

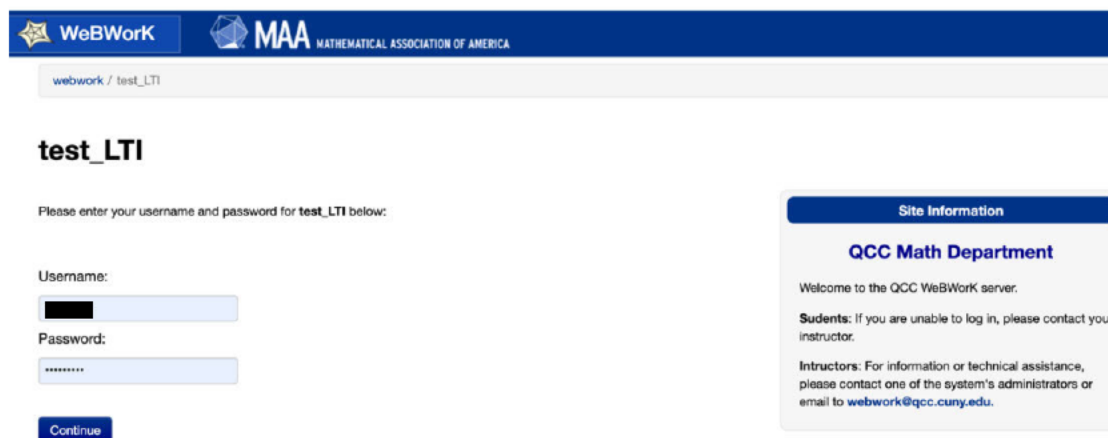
WeBWorK-Blackboard Integration

Blackboard supports a protocol call Learning Tools Interoperability (LTI) that can be used to connect WeBWorK to Blackboard. Basically, you create an "Assignment/Link" providing the url of the WeBWorK course to be connected. The only additional step you need to take in this process is to setup up the grade in Blackboard.

Faculty login and content linking

Instructors' login

Instructors, TAs and professors' access and manage their WeBWorK courses in the usual way as before the WeBWorK-Blackboard integration. That means that they use the WeBWorK front page <http://webwork.qcc.cuny.edu/webwork2>.



The screenshot shows the WeBWorK login interface. At the top is a dark blue header with the WeBWorK logo and the MAA (Mathematical Association of America) logo. Below the header, the URL "webwork / test_LTI" is displayed. The main heading is "test_LTI". Below this, a message says "Please enter your username and password for test_LTI below:". There are two input fields: "Username:" and "Password:". The "Username:" field contains a blacked-out text, and the "Password:" field contains a series of asterisks. Below the password field is a blue "Continue" button. To the right of the login fields is a "Site Information" box. The box has a blue header with the text "Site Information". Below the header, the text "QCC Math Department" is displayed. The box contains the following text: "Welcome to the QCC WeBWorK server.", "Students: If you are unable to log in, please contact your instructor.", and "Instructors: For information or technical assistance, please contact one of the system's administrators or email to webwork@qcc.cuny.edu."

In the LTI's default configuration of WeBWorK, accounts for users with roles of TA or higher are NOT created via Blackboard. That means that the accounts for the instructors are created manually in WeBWorK by the system's administrators as it has been done since the system was implemented at QCC.

Instructors, professors and TAs cannot access WeBWorK via Blackboard. If a user in one of these roles attempts to login into WeBWorK via Blackboard, the following error message appears.

WebWork error

An error occurred while processing your request. For help, please send mail to this site's webmaster (webwork@qcc.cuny.edu), including all of the following information as well as what you were doing when the error occurred.

