at 06:00am	12/30/2020 at 06:00am
1.6 LIMITS INVOLVING INFINITY ✏	17	1/6	Yes	12/30/2020 at 06:00am	12/30/2020 at 06:00am	12/30/2020 at 06:00am

Changing the Dates of a HW Set

- By default, all sets are visible.
- Click on the calendar icons to change the dates and times.

Save Edit   Cancel Edit

Save changes

Take Action!

Showing 1 out of 21 sets.

Set List

Edit Set	Visible	Open Date		Close Date		Answer Date	
1.3 FINDING LIMITS ANALYTICALLY	☑	12/30/2020 at 06:00am	📅	12/30/2020 at 06:00am	📅	12/30/2020 at 06:00am	📅

Assigning Homework

	Edit Set Data	Edit Problems	Edit Assigned Users
☐	0.1 INTRODUCTION TO WEBWORK ✏	7	6/6
☐	1.1 AN INTRODUCTION TO LIMITS ✏	15	6/6
☐	1.2 EPSILON DELTA DEF OF A LIMIT ✏	2	1/6
☐	1.3 FINDING LIMITS ANALYTICALLY ✏	21	1/6
☐	1.4 ONE SIDED LIMITS ✏	12	1/6
☐	1.5 CONTINUITY ✏	15	1/6

Users Assigned to Set 1.3

Assign to All Current Users This action can take a long tim

Do not uncheck students, unless you know what you are doing
There is NO undo for unassigning students.

When you unassign by unchecking a student's name, you dest
then need to reassign the set to these students and they will re

Assigned	Login Name	Student Name	Section	Close
☐	dchen001	(Chen, Diane)		
☐	hgran001	(Granger, Hermione)		
☑	rlam004	(Lam, Robert)		
☐	alope001	(Lopez, Anna)		

Editing a Homework Set

- Click on the link corresponding to the homework set under the "Edit Problems" column to delete or mark a problem correct, change the weight or number of attempts, or to reorder the problems.

	Edit Set Data	Edit Problems	Edit Assigned Users
☐	0.1 INTRODUCTION TO WEBWORK ✏	7	6/6
☐	1.1 AN INTRODUCTION TO LIMITS ✏	15	6/6
☐	1.2 EPSILON DELTA DEF OF A LIMIT ✏	2	1/6
☐	1.3 FINDING LIMITS ANALYTICALLY ✏	21	6/6
☐	1.4 ONE SIDED LIMITS ✏	12	1/6
☐	1.5 CONTINUITY ✏	15	1/6

Editing a Homework Set

- Make the applicable changes on this page.

Granting Extensions

- In the "Classlist Editor" click on the link under the "Assigned Sets" column next to the student's name.

	Login Name	Login Status	Assigned Sets	First Name	Last Name
☐	dchen001 ✎	*Inactive*	3/21	Diane	Chen
☐	hgran001 ✎	*Inactive*	3/21	Hermione	Granger
☐	rlam004 ✎	**Active**	21/21	Robert	Lam
☐	alope001 ✎	*Inactive*	3/21	Anna	Lopez
☐	hpott001 ✎	*Inactive*	3/21	Harry	Potter
☐	rweas001 ✎	*Inactive*	3/21	Ron	Weasley

Granting Extensions

- Click on the calendar icon to change the dates of the closing date and answer date (if applicable).
- Be sure that the box next to any changed field is checked.

Save changes

Sets assigned to Hermione Granger (hgran001)

Assigned	Edit set for hgran001	Dates		
☑	0.1_INTRODUCTION_TO_WEBWORK	Open: ☐ None Specified 📅	09/01/2020 at 06:00am	
		Closes: ☑ 09/16/2020 at 11:59pm 📅	09/10/2020 at 11:59pm	
		Answer: ☑ 09/17/2020 at 06:00am 📅	09/15/2020 at 06:00am	

Modifying HW scores and Criteria for One Student

- In the "Homework Set Editor, under the "Edit Assigned Users" column, click on the link corresponding to the homework set to be modified.

