# MAPLE TA

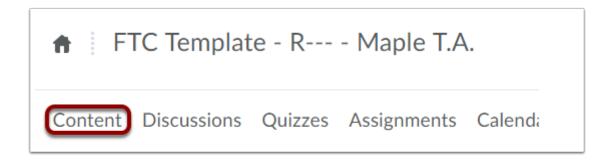
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# Maple TA

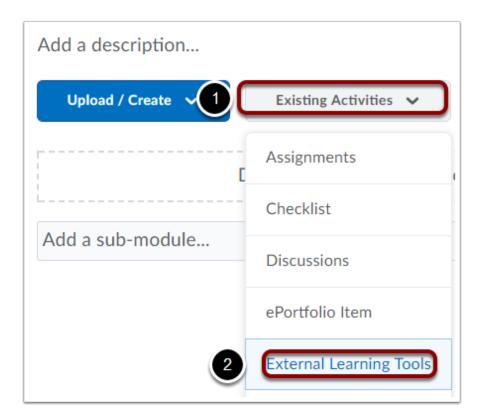
# How Do I Create a New Maple T.A. Class? (Campus Courses)

#### Content



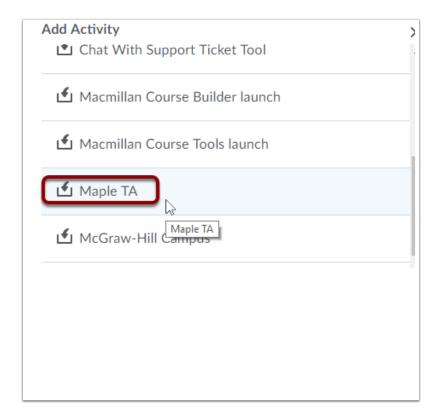
Click on the Content tab.

# **Existing Activities**



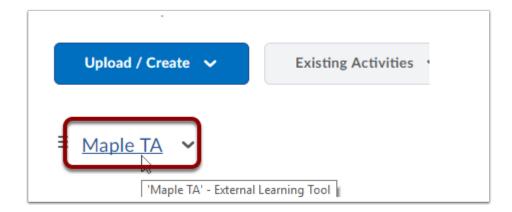
- 1. Click on Existing Activities.
- 2. Select External Learning Tools.

## Maple TA



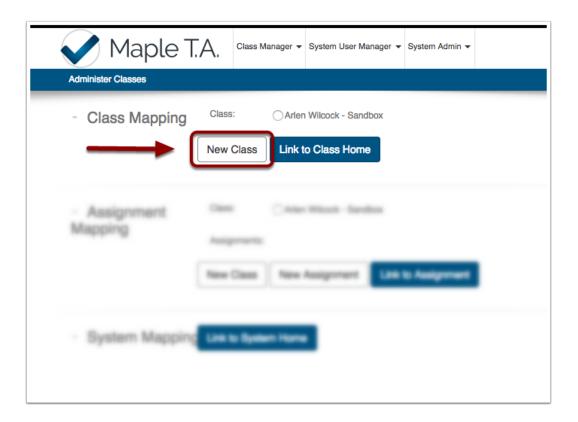
Select Maple TA from the list of external learning tools.

#### Click the Link



Click on the Maple TA link.

#### **New Class**



Once in Maple TA, Click on New Class.

Do not use the Assignment Mapping or System Mapping features at this time.

#### **Options**



The options for the new class should be left at their default values.

Do not use the Featured Class setting. It is reserved exclusively for online courses.

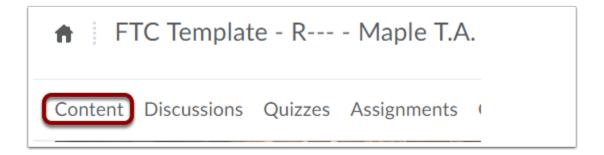
#### "Inherit Content From" Option

If you select a class for the "Inherit Content from" field, your new class will have all the same content as the class you select in the dropdown menu. This makes your new class a child class. Note that most of the content of a child course in Maple TA cannot be changed independent from the parent course. That is, to change anything in the child course, you would have to make the change in the parent course.

# How Do I Link to an Existing Maple TA Class?

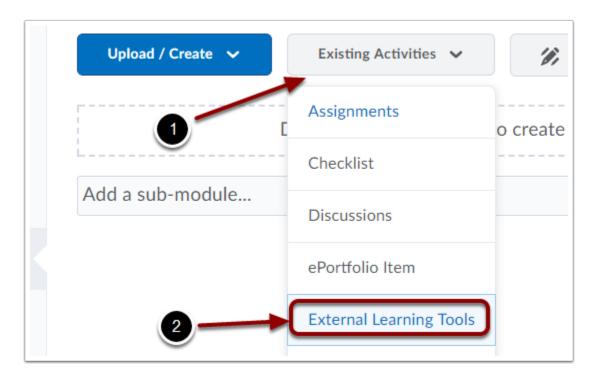
This article details how to create a link in I-Learn that points to an existing Maple TA class.

#### Content



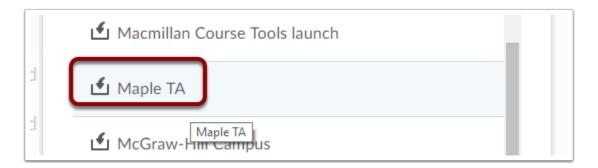
Go to the Content tab in I-Learn.

### **Existing Activities**



Click on Existing Activities then External Learning Tools.

## Maple TA



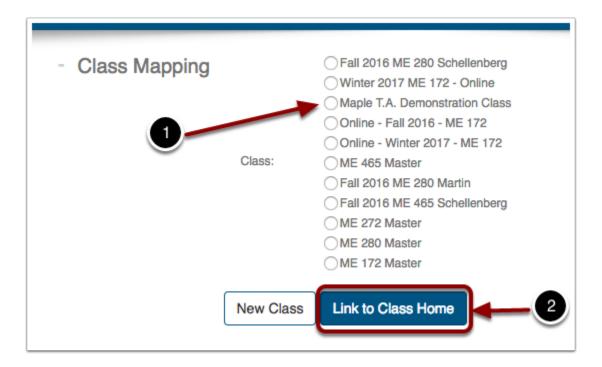
Select Maple TA from the list of external learning tools.

### Maple TA Link



Click on the newly-created Maple TA Link

#### Link to Class Home



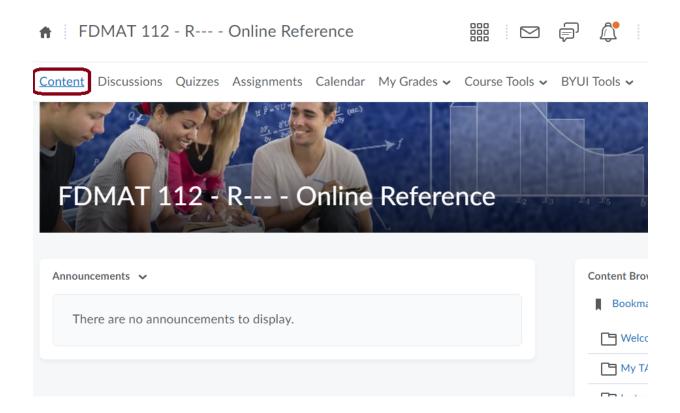
Select the class you would like to link to, then click Link to Class Home.

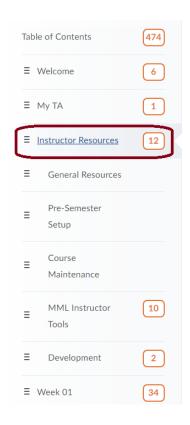
# How Do I Create a Child Class in Maple TA?

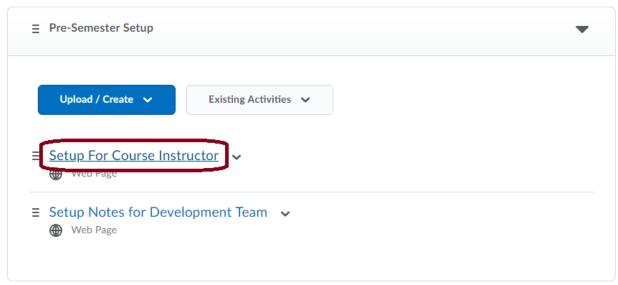
This article details how to create a child class based on an existing Maple TA Class in both Brightspace and Canvas.

#### **Brightspace Instructions**

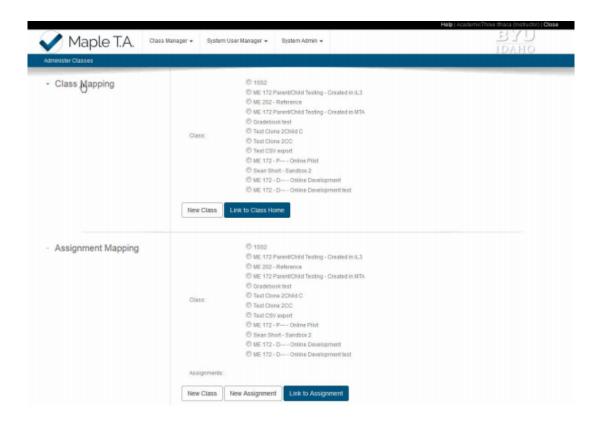
In the I-Learn 3.0 course, find the Maple TA link. (Follow the instructions in the Setup for Course Instructor in the course.)