Fri Jul 26 10:28:01 2019

Warning messages

```
* ===== parameters received ===== ext_lms => bb-3700.0.2-rel.36+fbf2221 oauth_consumer_key => Webwork tool_consumer_info_product_family_code => Blackboardlearn oauth_signature =>
N2uXhR0m2P7Tngt0jcs/P444e tool_consumer_instance_description => City University of New York tool_consumer_instance_name => City University of New York context_id =>
cd262997c52466f70c799f16e59f83 oauth_callback => about:blank custom_caliper_federated_session_id => https://caliper-mapping.cloud9b.blackboard.com/v1/sites/5ed26b7a-8099-44cb-9823-
8e4a2c9d30a4/sections/7485093000618F98C323A187309A8 custom_tc_profile_url => https://bbhostedstage.cuny.edu/learn/api/v1/lis/prof11a/211_version=1.1-1p0 launch_presentation_return_url =>
https://bbhostedstage.cuny.edu/webapps/blackboard/execute/blti/launchReturnCourse_id=1642145_liscontent_id=41780584_lisToolC=falseLaunch_id=bf8b0cc-1e14-4178-a061-
a6fa3f8784a6Link_id=41780584_lisLaunch_time=356415128033 oauth_version => 1.0 oauth_signature_method => HMAC-SHA1 roles => urn:lti:role:ins/lis/Instructor resource_link_description => Assignment
with Introduction to WebWork lis_outcome_service_url => https://bbhostedstage.cuny.edu/webapps/gradebook/lti11grade lis_person_name_full => Dr. Bianca Sosnovski tool_consumer_instance_guid =>
5591d91147c2486ab3e288180afcc949 context_label => QCC01_MA_336_PNT3_1189_1 lti_version => LTI-1p0 user_id => neb889554189464893c5673cc80c3da launch_presentation_document_target => window
oauth_timestamp => 1564151280 context_title => 2019 Fall Term (1) Statistics I/MA 336 PNT3[42324] (Queensborough CC) resource_link_title => WebWork Orientation lis_person_sourcedid => 10046014
ext_launch_presentation_cas_url => https://bbhostedstage.cuny.edu/common/shared.css,https://bbhostedstage.cuny.edu/themes/as_2015/theme.css,https://bbhostedstage.cuny.edu/branding/_1_1/brand.css?
ts=156414925000 tool_consumer_instance_contact_email => bbsupport@cuny.edu oauth_nonce => 832210009916282 lti_message_type => basic-lti-launch-request tool_consumer_info_version => 3700.0.2-
rel.36+fbf2221 launch_presentation_locale => en-US lis_person_name_family => Sosnovski ext_launch_id => bf8b0cc-1e14-4178-a061-a6fa3f8784a6 lis_person_name_given => Bianca
custom_caliper_profile_url => https://cunystage.blackboard.com/learn/api/v1/webentry/caliper/profilew/5376689a resource_link_id => _5376689a_1 ===== summary ===== at
/opt/webwork/webwork2/11b/webwork/Authn/LTIAdvanced.pm line 213. User id is [10046014] Use of uninitialized value in concatenation (.) or string at
/opt/webwork/webwork2/11b/webwork/Authn/LTIAdvanced.pm line 215. User mail address is [ Student Id is [undefined] preferred_source_of_username is [lis_person_contact_email_primary]
preferred_source_of_student_id is [undefined] ===== The following path was reconstructed by WebWork. It should match the path in the LMS at
/opt/webwork/webwork2/11b/webwork/Authn/LTIAdvanced.pm line 380. http://webwork.qcc.cuny.edu/webwork/test_LTI/PA-LTI-PNT3_Orientation/ at /opt/webwork/webwork2/11b/webwork/Authn/LTIAdvanced.pm
line 301. The adjusted LTI roles defined for this user are: --Instructor Any initial "urn:lti:ins/lis/" segments have been stripped off. The user will be assigned the highest role defined for them
===== user: 10046014 -- requested permission level is 10. at /opt/webwork/webwork2/11b/webwork/Authn/LTIAdvanced.pm line 309.
```

Error messages

The instructor account with user id [REDACTED] does not exist. Please create the account manually via WebWork. at /opt/webwork/webwork2/11b/webwork.pm line 321.

Call stack

The information below can help locate the source of the problem.

- In Carp::croak called at line 515 of /opt/webwork/webwork2/11b/webwork/Authn/LTIAdvanced.pm
- In WebWork::Authn::LTIAdvanced::create_user called at line 426 of /opt/webwork/webwork2/11b/webwork/Authn/LTIAdvanced.pm
- In WebWork::Authn::LTIAdvanced::authenticate called at line 310 of /opt/webwork/webwork2/11b/webwork/Authn/LTIAdvanced.pm
- In WebWork::Authn::LTIAdvanced::verify_normal_user called at line 300 of /opt/webwork/webwork2/11b/webwork/Authn.pm
- In WebWork::Authn::do_verify called at line 215 of /opt/webwork/webwork2/11b/webwork/Authn.pm
- In WebWork::Authn::verify called at line 321 of /opt/webwork/webwork2/11b/webwork.pm

Request information

Account doesn't exist
because Bb doesn't
not create it

If an instructor uses the “Student Preview” mode in Blackboard, then a student account can be created in WebWork and they will be allowed to login to WebWork via Blackboard as any student would.

