



Second Mate Shannon





Captain Anne MAC⁵



Sea Wench Casey





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Pirating Math in a Payroll Sea

Problem Solving Module

- Infused instruction
- Wage Theme
- Problems adapted to Vocational Context
- "Just-in-Time" math instruction

Goals

- Achieve desired level of workforce competencies
- Identify students with deficiencies

Problem Solving Process

Four Paces to the Treasure

- 1. Understand the problem/Preparation
- 2. Devise a plan/Incubation
- 3. Carry out the plan/Illumination
- 4. Check results/Verification

Current Course Content

Computing Salaries and Wages Under FLSA



Social Security Taxes



Unemployment Compensation Taxes

Workforce Expected Competencies*

Reach Your Level Or You Be Walking the Plank Matey!!!

- Level 3
 - Information given in a logical order
 - No extra information
 - Single operations

• Level 4

- Information without order
- Extraneous information included
- Multiple operations
- Interpret graphs and diagrams

• Level 5

- Multi-stage logic and calculations
- Decisions on needed information
- Comparisons for best choice
- Use of formulas for conversions

- Level 6
 - Error detection and trouble shooting
 - Translation from verbal to symbolic
 - Use of more complex formulas
- Level 7
 - Format unusual
 - Incomplete problem formulation
 - Four or more steps of logical reasoning
 - More than one unknown
 - Optimization

Sample Problem Balance the Booty

Cheryl's time card and pay stub for week ending 1/19/07 are shown below. Cheryl feels that she has been under paid, explain. (Level 6)

Pay Type <u>Salary</u> Pay period for the weekending <u>January 19, 2007</u>									
Date	Time In	Time Out	Total Hours						
1/15	8:00 am	3:30 pm	7.5 hrs						
1/16	8:15 am	4:30 pm	8 hrs. 45 min						
1/17	8:15 am	4:30 pm	8 ³ / ₄ hours						
1/18	8:00 am	4:15 pm	8hrs. 15 min.						
1/9	8:00 am	4:45 pm	8.75 hrs						





Psycheck with Stub Showing Estimat and Jan-to Fiste Faraings and Deductions

Employee Time Record

Employee Name Chervl Crowson

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Treasured Outcomes

Students will be able to:

- Develop critical thinking skills
- Differentiate between scientific and pseudoscientific data
- Apply statistics in real world experiences
- Generate more in-depth statistical analyses
- Produce more meaningful work