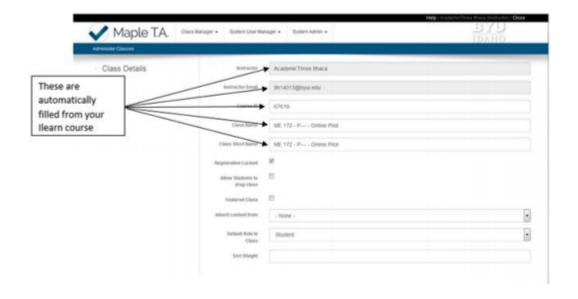




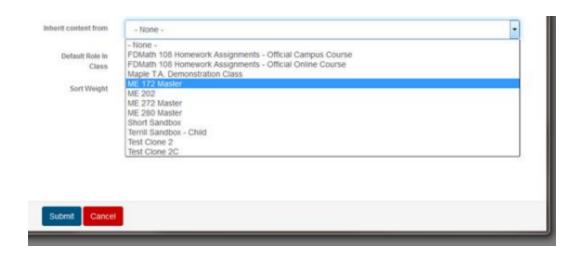
When setting up a new Maple TA course, ignore all other courses that may appear. In the Class Mapping area, click the new class button.



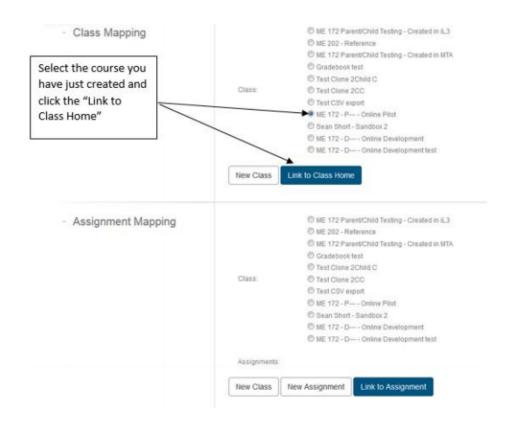
Most of the information is already filled in and should **NOT** be changed.



In the "Inherit content from" section, use the drop down box and find the course from the list that matches the correct course code and semester.



After the correct course has been selected, click on the submit button. This will go back to the Class Mapping screen.



Back in the Class Mapping section, select the course that was just made—it should have the same name as the original I-Learn section—and click "Link to class Home". This should provide a message about grades. Click okay.

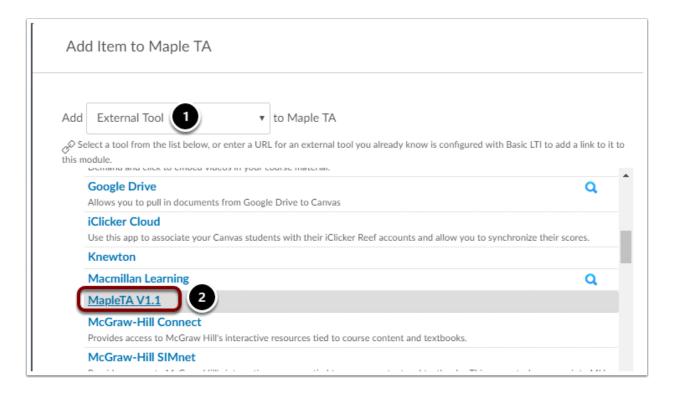
The link is now setup. Now, whenever the link is clicked, it will lead to the course homepage in Maple TA.

#### **Canvas Instructions**

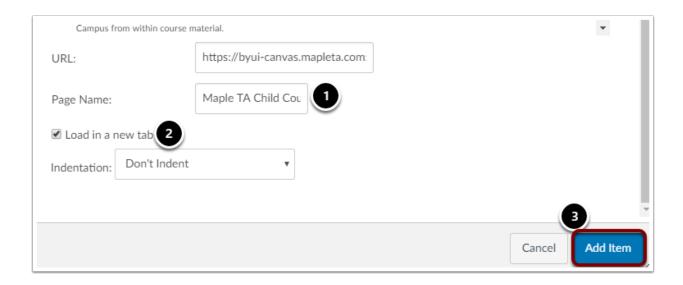
To create a Maple TA child class for a Canvas course, first go to modules in Canvas then click on the "+" button next to the module where the child class should be created. The child course can be added in any module, but it would be best placed in the module where it is first used.



Choose "External Tool" from the list of options then scroll down and click on "MapleTA V1.1".



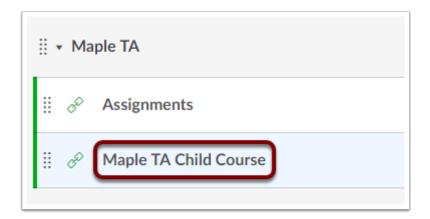
Scroll down to the bottom and add a page name for the item. Select the option to load in a new tab then click "Add Item".



Make sure that the new item is published by clicking the grey circle with a line through it. After clicking it, it should become a green circle with a check mark.



Now, click on the item that was just created.



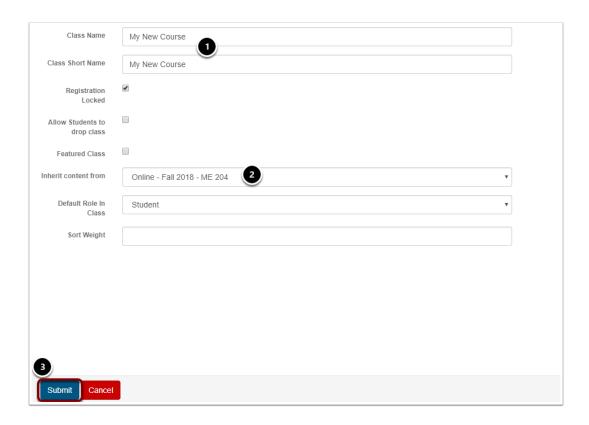
Click the button to load the course in a new window.



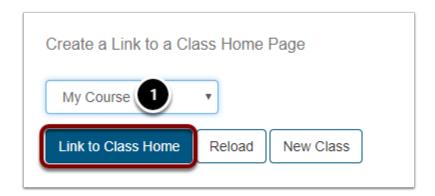
Click the "New Class" button.



Fill out the information on the page. Ensure that the class name is correct and the content is being inherited from the correct course. When finished, click the "Submit" button.



Now that the course has been created, the item needs to be linked to the home page. To do this, select the correct course from the drop down under the section "Create a Link to a Class Home Page", then click the button "Link to Class Home".

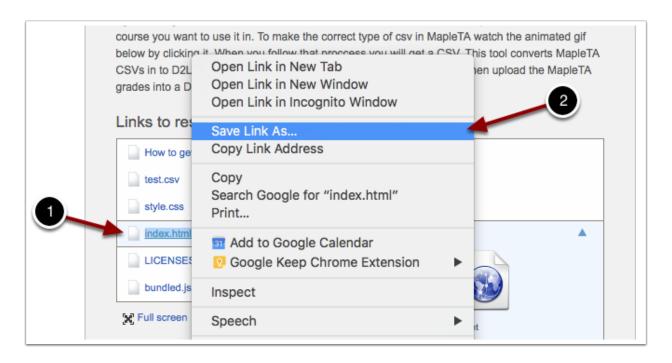


# How Do I Move Grades from Maple TA to I-Learn?

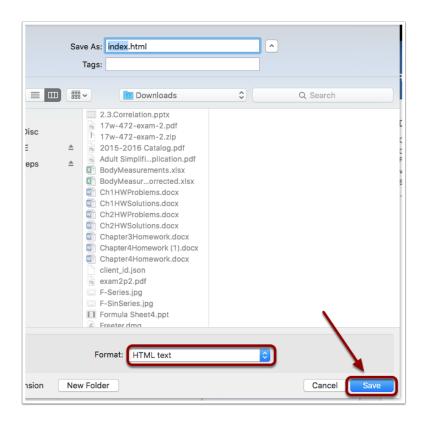
This article will detail how to export student grades from a Maple TA course into an I-Learn course. A tool has been developed by BYU-Idaho employees in order to make this process easier.

### **Access Necessary Files**

In order to use the Maple TA-to-I-Learn grade conversion tool, <u>click here</u> to access the necessary files.

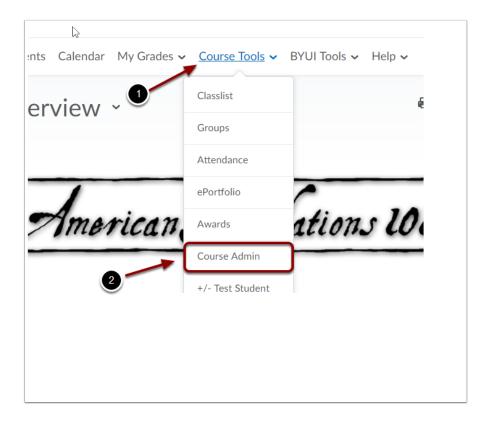


Right-click on index.html and then click Save Link As...

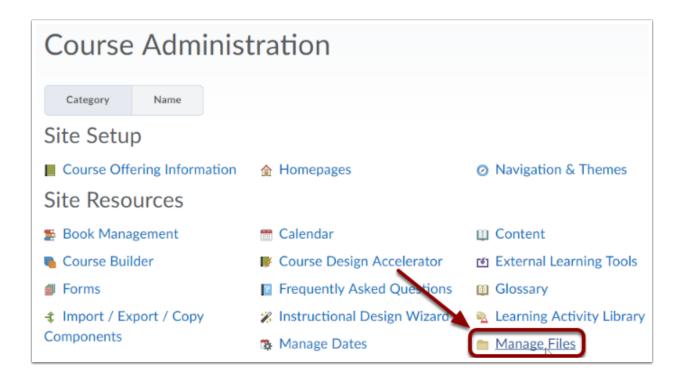


Ensure that index.html is saved in the default HTML format.