For security reasons, the cut off at the TA level for creation of LTI based accounts is to prevent instructors with LMS access to point to an existing WebWork URL to any other course. Thus, able to add themselves (and potentially their students) to somebody else’s course. With the default cut off to TA, the worst case is that an unauthorized student webwork account gets created for the course by a faculty using “Student Preview”.

Content linking in Blackboard

1) Enable LTI in Blackboard

In the Blackboard menu under “Customization” click on “Tool Availability”. Scroll down and make sure the box in the QCC WebWork row (in the “Available” column) is checked.

QBCC_PlayPosit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
QCC ALEKS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QCC VoiceThread LTIOne	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
QCC WebWork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Check this box

2) Create an assignment

Instructors create assignments in WebWork as usual. For more information about this, check <https://github.com/bsosnovski/WW-Converter>

The necessary steps in creating an assignment in WebWork are:

- Name the new assignment (e.g. MA-LTI-PNT3_Orientation).
- Select the questions/problems to be part of the assignment.
- Set dates for when the assignment opens, closes and when the answers will be available.
- Make the assignment visible.

The last two steps are shown below.







Set Detail 2 for set MA-LTI-PNT3_Orientation

This set **MA-LTI-PNT3_Orientation** is assigned to all students. Edit [individual versions](#) of set MA-LTI-PNT3_Orientation.

Any changes made below will be reflected in the set for **ALL** students.

Save Changes

Reset Form

General Information	
Opens	06/25/2019 at 11:59pm 
Closes	07/26/2019 at 03:59pm 
Answers Available	07/28/2019 at 11:59pm 
Visible to Students	Yes 
Hide Hints from Students	No 
Assignment type	homework 

Annotations:

- Red bracket on the date fields with arrow pointing to "Set dates"
- Red arrow from "Visible to Students" field pointing to "Make the assignment visible"

Set Description

3) Linking the assignment in Blackboard

Once the WeBWorK assignment is ready, the instructor will need to make a link/assignment in Blackboard that students can use to get to WeBWorK.

- Go to the content area where you want the assignment link to appear.
- Go Build Content > Web Link.
- Add a name for the assignment.
- Add the URL of the assignment you are linking to. (the URL looks like: **<http://webwork.qcc.cuny.edu/webwork2/CourseName/Assignment>**)
- Check the box "This link is a Tool Provider".
- Enable Evaluation and make visible to students.
- Set the number of points (same as in WeBWorK)
- (Optional) Set the due date in Blackboard.
- (Recommended) Set the link to open the assignment in a new window.

Example:

A valid link for linking an assignment is like

http://webwork.qcc.cuny.edu/webwork2/test_LTI/MA-LTI-PNT3_Orientation

Note:

Visibility and due dates of assignments are not automatically synchronized. Changing theses in WeBWorK doesn't change them automatically in Blackboard. Though instructors have to set these features in both systems separately, it is recommended that instructors to set due dates also in Blackboard and to allow WeBWorK to control the availability of the assignments.

Edit Web Link

A Web Link is a shortcut to a Web resource. Add a Web Link to a Content Area to provide a quick access point to relevant materials. [More Help](#)

* Indicates a required field.

WEB LINK INFORMATION

* Name

* URL
For example, <http://www.myschool.edu/>

☒ This link is to a Tool Provider. [What's a Tool Provider?](#)

Enable Evaluation ☒ Yes ☐ No

To set additional evaluation options, use the Column settings in the Grade Center

* Points Possible

Visible to Students ☒ Yes ☐ No

Due Date

Enter dates as mm/dd/yyyy. Time may be entered in any increment.

Now everything is set up and ready for the students.

Note: You need to make sure grading is enabled for the link and set the total number of points the assignment is worth.

It is recommended that you use 100 points so that the grade looks like a percentage. However, the grade given to the student will always be a percentage of the total available points so you can use however many points you want.

The following shows the assignments links created in the content area called “WeBWorK LTI.”

WeBWorK LTI

Build Content Assessments Tools Partner Content

WeBWorK Orientation
Enabled: Statistics Tracking
Assignment with Introduction to WeBWorK

WeBWorK HW 1
Enabled: Statistics Tracking
First homework assignment.

