

## Modifying a problem - Changing Text Only

In looking at editing a WebWork problem we start with the easiest case. I have a problem that I like out of the library, and I want to change some of the text of the problem. (The problem may have been written in a context different from my class, so I want to add a hint or provide information.)

I will start with a simple differentiation problem for a fictitious class, Experiment2. The problem is part of the assignment FirstSet.

The screenshot shows the WeBWorK interface. At the top is the WeBWorK logo. Below it is a navigation menu with categories: Courses, Homework Sets (with sub-item FirstSet), Password/Email, Grades, and Instructor Tools (with sub-items: Classlist Editor, Hmwk Sets Editor, FirstSet, and Library Browser). The main content area shows the breadcrumb trail: WeBWorK → Experiment2 → Instructor Tools → Hmwk Sets Editor → Set Detail for set FirstSet. Below the breadcrumb is a box containing the text: "This set **FirstSet** is assigned to 1 student. Edit [individual versions](#) of set FirstSet." Below this is a warning: "Any changes made below will be reflected in the set for ALL students." At the bottom are two buttons: "Save Changes" and "Reset Form".

Note that the problem comes from the Michigan contributions to the Library. I will select "Edit it"

Problems	Data	Display Mode: <input type="text" value="jsMath"/> <input type="button" value="Refresh Display"/>
<input type="button" value="1"/> <a href="#">Edit it</a> <a href="#">Try it</a> <input type="checkbox"/> Delete it? <input type="checkbox"/> Mark Correct?	Weight <input type="text" value="1"/> Max attempts <input type="text" value="unlimited"/>	Source File <input type="text" value="Library/Michigan/Chap3Sec3/Q03.pg"/> Find the derivative of the function $f(x)$ , below. It may be to your advantage to simplify first. $f(x) = x \cdot e^x$ $f'(x) =$ <input type="text"/>

This pulls up a new window with the text of the problem and a warning that the problem file is protected. In order to edit it I need a local copy.

Work Logged in as FrMay.  
[Log Out](#)

WeBWork → Experiment2 → FirstSet → 1 → Editor

Problem 1

The file '[TMPL]/Library/Michigan/Chap3Sec3/Q03.pg' is protected!  
To edit this text you must make a copy of this file using the 'make local editable copy at ...' action below.

*Editing set FirstSetproblem 1 in file '[TMPL]/Library/Michigan/Chap3Sec3/Q03.pg'*

[Manpages](#) | [macro list](#) | [pod docs](#) | [report problem bugs](#) |

```
# DESCRIPTION
# Problem from Calculus, single variable, Hughes-Hallett et al., 4th ed.
# WebWork problem written by Gavin LaRose, <glarose@umich.edu>
# ENDDescription
## KEYWORDS('calculus','derivative','product rule','quotient rule')
## Tagged by glr 12/04/08
## DBsubject('Calculus')
## DBchapter('Differentiation')
## DBsection('The Product and Quotient Rules')
## Date('')
## Author('Gavin LaRose')
## Institution('University of Michigan')
## TitleText1('Calculus')
## TitleText2('Calculus')
## EditionText1('4')
## EditionText2('5')
## AuthorText1('Hughes-Hallett')
## AuthorText2('Hughes-Hallett')
```

View using seed  and display mode

Add to set  as

Make local editable copy at: [TMPL]/Michigan/Chap3Sec3/Q03.pg

Create a copy at [TMPL]/Library/Michigan/Chap3Sec3/Q03.pg and  use in set FirstSet/problem 1

Select above then:   in another window

Thus I start by making a local copy. To make things simple I am changing "Library/Michigan/" to "Local/Library/Michigan/" and leaving the rest of the file name the same. (This lets me change back without getting too confused. It also leaves the address string intact if I want to remember where the file came from.)

View using seed  and display mode

Add to set  as

Make local editable copy at: [TMPL]/Michigan/Chap3Sec3/Q03.pg

Create a copy at [TMPL]/Local/Library/Michigan/Chap3Sec3/Q0 and  use in set FirstSet/problem 1

Select above then: Take Action!  in another window

WebWork lets me know that I have created a copy of the file.

Saved to file  
[TMPL]/Local/Library/Michigan/Chap3Sec3/Q03.pg'.  
A new file has been created at  
[TMPL]/Local/Library/Michigan/Chap3Sec3/Q03.pg' with  
the contents below. No changes have been made to set  
FirstSet.