## I-Learn Manage Files

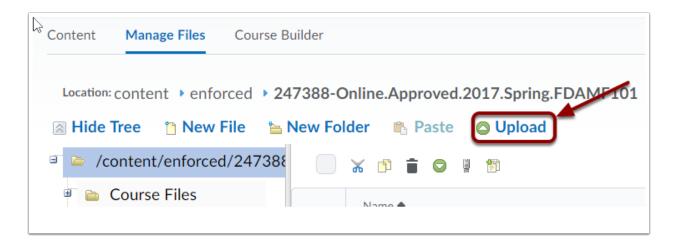


In I-Learn, click on Teaching Tools, then Course Admin.

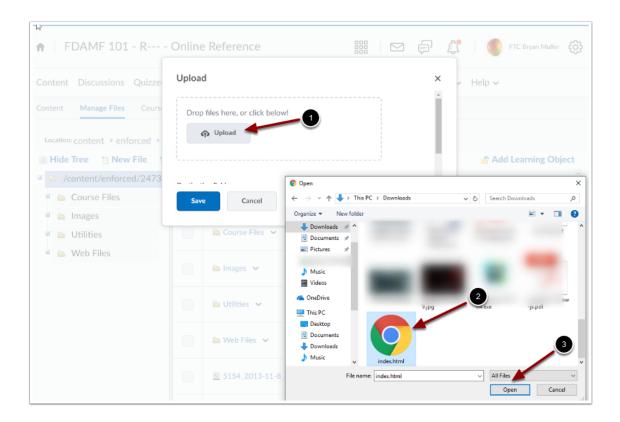


On the Course Administration page, click Manage Files

### **Upload File**

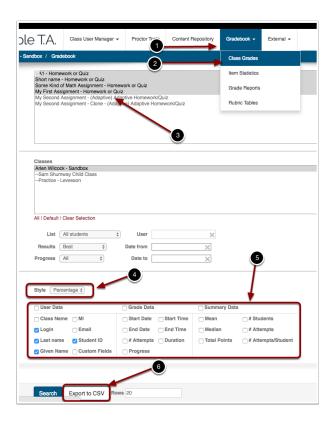


Click the Upload button.



Click Upload, select index.html, then click Open.

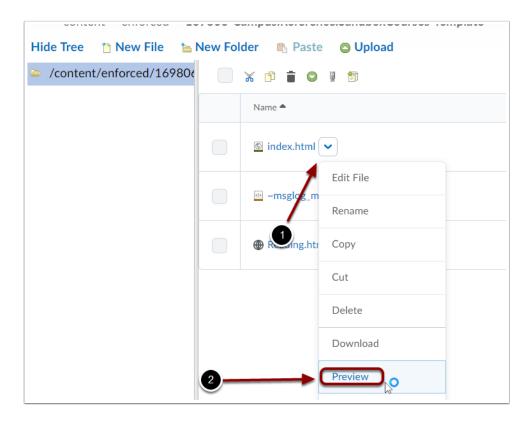
### **Export Maple TA Grades**



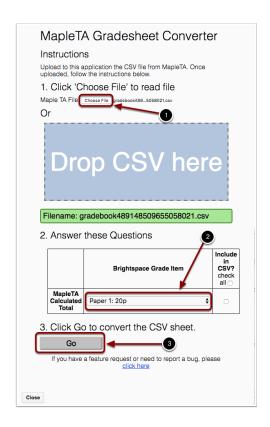
- 1. Click on Grades
- 2. Click on Class Grades
- 3. Select the Assignments whose grades you would like to export
- 4. Make sure the style is set to Percentage
- 5. Ensure the correct checkboxes are selected as depicted in the image above
- 6. Click Export to CSV

A csv file will then be downloaded.

# Import Grades into I-Learn



Back in the Manage Files part of I-Learn, click the dropdown mean next to index.html and select Preview.



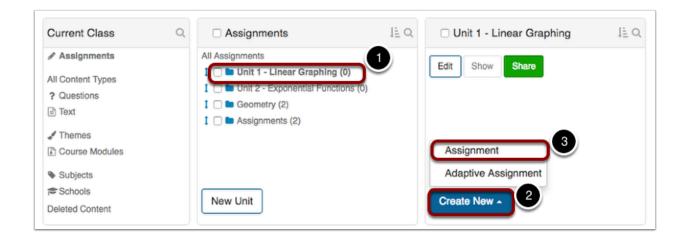
- 1. Click Choose File and select the csv file that was downloaded from Maple TA
- 2. Select the corresponding grade item from your I-Learn gradebook.
- 3. Click Go

# How Do I Create a Maple TA Assignment?

### **Content Repository**

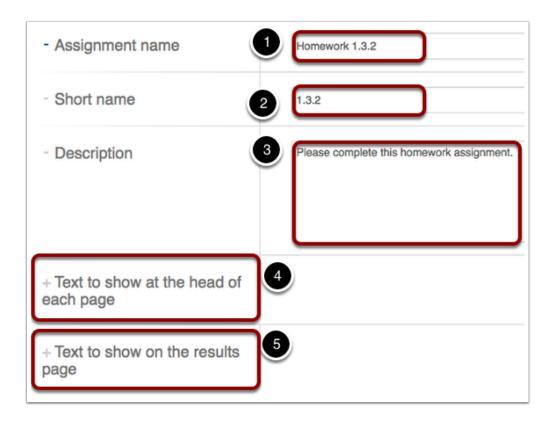


#### Select Unit



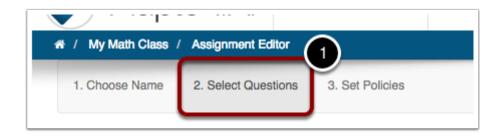
- 1. Select the unit you want to add an assignment to
- 2. Click Create New
- 3. Click on Assignment

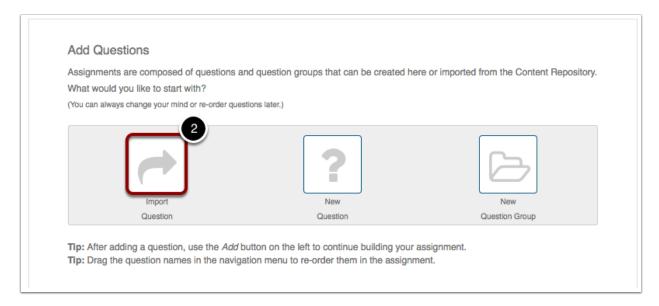
#### **Set Name**



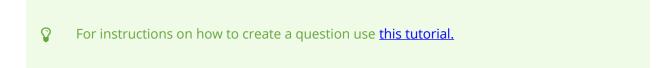
- 1. Assignment name The name of the assignment as it will show to the student.
- 2. Short name This will appear on the content repository page to save space.
- 3. Description This will be shown to the students as they begin the assignment.
- 4. Show at head Text entered here will appear on every page. This would be a great place to put equations that students can use on the assignment or special instructions.
- 5. Show on the results This text will only apear after students submit the assignment. This could be used to gives students general feedback, or instructions to complete after they complete the assignment.

### **Select Questions**

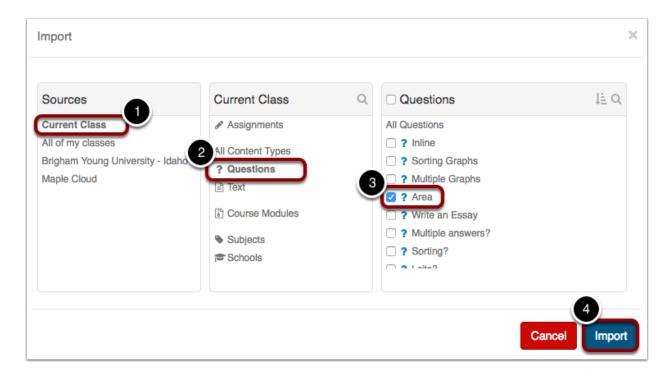




- 1. Click on the Select Questions tab on the top.
- 2. Choose the Import Questions option

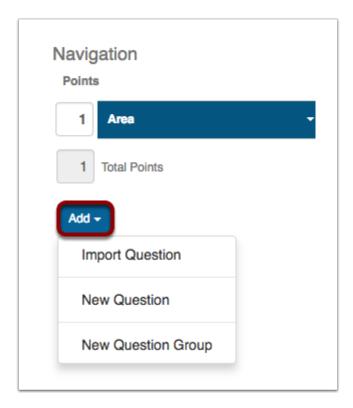


### Import a Question



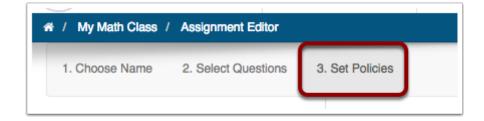
- 1. Select Current Class
- 2. Select Questions
- 3. Check the box next to the questions you want to add. You can select multiple questions at one time.
- 4. Click the blue Import button.

### Add More Questions



If you need to add or create more questions you can use the blue Add button on the right of the screen.

#### **Set Policies**



**Click** on the Set Policies tab to be able to change settlings regarding attempts, passwords or time limits.



If you want more information on policies check out this tutorial.

#### Save and Close

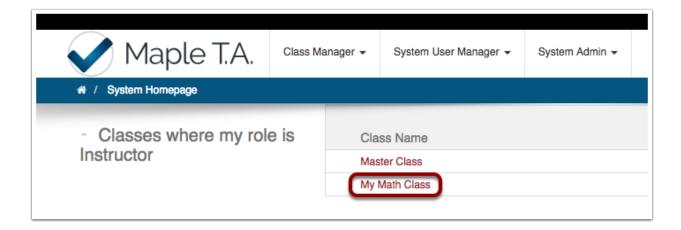


**Click** the Save & Close button to finalize your assignment. You will get a pop up to confirm just **click** Save & Close again.