WeBWorK HW 2
Enabled: Statistics Tracking
Second homework assignment

Grade sync

The LTI configuration in WeBWorK is set to return the total score for each assignment to Blackboard. In other words, instructors will see multiple columns in Blackboard Grade Center, one for each link/assignment, which will be filled out with the students' scores on individual WeBWorK assignment.

WeBWorK will attempt to update student grades every time they submit an answer to a problem. This keeps the student grades current. One possible downside of this feature is that it can drain our QCC WeBWorK server.

Below is an illustration of the corresponding columns created in the Grade Center based on the assignments shown above. These columns will be filled with scores as students access the assignments using the links provided in Blackboard.

Grade Center : Full Grade Center

The Full Grade Center displays all columns and rows in the Grade Center and is the default view of the Grade Center. [More Help](#)

Create Column Create Calculated Column ▾ Manage ▾ Reports ▾ Filter Discover Content Work Offline ▾

Move To Top Email ▾ Sort Columns By: Layout Position ▾ Order: ▲Ascending ▾

Grade Information Bar

<input type="checkbox"/>	LAST NAME ▾	FIRST NAME ▾	INTRODUCTIO NS ▾	WEBWORK ORIENTATION ▾	WEBWORK HW 1 ▾	WEBWORK HW 2 ▾
Selected Rows: 0						

Move To Top Email ▾ Icon Legend Edit Rows Displayed

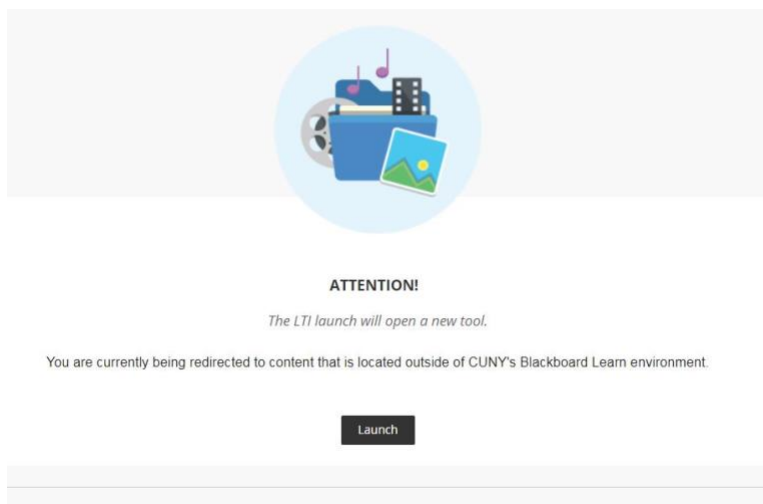
Testing the system as a student

Students' login

With the WeBWorK-Blackboard integration via LTI, Blackboard automatically creates students accounts in WeBWorK. A password will not be required from the students to access WeBWorK. Students are automatically assigned to all visible homework sets.

Students' accounts created via Blackboard will not have neither a student ID nor an initial password in WeBWorK. Students will not be able to login into WeBWorK directly. There is only one way for students to login. They must log in to Blackboard and select a WeBWorK assignment.

Students see the link(s) to their WeBWorK assignment(s) in the Content area in Blackboard. They will use the link(s) to access WeBWorK assignment(s). Once students click on a link, they receive a notification that they will be redirected to an application outside Blackboard.



The screenshot below shows what a student see after there are logged in to WeBWorK.

MA-LTI-PNT3 Orientation

Homework Sets

Name	Attempts	Remaining	Worth	Status
Problem 1	2	unlimited	1	100%
Problem 2	1	unlimited	1	100%
Problem 3	1	unlimited	1	100%
Problem 4	1	unlimited	1	60%
Problem 5	3	unlimited	1	100%
Problem 6	1	unlimited	1	100%
Problem 7	2	unlimited	1	100%
Problem 8	1	unlimited	1	100%

Email instructor

Download PDF or TeX Hardcopy for Current Set

Set Info

WeBWorK Assignment MA-LTI-PNT3_Orientation is due : 07/26/2019 at 03:59pm EDT.

Here's the list of functions and symbols which WeBWorK understands.

The login was successfully done via Blackboard and the student is able to submit answers to the assignment before or on the due date.