	Edit Set Data	Edit Problems	Edit Assigned Users
☐	0.1 INTRODUCTION TO WEBWORK ✏	7	6/6
☐	1.1 AN INTRODUCTION TO LIMITS ✏	15	6/6
☐	1.2 EPSILON DELTA DEF OF A LIMIT ✏	2	6/6
☐	1.3 FINDING LIMITS ANALYTICALLY ✏	21	6/6
☐	1.4 ONE SIDED LIMITS ✏	12	1/6
☐	1.5 CONTINUITY ✏	15	1/6

Modifying HW scores and Criteria for One Studnet

- Click on the "Edit Data" link which corresponds to the student's name.

Assigned	Login Name	Student Name	Section	Close Date	
☑	dchen001	(Chen, Diane)			Edit data for dchen001
☑	hgran001	(Granger, Hermione)			Edit data for hgran001
☑	rlam004	(Lam, Robert)			Edit data for rlam004
☑	alope001	(Lopez, Anna)			Edit data for alope001
☑	hpott001	(Potter, Harry)			Edit data for hpott001
☑	rweas001	(Weasley, Ron)			Edit data for rweas001

Modifying HW scores and Criteria for One Studnet

- Modify any data as applicable.

- "Seed" is for randomization.

- "Status" = score.

- Be sure that the box next to "Weight" and "Max attempts" are checked if modified.

User Values | Class values
Seed — 2092
Status — 0
○ Weight — [ ] 1
○ Max attempts — [ ] 5
Attempts 0

The Student's Guide

- The Student's Guide is here:

- https://mathdept.ucr.edu/sites/g/files/rcwecm1516/files/202002/WeBWorK%20Student%27s%20Guide%20Mar2012.pdf

- Please make it available to your students as it will answer most of their common questions.

- To avoid syntax error, encourage your students to preview their answers before submitting.

Preview Answers

Entered	Answer Preview
[cos((z-4)/(z+4))*[(z+4)*1-(z-4)*1]]/[(z+4)^2]	$\cos\left(\frac{z-4}{z+4}\right)\dfrac{((z+4)\cdot 1 - (z-4)\cdot 1)}{(z+4)^2}$

(1 point) **Library/UCSB/Stewart5_3_5/Stewart5_3_5_25.pg**

Differentiate $F(z) = \sin\dfrac{z-4}{z+4}$.

$F'(z) = $ | cos[(z-4)/(z+4)]*[(z+4)(1)-(z-4)(1)]/(z+4)^2

Scoring The Homework Sets

- You can wait until the end of the quarter and score all your homework sets all at once.

- However, it is recommended that you score them as they come due and backup a copy of your gradebook on your own computer or cloud.

- Each time you score a set, your old file is backed up and becomes a dot bak file before it is overwritten.

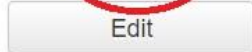# Scoring The Homework Sets
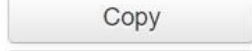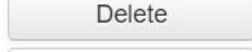
Scoring Tools

User Settings

Grades

Instructor Tools

  Classlist Editor

  Hmwk Sets Editor

  Library Browser

  Statistics

  Student Progress

  Scoring Tools

  Email

  File Manager

Course

0.1_INTRODUCTION_TO_WEBWORK
1.1_AN_INTRODUCTION_TO_LIMITS
1.2_EPSILON_DELTA_DEF_OF_A_LIMIT
1.3_FINDING_LIMITS_ANALYTICALLY
1.4_ONE_SIDED_LIMITS
1.5_CONTINUITY
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2.1_2.2_THE_DERIVATIVE_AND_ITS_INTERPRETATIONS
2.3_BASIC_DIFFERENTIATION_RULES
2.4_THE_PRODUCT_AND_QUOTIENT_RULES

☐ Includ
☐ Recor
☑ Pad F

Score selected set(s) and save to: MATH_009A_DEMO_20F_totals.csv

Scoring The Homework Sets

2.3_BASIC_DIFFERENTIATION_RULES
2.4_THE_PRODUCT_AND_QUOTIENT_RULES

Score selected set(s) and save to: MATH_009A_DEMO_20

All of these files will also be made available for mail merge.

Totals

Click on link to download

MATH_009A_DEMO_20F_totals.csv

NO OF FIELDS	,	,	,	,	,	,
SET NAME	,	,	,	,	,	,0
PROB NUMBER	,	,	,	,	,	,

Finding Your Gradebook

Finding Your Gradebook

Rob Lam
Academic Coordinator
Skye Hall 217
(951) 827-3117
robert.lam@ucr.edu