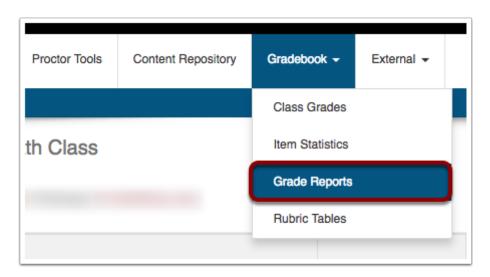
# How Do I Set Up A Grade Report in Maple TA?

### Navigate to the Class



First navigate to your class in Maple T.A.

### **Grade Reports**



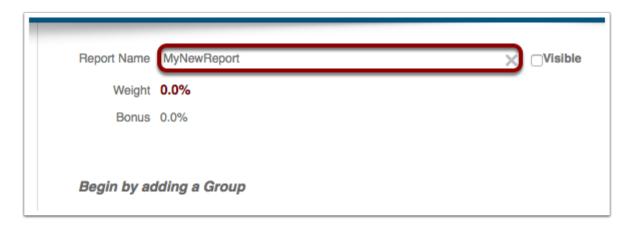
Go to Gradebook and select Grade Reports.

### **New Report**



Click the New button at the bottom of the page.

### Name the Report



Type in the name of the grade report, according to the setup notes in your course.

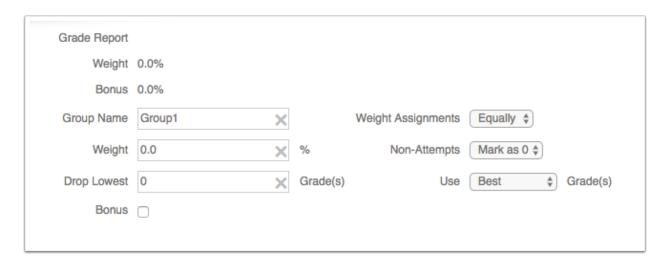


Each gradebook item in I-learn will match a single group in Maple TA, unless you are only transferring the "Maple TA Calculated Total". See the <u>Transferring Grades from Maple TA</u> document for more information.

### Add Group



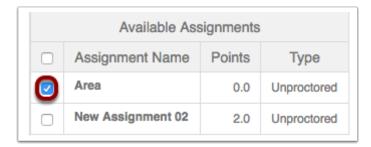
#### Click the Add Group button.



Follow instructions in the setup notes in your course for each of the following:

- · Group name
- Weight Assignment as ...
- Weight % (The grade percentage the group will have in the overall score).
- Non-Attempts (zero everything from beginning or ignore non-attempts in calculation)
- Drop Lowest ...
- Use Grades
- Bonus (checked or unchecked)

# Add Assignments



Connect all corresponding assignments into the group, again according to the setup notes in your course.

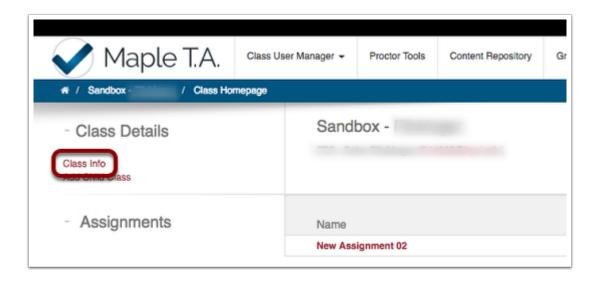
Repeat these steps until all Groups have been created.



Note: The combined weight of all the groups needs to be 100%.

# How Do I Change A Maple TA Course Name?

### Class Info



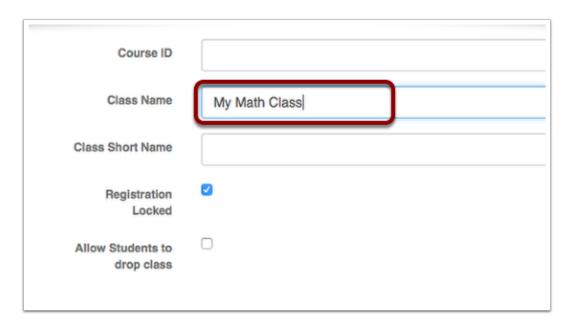
Select Class Info on the left hand side of the screen.

#### Edit



Click on the Edit link.

# **Change Name**



**Type** in a new class name.

## Submit



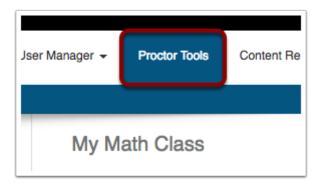
Click on the Submit button at the bottom of the page.



All of your links should remain intact. If you get an error message you should be able to ignore it and the name should work.

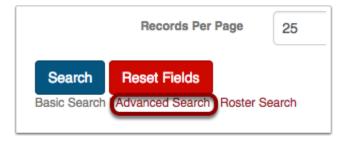
# How Do I Give Students More Time On A Maple TA Assignment?

### **Proctor Tool**



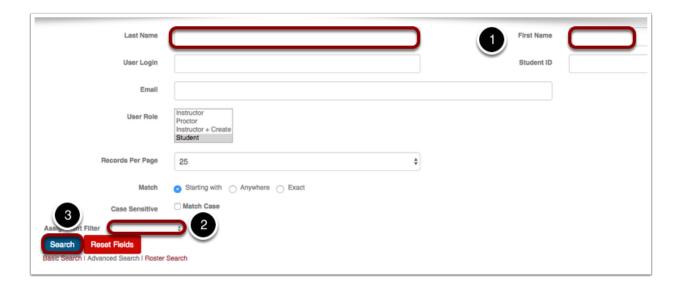
Click on the Proctor Tools button at the top of the screen.

#### **Advanced Search**



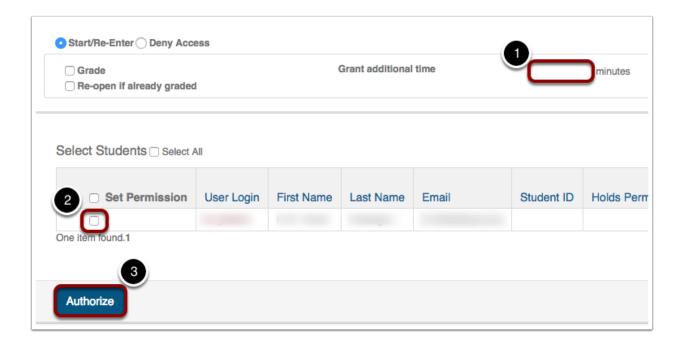
Click on the Advanced Search link.

### **Enter Student Info**



- 1. Enter the students first or last name
- 2. Select the assignment you want to give them extra time on at the bottom of the screen
- 3. Click Search

### **Grand Additional Time**

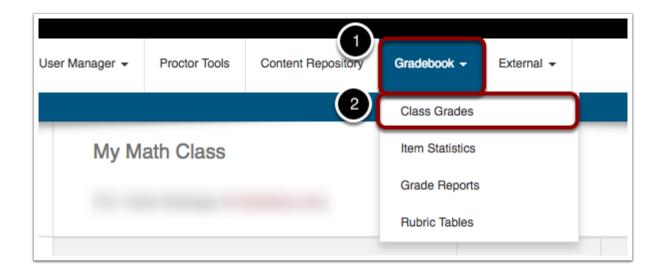


- 1. Enter how many additional minutes you want to give the student.
- 2. Select the student(s).
- 3. Click Authorize.

You will then see the new time limit for the student update to the right of their name under the Time Limit column.

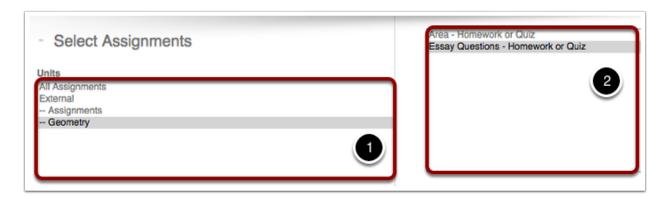
# How Do I Grade Maple TA Essay Questions?

#### Go to Class Grades



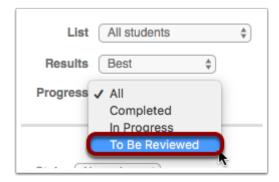
First click on Gradebook then on Class Grades.

### Select the Assignment



Click on the unit and then on the assignment you want to grade.

### Filter for "To Be Reviewed"



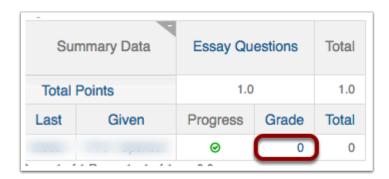
Under Filter Results select To Be Reviewed as the Progress.

### Search



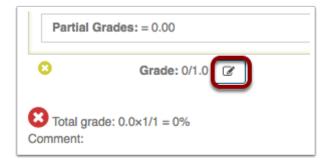
Click Search.

### Select the Grade



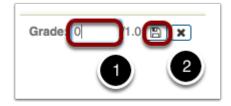
Click on the grade for the student you want to change the grade for.

# Change the Grade



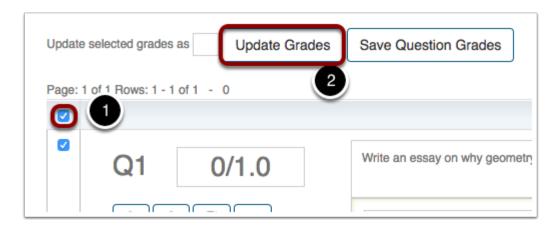
Click the edit button next to the grade.

#### Enter the New Grade and Click Save



Enter your new grade and click on the save icon.