Through a customization of WeBWorK's configuration, section and semester/year that are passed to WeBWorK as well. The information helps to facilitate instructors' management of their course accounts in system.

Once in WeBWorK students navigate and finish assignments in exactly the same way they normally would. WeBWorK behaves just as it would if there were no connection to Blackboard at all. The only difference is when students submit a grade, they should get a message like the one below about the status of the submission.

MA-LTI-PNT3 HW 1: Problem 12

[Previous Problem](#)[Problem List](#)[Next Problem](#)

Results for this submission

Entered	Answer Preview	Result
3	3	correct
$y - 3x = 0$	$y - 3x = 0$	correct

All of the answers above are correct.

(1 point) Find the slope and the equation for the line passing through the points: $(-1, -3)$ and $(0, 0)$.

Note: If the slope does not exist, enter: **Does not exist**

a) $m =$

b) The equation for the line:

Note: You can earn partial credit on this problem.

[Preview My Answers](#)[Submit Answers](#)

I estimate that you answered **zero** questions incorrectly.

Your score was recorded. Your score was successfully sent to the LMS.

You have attempted this problem **3** times.

You received a score of 100% for this attempt.

Your overall recorded score is 100%.

You have unlimited attempts remaining.

From instructors' perspective, WebWork's classlist shows the newly student account created with time stamp of the latest grade submission to the LMS, section and semester/year of the course enrollment.

Classlist Editor

[Show/Hide Site Description](#)

Select an action to perform:

[Filter](#) [Sort](#) [Edit](#) [Password](#) [Import](#) [Export](#) [Add](#) [Delete](#)

Show Which Users?:

What field should filtered users match on?:

Filter by what text?:

[Take Action!](#)

Showing 11 out of 11 users

Users List											
<input type="checkbox"/>	Login Name	Login Status	Assigned Sets	First Name	Last Name	Email Link	Student ID	Status	Section	Recitation	Comment
<input type="checkbox"/>	██████████	Inactive	6/7	██████████	██████████	Email	██████████	Enrolled			
<input type="checkbox"/>	██████████	Active	6/7	██████████	██████████	Email	██████████	Enrolled			
<input type="checkbox"/>	██████████	Inactive	6/7	██████████	██████████	Email	██████████	Enrolled			
<input type="checkbox"/>	██████████	Inactive	6/7	██████████	██████████	Email	██████████	Enrolled			
<input type="checkbox"/>	██████████	Inactive	6/7	██████████	██████████	Email	██████████	Enrolled	Sp Admin		
<input type="checkbox"/>	██████████	Inactive	7/7	██████████	██████████	Email	██████████	Enrolled	L test		
<input type="checkbox"/>	██████████	Inactive	6/7	Bianca	Sosnovski	Email	██████████	Enrolled			
<input type="checkbox"/>	██████████	Inactive	6/7	██████████	██████████	Email	██████████	Enrolled			07/26/2018 at 01:10pm EDT
<input type="checkbox"/>	██████████	Inactive	6/7	test	test	Email	██████████	Enrolled	test		
<input type="checkbox"/>	██████████	Inactive	6/7	Qbcc	Testperson			Enrolled	MA 336 PNT3[42324]	2018 Fall	08/01/2019 at 06:44pm EDT
<input type="checkbox"/>	██████████	Active	6/7	Qbcc	Testperson	Email		Enrolled	MA 336 PNT3[42324]	2018 Fall	08/01/2019 at 06:51pm EDT

Section and year/
semester are
provided in the
student's profile

Time stamp updated
every time student
submit an answer in
Ww

The following is the student's view in Blackboard's "My grades".

My Grades		
<div>All Graded Upcoming Submitted</div> <div>Order by: Course Order</div>		
ITEM	LAST ACTIVITY	GRADE
WeBWork Orientation DUE: JUL 26, 2019	Jul 25, 2019 3:02 PM GRADED	0.00 /8
WeBWork HW 1 DUE: JUL 27, 2019	Jul 26, 2019 10:30 AM GRADED	0.00 /100
WeBWork HW 2 DUE: JUL 28, 2019	UPCOMING	- /15

Grade submission

After submitting an assignment, the debugging message in WeBWork shows that the grade was passed successfully to the LMS.

MAIN MENU

Courses

Homework Sets

MA-LTI-PNT3

Orientation

Problem 8

User Settings

Grades

Problems

Problem 1 ✓

Problem 2 ✓

Problem 3 ✓

Problem 4 ...