Editing unassigned problem file: *set Undefined\_Set/problem Undefined\_Set* in file '[TMPL]/Local/Library/Michigan/Chap3Sec3/Q03.pg'

| [Manpages](#) | [macro list](#) | [pod docs](#) | [report problem bugs](#) |

```
# DESCRIPTION
# Problem from Calculus, single variable, Hughes-Hallett et al., 4th ed.
# WeBWorK problem written by Gavin LaRose, <glarose@umich.edu>
# ENDDescription
## KEYWORDS('calculus','derivative','product rule','quotient rule')
## Tagged by glr 12/04/08
```

In the text of the problem, I now scroll down through a bunch of comments and other nice things to find the phrase “BEGIN\_TEXT”.

```
TEXT(beginproblem());
$showPartialCorrectAnswers = 1;

$b = random(1,15,1);
$b = e if ( $b == 1 );

Context()->texStrings;
BEGIN_TEXT

Find the derivative of the function  $f(x)$ , below. It may be to your
advantage to simplify first.
$BR
 $f(x) = x \cdot b^x$ 

$PAR
 $f'(x) =$  

END_TEXT
Context()->normalStrings;
```

Now I simply add in or modify the text. I would like to add in a comment that says this will be a problem checking the product rule. I will want to save the changes and view them. (\$BR is a line break. \$PAR starts a new paragraph.)

```
Context()->texStrings;  
BEGIN_TEXT
```

This first problem checks that you can use the product rule.  
\$BR

Find the derivative of the function  $f(x)$ , below. It may be to your advantage to simplify first.

\$BR

$f(x) = x \cdot b^x$

\$PAR

$f'(x) =$    $\{ ans\_rule(35) \}$

END\_TEXT

```
Context()->normalStrings;
```

```
ANS( Compute( "$b^x + x*ln($b)*$b^x" )->cmp0 );
```

View using seed  and display mode

Add to set  as

Save to [TMPL]/Local/Library/Michigan/Chap3Sec3/Q03.pg and View

Create a copy at [TMPL]/

Select above then:   in another window

Since I said I wanted to view in another window, I can see that the problem has been modified as desired.

WebWork → Experiment2 → Undefined\_Set → Undefined\_Set

Undefined Set: Problem Undefined\_Set

This set is *hidden from students*.

Saved to file  
[TMPL]Local/Library/Michigan/Chap3Sec3/Q03.pg'

◀ Previous ▲ Prob. List ▶ Next ▶

This first problem checks that you can use the product rule.  
 Find the derivative of the function  $f(x)$ , below. It may be to your advantage to simplify first.  
 $f(x) = x \cdot 10^x$   
 $f'(x) =$

[Edit this problem](#)

Back in my problem set, I now change the file for problem 1 to go to my new localized file. Note that I had to save the changes, and the problem is now part of the homework set.

Problems	Data	Display Mode: jsMath <input type="button" value="Refresh Display"/>
1 <input type="button" value="↕"/> <a href="#">Edit it</a> <a href="#">Try it</a> <input type="checkbox"/> Delete it? <input type="checkbox"/> Mark Correct?	Weight <input type="text" value="1"/> Max attempts <input type="text" value="unlimite"/>	Source File <input type="text" value="Local/Library/Michigan/Chap3Sec3/Q03.pg"/> This first problem checks that you can use the product rule. Find the derivative of the function $f(x)$ , below. It may be to your advantage to simplify first. $f(x) = x \cdot e^x$ $f'(x) =$ <input type="text"/>
2 <input type="button" value="↕"/> <a href="#">Edit it</a> <a href="#">Try it</a> <input type="checkbox"/> Delete it? <input type="checkbox"/> Mark Correct?	Weight <input type="text" value="1"/> Max attempts <input type="text" value="unlimite"/>	Source File <input type="text" value="Library/Michigan/Chap3Sec3/Q05.pg"/> Find the derivative of the function $y$ , below. It may be to your advantage to simplify first. $y = \sqrt{x} \cdot 2^x$ $\frac{dy}{dx} =$ <input type="text"/>

Force problems to be numbered consecutively from one (always done when reordering problems)

Any time problem numbers are intentionally changed, the problems will always be renumbered consecutively, starting from one. When deleting problems, gaps will be left in the numbering unless the box above is checked.

It is before the open date. You probably want to renumber the problems if you are deleting some from the middle.

When changing problem numbers, we will move the problem to be *before* the chosen number.

Add  blank problem template(s) to end of homework set

(Any unsaved changes will be lost.)