# **Update Grade**



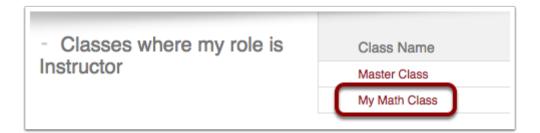
Use the top checkbox to select all questions and **click** the Update Grades button.



For more information of grading essay questions check out the <u>help guide from Maple TA</u>.

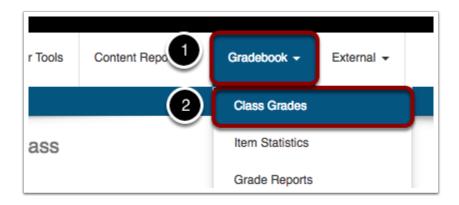
# How Do I View "In Progress" Grades On A Maple TA Assignment?

### **Find Your Class**



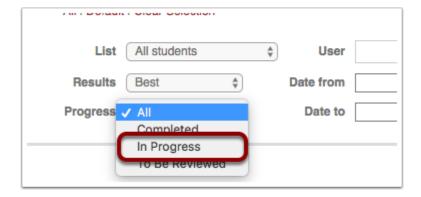
Navigate to your class in MapleTA.

#### Class Grades



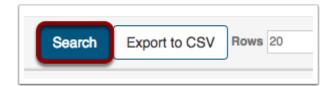
First Click on Gradebook then on Class Grades.

### Filter Results



Under Filter Results select the In Progress option from the Progress dropdown menu.

### Search



Click the Search button to view the students who are still in progress.

# How Do I Force Grade A Maple TA Assignment?

#### Search Students

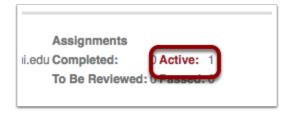
First you must know how to search for students who are in progress of taking the assignment. You can learn how to do that from this <u>tutorial</u>.

#### Grade



Click on one of the students grade for the assignment. This may not be a 0.

#### **Active**



Click the red Active link and select Okay

# Ok



Click OK to force all grades.

# How Do I Copy A Maple TA Course?

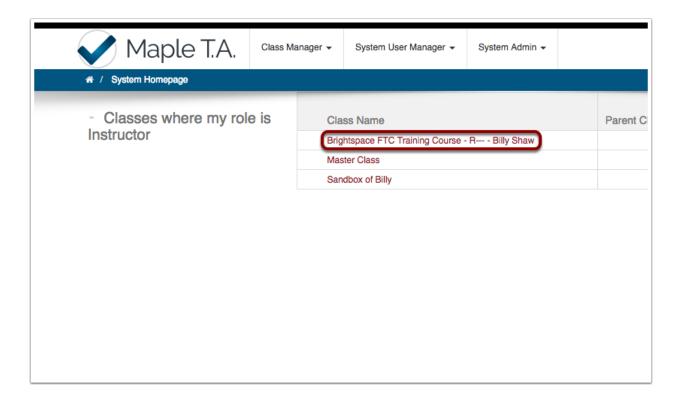
There are two methods you can use to copy a course in Maple TA:

- 1. Create a child course: This is the simplest way the create a copy of a Maple TA course. The major drawback about creating a child course is that all the content of the child course will be an **exact** reflection of the parent course contect—**permanently**. You cannot change the content of the child course independent of the parent course. If any changes need to be made to the content of the course, they will have to be made in the parent course.
- 2. Import/Export Content: This method takes a bit more time, but creates an independent copy of the course.

This article will cover both methods.

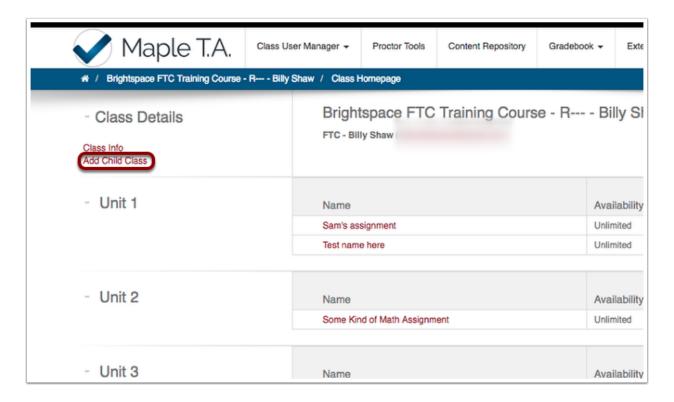
### Method 1: Create a Child Course

#### **Access Parent Course**



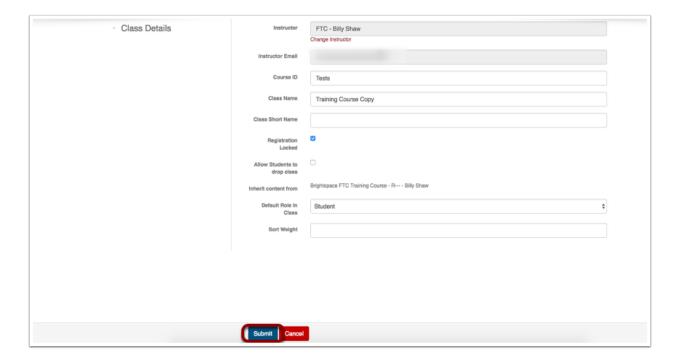
Click on the course you want to copy.

#### Add Child Class

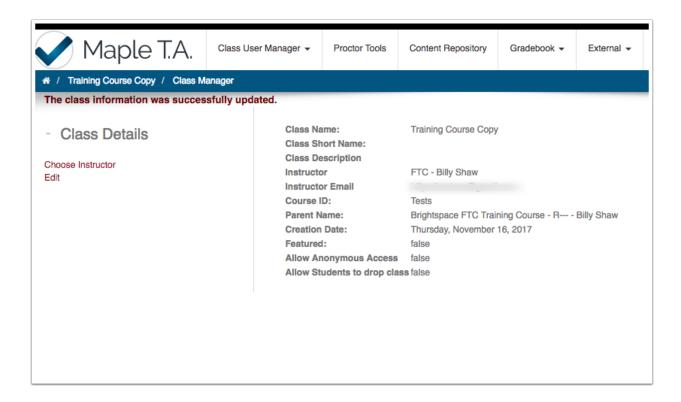


Click Add Child Class.

### **Class Information**



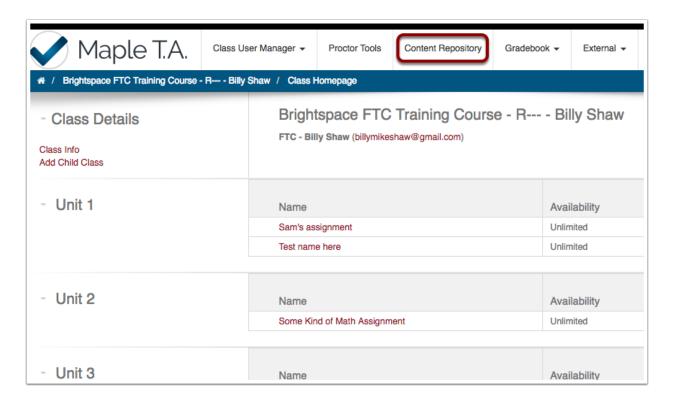
Enter course information and click on Submit.



Your class has been successfully copied.

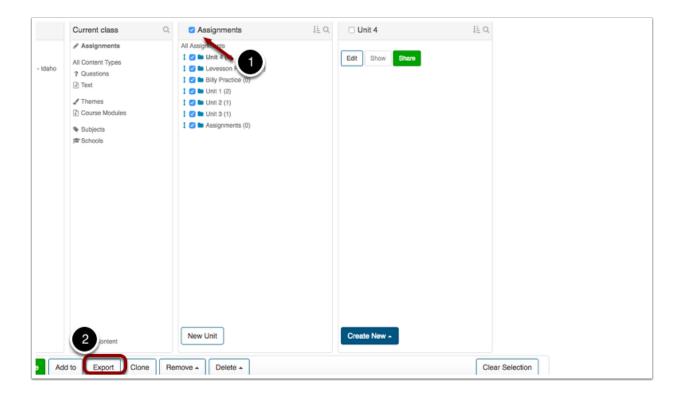
## Method 2: Import Course Content

### **Content Repository**



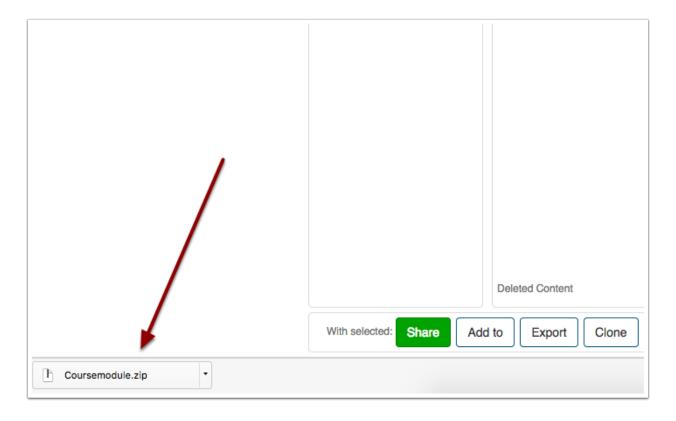
In the course you want to copy, click on Content Repository.

# Select Assignments



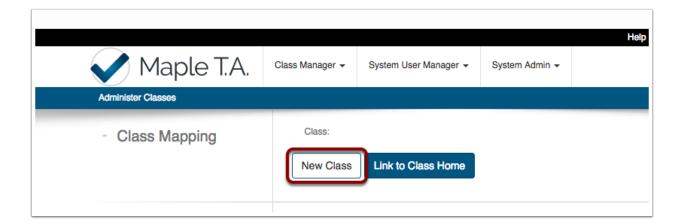
Check the box next to Assignments then click on Export.