Problem 5 ✓

Problem 6 ✓

Problem 7 ✓

Problem 8 ✓

< webwork / test_lti / ma-lti-pnt3_orientation / 8

MA-LTI-PNT3 Orientation: Problem 8

Previous Problem Problem List Next Problem

Results for this submission

Entered	Answer Preview	Result
All of the answers above are correct.		
(1 point)		
<div>When You're Stuck...</div> <p>The goal of the WeBWork software is to help you learn mathematics by giving you immediate feedback on the correctness of your answer to a problem. It is not designed to be a tutorial or to replace humans in explaining the material to you. As with any learning tool, it is up to you to make efficient and effective use of the software. Here are some things you can try when you are stuck on a problem.</p> <ul style="list-style-type: none">Reread the problem carefully to see if there are any instructions that you did not notice.Check carefully for directions on the Problem List page. You can get to this page by pressing the "Problem List" button at the top of any problem page.Look in the textbook for similar problems or relevant methods.		

The student sees the following in WeBWork's grades.

Grades

Qbcc Testperson

Set	Percent	Score	Out Of	Problems																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
MA-LTI-PNT3 HW 1	0%	0.00	18	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
MA-LTI-PNT3 HW 2	0%	0.00	15	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
MA-LTI-PNT3 HW 3	0%	0.00	13	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
MA-LTI-PNT3 HW 4	0%	0.00	19	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
MA-LTI-PNT3 HW 5	0%	0.00	16	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
MA-LTI-PNT3 Orientation	96%	7.60	8	<div><div>100%</div></div>	<div><div>100%</div></div>	<div><div>100%</div></div>	<div><div>60%</div></div>	<div><div>100%</div></div>	<div><div>100%</div></div>	<div><div>100%</div></div>	<div><div>100%</div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Homework Totals	9%	7.6	89																		

And faculty sees the following in Blackboard's Grade Center.

Grade Center : Full Grade Center

The Full Grade Center displays all columns and rows in the Grade Center and is the default view of the Grade Center. [More Help](#)

Create Column Create Calculated Column Manage Reports Filter Discover Content Work Offline

Grade Information Bar

Sort Columns By: Layout Position Order: Ascending

Last Saved July 26, 2019 1:22 PM

LAST NAME	FIRST NAME	USERNAME	LAST ACCESS	WEBWORK ORIENTATION	WEBWORK HW 1	WEBWORK HW 2
			July 26, 2019	4.90
	Testperson	Qbcc	July 26, 2019	7.60	0.00	0.00

Selected Rows: 0

Move To Top Email

Link never clicked by user

Latest score passed to Bb

Link clicked by user but not answer submitted to the system

Icon Legend Edit Rows Displayed

If assignments are made visible in WeBWorK but are without links in Blackboard or their links were never used by the user, students will be able to see the sets but not access them direct via WeBWorK.

test_LTI

Homework Sets		
Name	Status	
MA-LTI-PNT3 Orientation	Open, closes 07/26/2019 at 11:59am EDT.	Assignments with links in Bb
MA-LTI-PNT3 HW 1	Open, closes 07/27/2019 at 11:59pm EDT.	
MA-LTI-PNT3 HW 2	Open, closes 07/28/2019 at 11:59pm EDT.	
MA-LTI-PNT3 HW 4	Open, closes 07/28/2019 at 11:59pm EDT. You must log into this set via your Learning Management System (e.g. Blackboard, Moodle, etc...).	Assignments created in Ww but without links in Bb
MA-LTI-PNT3 HW 3	Open, closes 07/29/2019 at 11:59pm EDT. You must log into this set via your Learning Management System (e.g. Blackboard, Moodle, etc...).	
MA-LTI-PNT3 HW 5	Open, closes 07/30/2019 at 11:59pm EDT. You must log into this set via your Learning Management System (e.g. Blackboard, Moodle, etc...).	

Course Info
Welcome to WeBWork!
 College: QCC - CUNY
 Prof: B. Sosnovski

MAIN MENU
 Courses
 Homework Sets
 MA-LTI-PNT3 HW 5
 User Settings
 Grades

Sets
 MA-LTI-PNT3 HW 1
 MA-LTI-PNT3 HW 2
 MA-LTI-PNT3 Orientation

[webwork / test_LTI / MA-LTI-PNT3_HW_5](#)

MA-LTI-PNT3 HW 5 - Closes 07/30/2019 at 11:59pm EDT

Homework Sets
 The selected problem set (MA-LTI-PNT3_HW_5) is not a valid set for [redacted]
 You must use your Learning Managment System (E.G. Blackboard, Moodle, Canvas, etc...) to access this set. Try logging in to the Learning Managment System and visiting the set from there.

