

MATH MODELING

MATH 1101

Sara Woodham

Spring Semester 2012

Professor: Dr. Inessa Levi



ABOUT ME

- Name: Sara Woodham
- Age: 29
- Major: Nursing
- Standing at time of class: Junior
- Taken Spring Semester 2012 with Dr. Inessa Levi
- Currently: I am now classified as a Senior and have started my first year of Nursing School here at CSU.

MY EXPERIENCE

- Me and Math: Before Math 1101
- Web Assign
- Material Covered
- Working with Excel
- If You Put Your Mind to It
- Me and Math: After Math 1101

ME AND MATH BEFORE

- Algebra I in HS: Barely Passed
- Algebra II in HS: Failed miserably
- Algebra II the 2nd time: Luckily passed
- Every AP class except math classes in HS
- In college, withdrew from 3 Algebra classes
- Graphing calculators
 - Price: \$80-\$130
 - Confusing
- Teacher Time Limited

WEB ASSIGN

- What a breath of fresh air!
- Immediate Feedback is Great
 - Who doesn't like getting their grade right away?
- Master the Material
 - Step by Step Instructions
- Try Another Version
 - A similar problem before submitting your assignment

MATERIAL COVERED

It Starts Simple

Example

If your job pays \$7.00 per hour, then the money M , in dollars, that you make depends on the number of hours h that you work, and the relationship is given by a simple formula.

Money = 7 X hours worked, or $M = 7h$ dollars

MATERIAL COVERED

Example Continued

You work 30 hours, then in functional notation, $M(30)$ is the money you earn.

To calculate that, you need to only replace h in the formula by 30:

$$M=7h \text{ dollars}$$

$$M(30)=7 \times 30 = 210 \text{ dollars}$$

Who knew breaking down a word problem could be so simple? Yes, I said simple.

MATERIAL COVERED

- Other Material Covered
 - Average Rate Change
 - Functions given by graphs
 - Tables and Trends
 - Creating Graphs
 - Solving Linear and Nonlinear Equations
 - Geometry Lines
 - Logarithmic Functions

WORKING WITH EXCEL

- I love it! I can't say it enough.
- Price: \$119.99
- Plus, Word and Power Point
- Free for Students at CSU
- Excel is everywhere
- Once you set it up, just plug in a few numbers, and off you go.

PUT YOUR MIND TO IT

- Simple Start?
 - Yes, but it's needed.
- Simple End?
 - Not if you don't keep up with the material.
- Can you learn a lot in MATH 1101?
 - Yes, and I still use it every day.

ME AND MATH AFTER

- I can't say I love math, but I don't hate it anymore.
- I love having the knowledge to use Excel.
- As I said before, I use it every day
 - Grading Calculator
 - Bookkeeping Materials
 - Medication Dosage Calculation
 - IV Solution Time Adjustments