### **Download**



The course content is downloaded as a .zip file. You will want to leave that file as it is; do not unzip it.

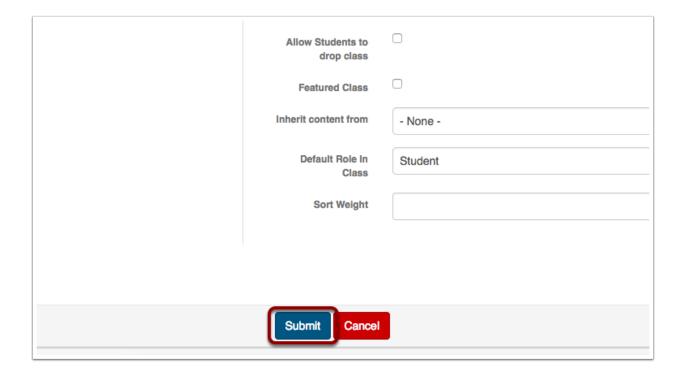
#### **Create New Class**



Within your I-Learn I-Learn, create a new Maple TA class.

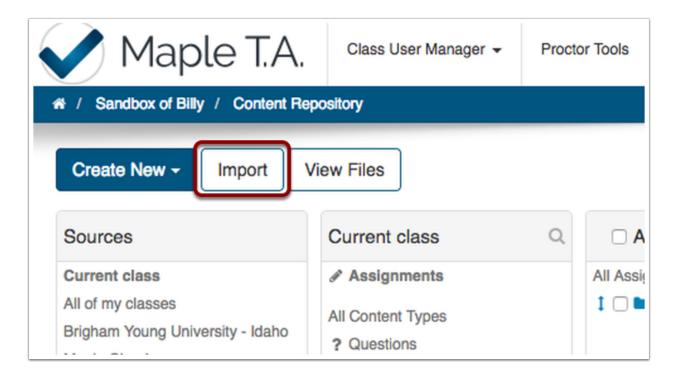


### **Class Information**

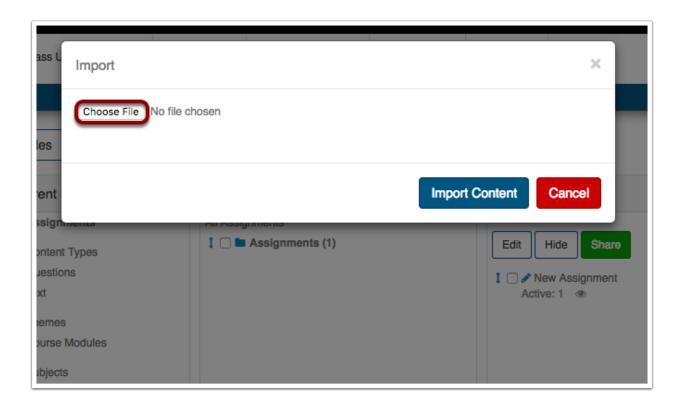


Enter in the information for the new course and click Submit.

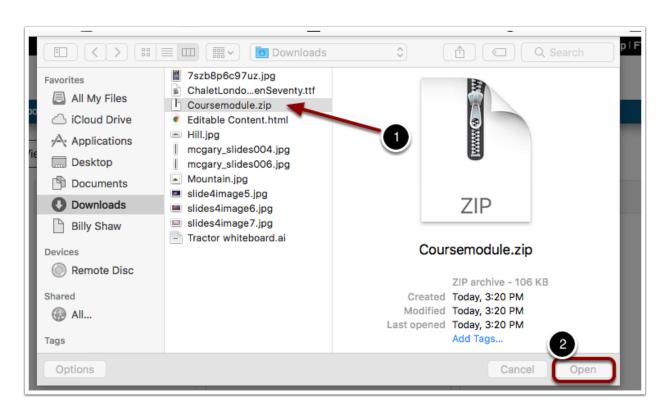
### **Import Content**



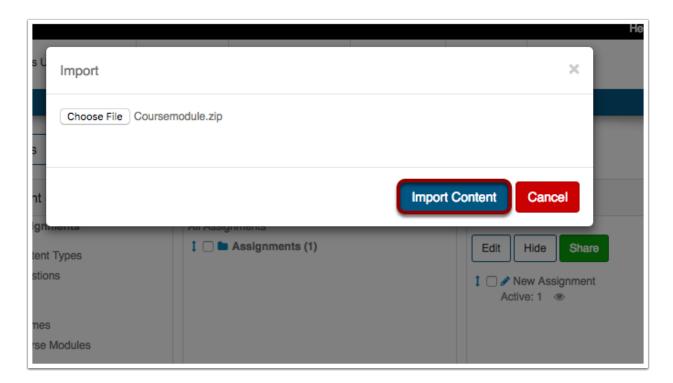
In the content repository of the new class, click on Import.



#### Click on Choose File.



Select Coursemodule.zip and click on Open.



Click on Import Content and your course is successfully copied. You may need to refresh your page.



You may notice that your assignments appear to be out of order after they are imported. If this is the case, simply drag them back into order in the Content Repository.

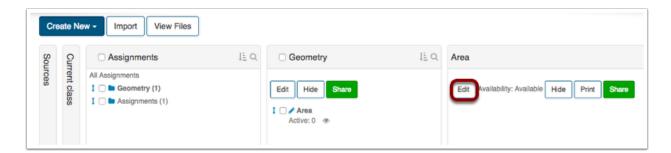
# How Do I Set Dates On A Maple TA Assignment?

## **Content Repository**



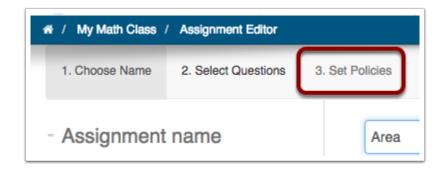
Navigate to the class you want and select the Content Repository at the top of the screen.

## **Assignment Editor**



Navigate to your assignment through the tabs and click the edit button.

#### **Set Policies**



Select Set Policies.

# Scheduling & Visibility

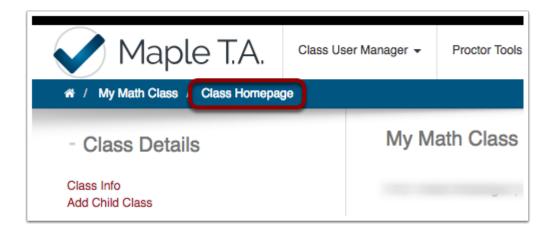


Scroll down to the Scheduling & Visibility options and make the changes you want to the dates.

# How Do I Set A Maple TA Course As Featured/Unfeatured?

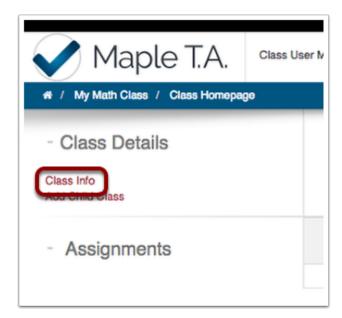
This article explains how to set a Maple TA course as featured or unfeatured. A featured Maple TA course allows any instructor at the university to make a child course based on the featured Course. This feature is typically used only for Online courses.

### Homepage



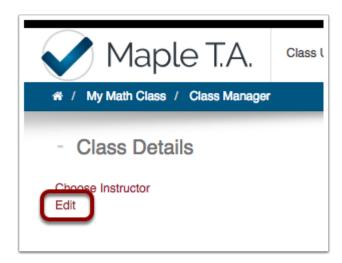
Navigate to your class homepage.

#### Class Info



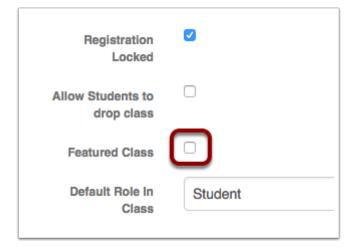
Click the Class Info link.

### **Edit**



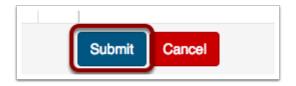
Click Edit.

## **Featured Class**



Check the Featured Class option.

#### **Submit**



Click the Submit button at the bottom of the screen.



Note: When featuring a course for the upcoming semester, **remember** to unfeature the previous semester course.

# **Algorithm Documentation**

This article gives a brief introduction to commonly used features in the algorithm section of the question editor. For more detail, see <u>this article</u> from Maple TA's help documentation.

When building a question in Maple T.A. two different input fields are available: the Question text field (with familiar image and video input, html editing capabilities and formatting options), the algorithm field, a Custom CSS field, and a Feedback Field. To view the Algorithm field simply click "Algorithm" to expand it into view.

The Question Text field will house your actual question, but it is just a display – think of the brains of the question being the algorithm.

Getting the two to talk to each other involves variables (defined with "\$" symbol).

When \$variable is in the question field it will display as the value defined by the algorithm.

For example: if in the question text a length is displayed as equal to L (ie length = L in) and in the algorithm L = 7, the question field will display 7 (ie length = 7 in).

Responses from the student are received through an item called a Response Area – variables are used here as well to link the responses to the algorithms.

# Introduction to Algorithm Code

Algorithm code (Formally documented as MAPLE TA) is a programming language that follows specific rules and constructs – for instance the symbol "\$" declares a variable. Functions can be called (like in excel) and constants like pi are recognized. Breaking these rules will trigger a built in debugger that will attempt to tell you where the error in the code is located.

Don't stop reading!! This is simpler than it sounds.