Available assignments to user in Ww

Page generated at 07/26/2019 at 12:43pm EDT
 WeBWork © 1996-2019 | theme: math4 | ww_version: WeBWork-2.14 | pg_version PG-2.14 | The WeBWork Project

Note:

In Blackboard, instructors do not have grades. In this case they will see the message "Your score was not successfully sent to the LMS". This is OK. The following shows what they see in WeBWork.

MA-LTI-PNT3 HW 1: Problem 14

[Previous Problem](#)[Problem List](#)[Next Problem](#)

This set is **visible to students**.

Results for this submission

Entered	Answer Preview	Result
$2x + y = 2$	$2x + y = 2$	correct

The answer above is correct.

(1 point) **Library/CollegeOfIdaho/setAlgebra_02_04_PointSlopeFormofLine/24IntAlg_26_LinearFunction.pg**

Find the equation for the line passing through the point $(2, -2)$ and perpendicular to the line whose equation is $-2x + 4y + 8 = 0$.

Answer:

Solution:
.....

[Edit2](#) [Edit3](#)

Show: ☐ CorrectAnswers ☐ AnswerGroupInfo ☐ Show Auxiliary Resources ☐ AnswerHashInfo ☐ PGInfo

[Preview My Answers](#)[Check Answers](#)[Submit Answers](#)

I estimate that you answered **zero** questions incorrectly.

Your score was recorded. Your score was not successfully sent to the LMS

You have attempted this problem 1 time.

You received a score of 100% for this attempt.

Your overall recorded score is 100%.

You have unlimited attempts remaining.

Instructors can switch to the “Student Preview” mode and click on the assignment link. Once the Instructors successfully logged in and see the assignment and try answering some questions, they will see the corresponding scores appear in your student preview account in Blackboard's Grade Center. If any of these steps are unsuccessful, they need to troubleshoot.

Student preview mode ensures grades are passed back to Blackboard; otherwise, grades are not be passed back. In either case, Blackboard logs you into the same account in WeBWorK.

Student Preview mode is ON

SettingsExit Preview

2018 Fall Term (1) Statistics MA 336 PNT3[42324] (Queensborough CC)

My Grades

2018 Fall Term (1)
Statistics MA 336
PNT3[42324]
(Queensborough CC)

Announcements

Contact Information

Getting Started (Before
classes start)

Course Information

Grading Policy

My Grades

Ask a question to the
instructor

My Grades

AllGradedUpcomingSubmitted

Order by: Course Order

ITEM	LAST ACTIVITY	GRADE
WebWork Orientation DUE: JUL 26, 2019	JUL 26, 2019 1:22 PM GRADED	4.96 /8
WebWork HW 1 DUE: JUL 27, 2019	UPCOMING	- /100
WebWork HW 2 DUE: JUL 28, 2019	UPCOMING	- /15

Other WeBWorK's features:

One of the important features in WeBWorK is the button, [Email instructor](#) which students use to communicate with instructors about a specific problem in the assignment posted.

If a student clicks on the button, she/he will be taken to a page where they can type a question that will be sent to your instructor. Then the instructor will receive a link that will take her/him directly to the problem student is working on.

E-mail Instructor

From: mail@gcc.cuny.edu

Use this form to report to your professor a problem with the WeBWorK system or an error in a problem you are attempting. / included.

E-mail:*

Student's email
passed from Bb
to Ww

Send E-mail

Cancel E-mail

This WeBWorK's feature helps faculty to provide feedbacks to students.

Summary

With the integration, the Department's WeBWorK server allows direct login via Blackboard and it includes:

- Automatic creation of WeBWorK student accounts from Blackboard;
- Single login via Blackboard;
- Automatic grade passback from WeBWorK to Blackboard;
- Assignments are assigned to users once visible.

What remains the same:

- WeBWorK courses are created at the request of course instructors by the department WeBWorK administrators;
- Instructor accounts must be manually created on WeBWorK;
- Assignments are created, opened and closed on WeBWorK.