Topics Webwork TAs Fall 2016

Search your favorite search engine: Webwork topic/command/

Classlist editor – add/edit permissions

HMWK Sets Editor – all class sets – check assigned users, open,due dates

> Link to edit problems – view problems(render), set weights, max attempts
>
> Link to assign users for problem set – edit data for single user(seed/max attempts/status(%correct)

Note always click the **save** or **take action** buttons

Student Progress – observe performance on problems 1) by HW set, 2) by Student

Grades – on all sets assigned for single student

Coding/Editing Problems

See: https://math.dartmouth.edu/news-resources/computing/WeBWorK_newbie.pdf

See: http://webwork.maa.org/w/images/a/ab/WeBWorK_Problem_Authoring_Tutorial.pdf

Perl language Note Perl variables and Math Objects – answer checking is done on MathObjects

Header Description – needed for submission to national library and database searches

Macros – define certain capabilities, definitions, processing, options,

Context – defines allowed operations, variables vs. constants, tolerances, Latex strings

Computation: arithmetic operations, functions (Function, Real, etc.), constants (pi, infinity,etc)

Random number generators: random(start,end,increment) lots of variations, e.g., non_zero_random, list_random

> Note: be careful about choosing sets of random numbers when there is interaction, e.g., Multiple roots, but need unique roots.
>
> ```
> do { $c = random(1, 10); }   until (($c != $a) and ($c != $b));
> ```

Answers: insert space for answers in TEXT block:

\(X(z) = \) \{ ans_rule(60) \} \{ AnswerFormatHelp("formulas") \}

Call to Answer checker is after END_TEXT

ANS($answera->cmp()); ANS(Interval($ROC)->cmp);

$answers must be mathobject

Writing Problem Text: BEGIN_TEXT, ….END_TEXT

Using Context()->texStrings you can shift to Latex mode using \(…\) (inline) or

\[…. \] centered new line

Note there are some special character changes since Perl uses $ and #.

Include solutions: BEGIN_SOLUTION …(text like above)… END_SOLUTION