#### A First Question

First let's look a little closer at the multiplication problem:  $a \times b = c$ . The question might read something like "Find the product of a and b:" The instructor wants all these values to change and then c to change accordingly.

- 1. First write the question to reflect the variables: reword as "Find the product of \$a and \$b:" This will now link the question display to the algorithm.
- 2. Build the variable in the algorithm field
  - 1. do this the same was as in the question field with the "\$" symbol (ie \$a and \$b)
- 3. Set the variables equal to a random number between 1 and 6
  - 1. \$a=range(1,6);
  - 2. \$b=range(1,6);

Whoa! What just happened? Programming!! Look a little closer at 3.a: First we told Maple T.A. which algorithm we were working with by using "\$a", next we set it equal to something using the "=" operator. Finally we used a function to find a random integer based on some conditions. In this case a random integer between 1 and 6 using the range() function. Don't forget to close your code lines with the ";" semi-colon operator.

Now when we preview the question, a and b will randomly be changed to values between 1 and 6.

Now for the answer - c.

Back in our question text let's add a response area and then select the numeric response. In the numeric part field (this is what would be the question answer) simply create a variable called \$answer to link it to the algorithm.

Now in the algorithm field, create a variable called ax b with the "=" operator and the a and b variable names and the "ax b" multiplication operator.

Your code might look something like this:

```
$a=range(1,6);
$b=range(1,6);
$ans=$a*$b;
```

Now in previewing the question answers can be entered and grading them will show that the answer changes with a and b.

Great! You are now a master of the algorithm feature in Maple TA.

### The Algorithm Designer

Maple TA has a quick wizard for creating variables so we don't have to remember all the syntax. Expand the red "Show Designer" link under the Algorithm heading to show the wizard. After entering the needed data and hitting "Add" Maple TA will automatically generate the syntax at the point where the cursor is in the algorithm field.

## **Useful Algorithmic Functions**

#### R-Int

```
rint(x)
```

Rint returns a random integer between 0 and the argument given (x).

#### **Switch**

```
switch(i,1,2,3,4,5,6...)
```

Switch essentially means "pick x from list". The first argument is the index of which item to pick ( i ) and the following arguments are the list.

#### Range

```
range(x,y,z)
```

Range returns a random number greater than x and less than y in steps of z. ie range(15,30,5) would return either 15, 20, 25 or 30

#### Maple

```
maple("string entry")
```

Maple TA has access to the Maple programming engine when greater complexity of code is needed or wanted. The string entry argument is simply maple code that will be evaluated with the Maple engine and return a value.

## How Do I Get to the Policies Tab?

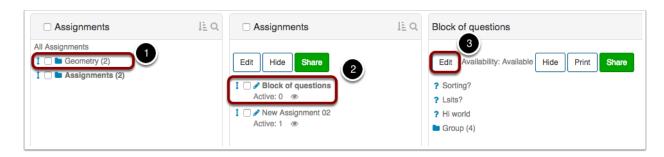
The Policies Tab allows you to add passwords, add time limits, change dates, and configure feedback on assignments.

#### **Content Repository**



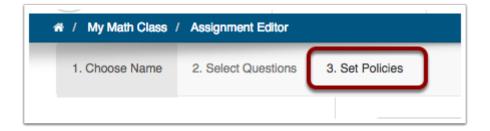
Click on the Content Repository tab at the top of the screen.

## Locate and Edit the Assignment



- 1) Click on the assignment's group.
- 2) Click on the assignment itself and
- 3) Click on the Edit button.

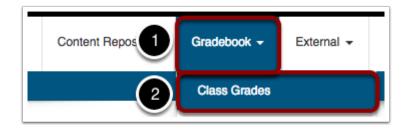
#### **Set Policies**



Click on the Set Policies tab to make changes. Save after you're done.

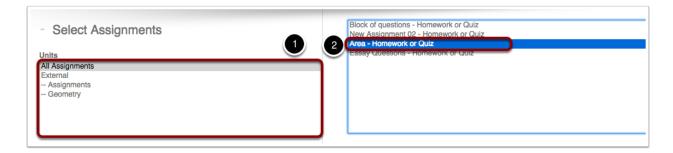
# How Do I Review a Student Assessment?

#### Class Grades



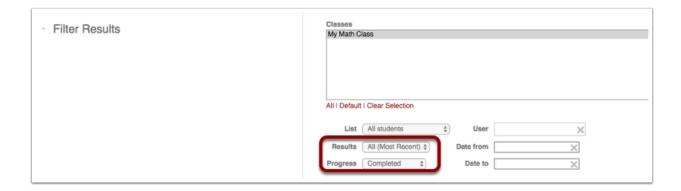
- 1) Click on the Gradebook tab
- 2) Click Class Grades.

## Find the Assignment



- 1) Select the Unit from the box on the left
- 2) Click the assignment from the box on the right.

#### Filter the Results



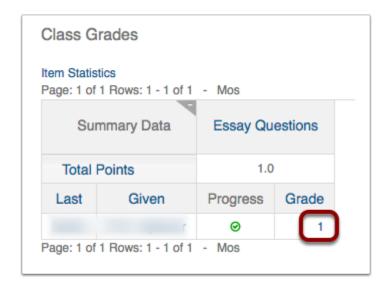
Filter your results. In most cases, you will want the Results to show Most Recent and then Progress set to Completed.

#### Search



Click the blue Search button at the bottom of the screen.

#### Select Student



Click on the grade number next to the student's name.

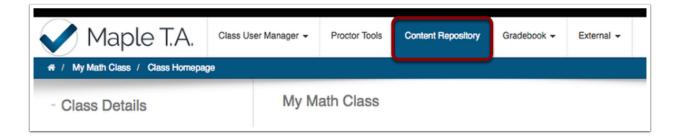
#### **View Results**



Here you can see all of the students answers to questions and change their grade.

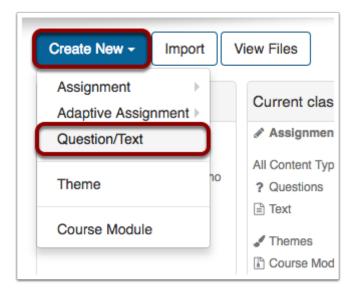
# How Do I Create a Question in Maple TA?

#### **Content Repository**



Navigate to your class in Maple TA and click on the Content Repository tab.

#### **Create New Question**

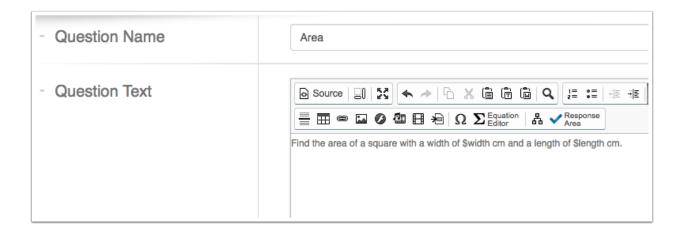


Click on the Create New button and then on Question/Text.



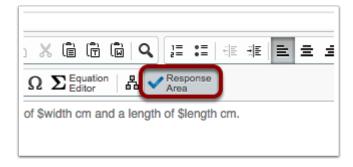
You can also create questions from within an assignment under the Select Questions tab and clicking on the New Question button.

#### Name and Text

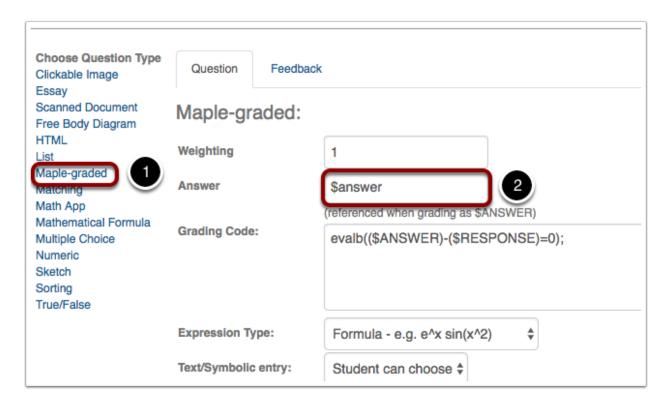


Give you question a simple name to help you find it later and enter the text for the question. In this example we will be using two variables called \$width and \$length.

## Response Area



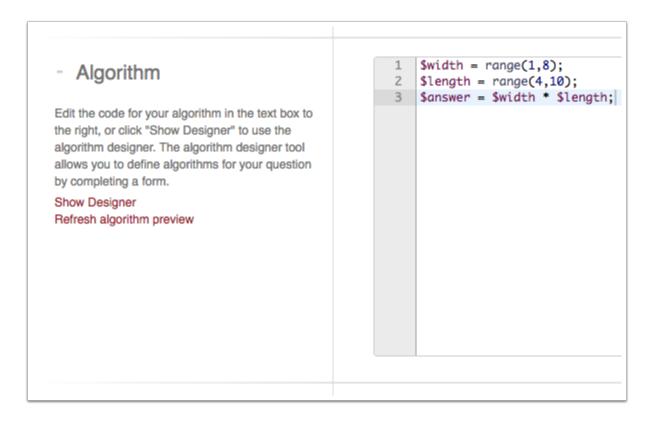
#### Select Answer Type





There are many different answer types that you can select. For this example we will use a Maple-graded answer which we set to variable \$answer. Once you have set up your answer click OK.

#### Algorithm



Now we are going to define what all the variables are that we have used. Click on the Algorithm option and enter the following code. This will set variable \$width to a whole number between 1 and 8. Variable \$length will be set to a whole number between 4 and 10. The variable \$answer will equal the product of width and length.

