This is an explanation of a few updates to the way in which students see grade feedback after each problem as well as when they look in their grades tab.

These are not permanent changes to the WeBWork interface, they are simply improvements that provide instructors more options when creating homework sets that they want geared more toward their specific preferences.

Let's look at the grade feedback for individual problems, first. When an instructor creates a problem in the "Hmwk Sets Editor" tab, they also have the ability to edit the problem further in the base template shown below. The "\$noGradeFeedback" flag was created to hide a few pieces of grade information to the student. This will be discussed below. To implement, just add the flag as shown in the picture below.

Editing set Test/problem 4 in file '[TMPL]/local/Library/ma112DB/set3/sw2 2 7.pg'

```
Problem Techniques Math Objects POD PGLab PGML Author Info
                                                                  Report Bugs in this Problem
ZZ ## ProblemZ( 3/ )
23 ## KEYWORDS('algebra', 'graph')
24 DOCUMENT();
                   # This should be the first executable line in the problem.
26 loadMacros(
27 "PG.pl",
28 "PGbasicmacros.pl",
29 "PGchoicemacros.pl",
30 "PGanswermacros.pl",
31 "PGauxiliaryFunctions.pl"
32 );
33
34 TEXT(beginproblem());
35
36 $showPartialCorrectAnswers = 0;
37 $noGradeFeedback = 0;
```

A value of 0 means the flag is not turned on and will produce the normal output as shown below.

Entered	Answer Preview				
4	4				
-4	-4				
All of the answers above are correct.					
(1 point) Find the x- and y-intercepts of the graph of the eq	uation $y = x - 4$ .				
The x-intercept is: 4					
The y-intercept is: -4					
Note: You can earn partial credit on this problem.					
Preview My Answers Submit Answers					
Your score was recorded.					
You have attempted this problem 7 times.					
You received a score of 100% for this attempt.					
Your overall recorded score is 100%.					
You have unlimited attempts remaining.					

As you can see, there are 5 pieces of information printed to the screen after the student presses the "Submit Answers" button. If the problem has multiple parts and the student does not get every part right (receive a 100% for that problem), they could try and beat the system by fiddling with answer combinations to eventually pinpoint which part they have wrong. The output is designed to either say "All of the answers above are correct" in green or "At least one of the answers above is NOT correct" in red.

The goal is for the student to not have any outside influence when they are taking a quiz or completing a homework set. As a result, the noGradeFeedback flag will remove the two output lines that include percentages when it's value is set to 1 in the problem template as shown below.

### **Problem 4**

Editing set Test/problem 4 in file '[TMPL]/local/Library/ma112DB/set3/sw2\_2\_7.pg' Problem Techniques Math Objects POD PGLab PGML Author Info Report Bugs in this Problem 22 ## Problem2("3/") 23 ## KEYWORDS('algebra', 'graph') 24 DOCUMENT(); # This should be the first executable line in the problem. 25 26 loadMacros( 27 "PG.pl", 28 "PGbasicmacros.pl". 29 "PGchoicemacros.pl", 30 "PGanswermacros.pl", 31 "PGauxiliaryFunctions.pl" 32 ); 33 34 TEXT(beginproblem()); 36 \$showPartialCorrectAnswers = 0; 37 \$noGradeFeedback = 1; 38

#### Results for this submission

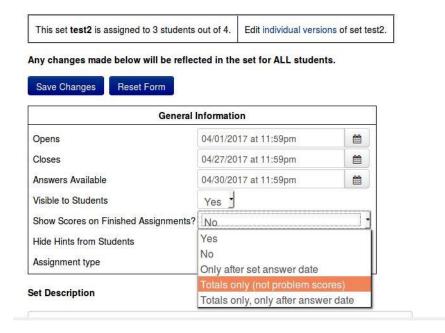
Entered	Answer Preview				
-4	-4				
1	1				
At least one of the answers above is NOT correct.					
(1 point) Find the x- and y-intercepts of the graph of the	equation $y = x - 4$ .				
The x-intercept is: -4					
The y-intercept is: 1					
Note: You can earn partial credit on this problem.					
Preview My Answers Submit Answers					
Your score was recorded.					
You have attempted this problem 1 time.					
You have unlimited attempts remaining.					

In the case where the student does not get a 100% on the question, they will not be able to tell how many questions they got wrong. Before, if they saw "You received a score of 0% (or 50%) for this attempt", they'd know they got both (or one of the) parts incorrect.

The second piece of functionality added was the ability for the instructor to choose how detailed grade information is in displayed in a student's "Grades" tab.

To access this functionality, create a homework set and then goes to the "General Information" page of the homework set by clicking the edit button in the "Hmwk Sets Editor" tab. There will be a new dropdown tab called "Show Scores on Finished Assignments?" as shown below.

# Set Detail 2 for set test2



If you choose the "Yes" option, the student will be able to see all information regarding each problem with percentage in the top row and number of attempts directly below. This is shown in the next picture.

## **Grades**

#### john doe

Set	Percent	Score	Out Of	Problems			
				1	2	3	4
test2	54%	2.17	4	100	0	67	50
				1	1	1	3
Homework Totals	54%	2.17	4				

Now, what if you just wanted your students to be able to see their total score with no information regarding the individual problems. For this, you would choose the "Totals only (not problem scores)" option. An example output is shown below.

# Grades

### john doe

Set	Percent	Score	Out Of	Problems			
				1	2	3	4
test2	54%	2.17	4				
Homework Totals	54%	2.17	4				

If you didn't want the student to have any information while the homework set was open, then you would want to select the "No" option which produces the output shown below.

#### Grades

#### john doe

Set	Percent	Score	Out Of	Problems				
				1	2	3	4	
test2	Display of scores for this set is not allowed.							
Homework Totals	0%	0	0					

Lastly, the two other options that deal with after the answer date produce the same output as the "Totals only (not problem scores)" and "No" options, respectively, just not until after the date and time specified in the "Answers Available" line.