

Midterm Exam Review Sheet

NAD Teachers' Convention 2012

Introduction Students' Experience Instructors' Experience Finding Good Problems How To Run WeBWork

Three Reasons Why Your Mathematics Students Should Do WeBWork

Jonathan Duncan and Thomas Thompson

Walla Walla University
College Place, Washington

NAD Teachers' Convention
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I. Introduction

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Speakers

Dr. Jonathan Duncan (Jon)

- Professor of Mathematics, Walla Walla University
- 10 years teaching at WWU
- Secondary teaching certification
- WWU WeBWork Administrator and WeBWork consultant

Dr. Thomas Thompson (Tom)

- Professor of Mathematics, Walla Walla University
- 40+ years teaching at WWU
- Used WeBWork since 2009
- WeBWork consultant

(a) Speakers

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About WeBWork

What is WeBWork?

WeBWork is an open-source online homework system for mathematics and science courses. WeBWork is supported by the MAA and the NSF and comes with a National Problem Library (NPL) of over 20,000 homework problems.

Why use WeBWork?

Three reasons your students should be doing WeBWork:

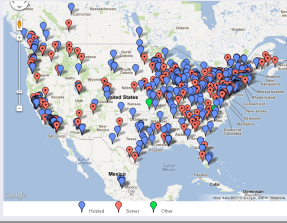
- 1 Provides individual versions of homework to each student
- 2 Gives immediate feedback and frees teachers from grading
- 3 Completely free to download, use, and even modify

(b) About WeBWork

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Who Uses WeBWork

Usage Map



Usage Details

- Over 540 institutions registered, 11% high school level
- Used at WWU since 2009 in most 100-300 level math classes.

(c) **Who Uses WeBWork**

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Testimonials

What Students Say About WeBWork

- "I can fix my mistakes while the problem is fresh in my mind."
- "It makes you want to redo it; after finding an answer, you feel accomplished, immediate feedback makes sure you have accomplished something."

What Teachers Say About WeBWork

- "... students find their homework to be far more rewarding and do more of it, and, not surprisingly do learn more."
- "Our school have also been able to compare WeBWork to commercial products like Prentice Hall's PHGradeAssist, and our instructors have found that commercial products are inferior to WeBWork.... Our students found WeBWork user friendly, and more reliable than other homework systems."

(d) **Testimonials**

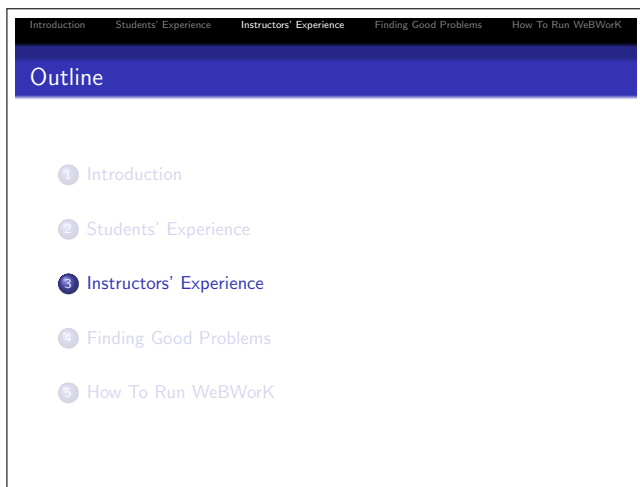
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Outline

- 1 Introduction
- 2 **Students' Experience**
- 3 Instructors' Experience
- 4 Finding Good Problems
- 5 How To Run WeBWork

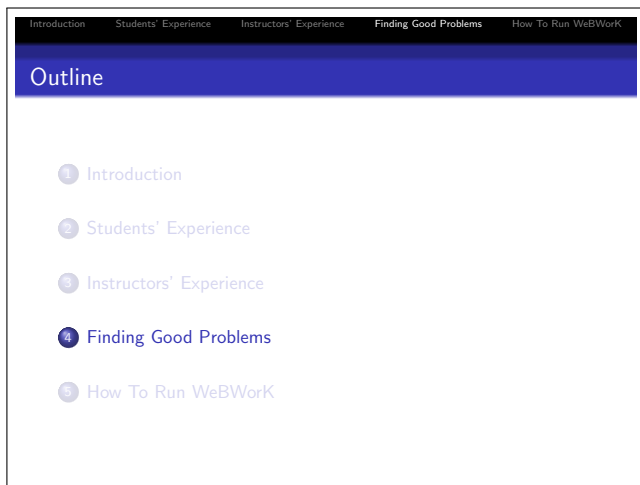
II. **Students' Experience**

- (a) Login
- (b) Print an Assignment
- (c) Entering Solutions
- (d) Email Instructor



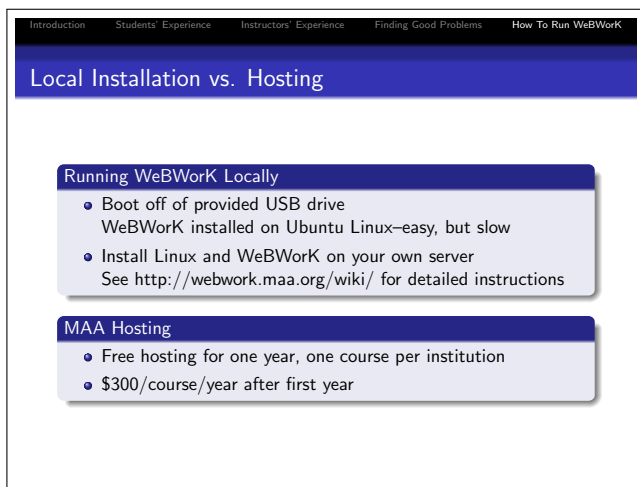
III. Instructors' Experience

- (a) View Student Problems
- (b) Change Assignment Parameters
- (c) Download Grades
- (d) Edit Student List
- (e) Add Assignment



IV. Finding Good Problems

- (a) The Library Browser
- (b) Find a Rational Functions Problem
- (c) Higher Order Derivatives Problem
- (d) Edit a Problem



V. How to Run WeBWorK

- (a) Local Installation vs. Hosting

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Walla Walla University Hosting

WWU Offer to NAD Academies
 WWU will offer free hosting to interested NAD academy teachers for the foreseeable future.

WeBWork Workshop, Summer 2013
 Given enough interest, we will also host a WeBWork workshop during the Summer of 2013.

- One week workshop with possible topics including:
 - Creating model high school courses
 - Writing WeBWork problems
 - Other?
- One quarter credit towards continuing education/technology requirements
- <http://nadww.wallawalla.edu/>

(b) Walla Walla University Hosting

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Questions?

We are happy to answer any questions after the presentation, or at any time. Please use the contact information below.

Presenter Contact Information

- Jon Duncan
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(c) Questions?