#### Save and Close



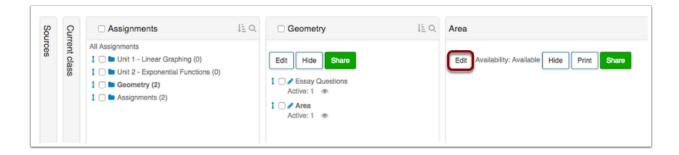
Congratulations you have successfully created a question in Maple TA. Click on Save & Close to finish.

# How Do I Add a Question to an Existing Maple TA Assignment?

## **Content Repository**



## Select the Assignment

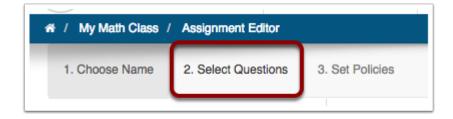


Navigate to your assignment and click the Edit button.



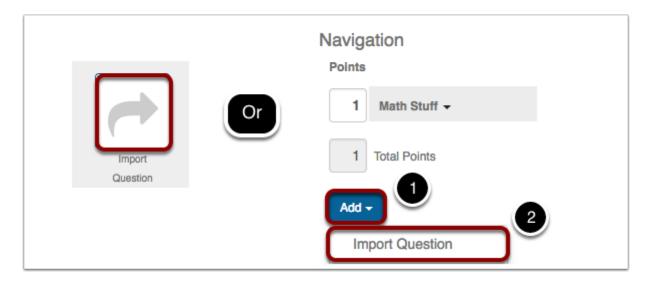
If there is no "Edit" button it is because students may be currently working on the assignment. If this is the case click the "Force Grade" button. Note that this will end all students currently on the assignment and give them a partial grade.

## **Select Questions**



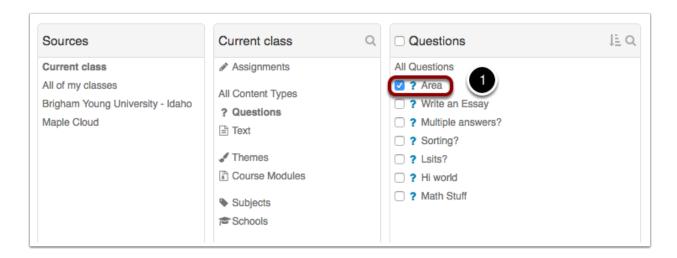
Click on the Select Questions tab at the top of the screen.

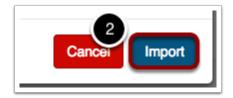
## **Import Question**



**Click** on the Import Question button. If there are already questions in your assignment then **click** on the Add button on the right of the screen.

## **Select Question**





Select the question(s) that you want to import and click the Import button.

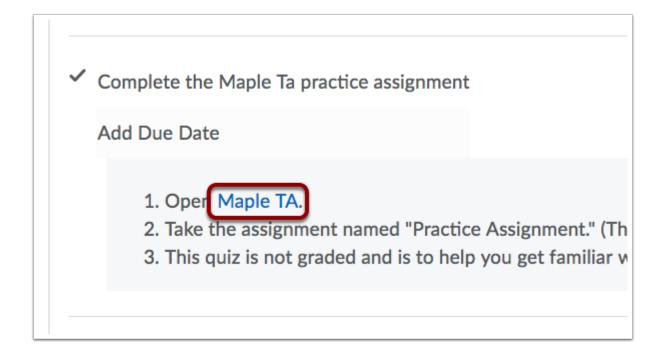
#### Save and Close



Click the Save & Close button on the bottom of the screen.

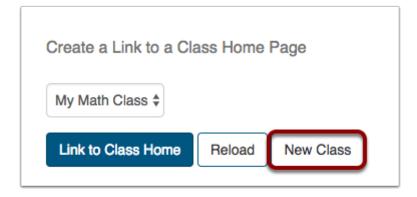
# How Do I Link my Online Class to Maple TA?

#### Find a Link



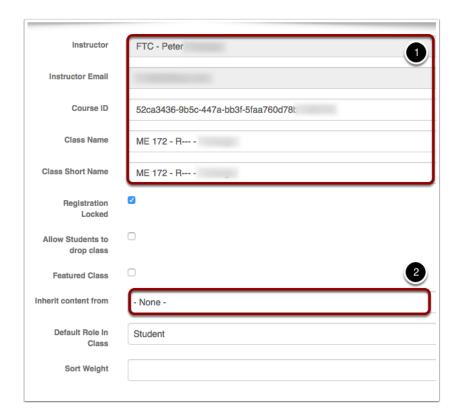
From your iLearn Course find a Maple TA link and click on it.

#### Make a New Class



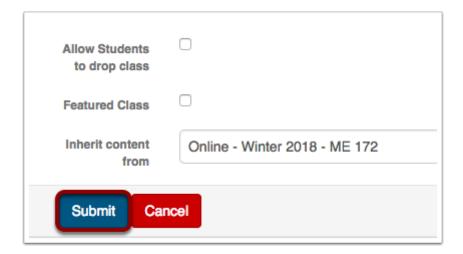
Click on the New Class button under the Create a Link to a Class Home Page section.

#### **Inherit Content**



The majority of the information should be filled in from your iLearn course. Please do not make changes to box 1. If you would like to inherit content from a class select which class from box 2.

#### **Submit**



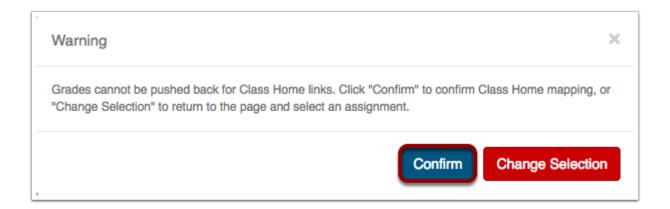
Go ahead and click on Submit.

#### Link



Click on the Link to Class Home button to

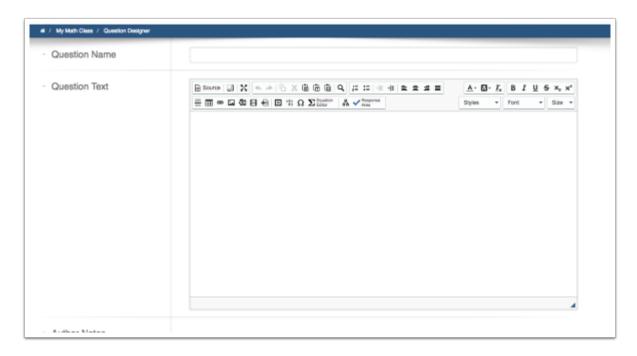
## Confirm



There is a warning concerning grades. You can ignore this by **clicking** Confirm.

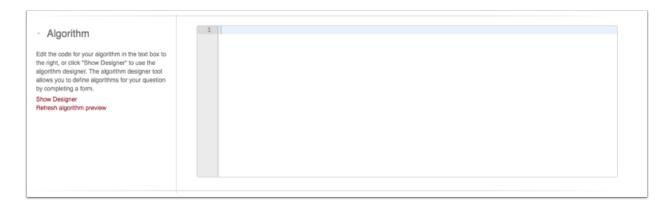
# How Do I Create a Plot/Graph in Maple TA?

#### Create a Question



Navigate to the question creator by following this tutorial.

## Maple TA Algorithm



Scroll down to the Algorithm portion of the question to being adding the code.

#### Add the Code

```
1 | $a = range(1,5);
2 | $plot = plotmaple("plot(($a*x), view=[0..5,0..5]), plotoptions='height=250, width=250'");
4 |
```

```
$a = range(1,5);
$plot = plotmaple("plot(($a*x), view=[0..5,0..5]), plotoptions='height=250,
width=250'");
```

The following code will create a random variable from 1 to 5 then set it to the slop of a linear equation. The graph will plot the equation (\$a\*x) and show it from 0 to 5 on both axes. The plot options referes to the width and heights in pixels that it will display on the screen.

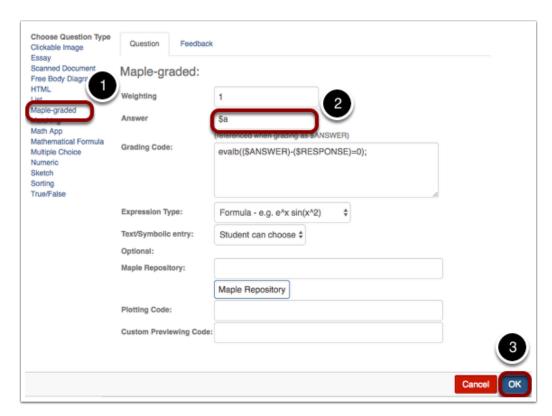
## Add Plot to Question

You can use the variable \$plot just like any other Maple variable and add it to the question text. \$plot can also be added to the text area in hints, sorting questions and other places.



## Add Responce Area

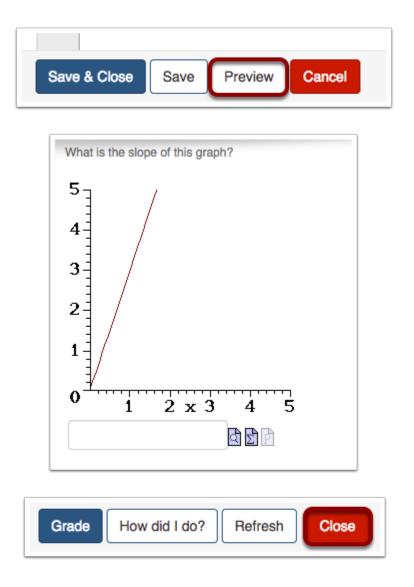




#### Click on Responce Area and

- 1. Select Maple-graded
- 2. Set answer to \$a
- 3. Click OK

#### **Preview**



Click on Preview to see what your question looks like. When your done click on Close.

#### Save & Close



Click on Save & Close to finalize your question.