

Algorithmic Work4Me

Accounting Simulations

1st Web-Based Edition

Descriptions of Algorithmic Problems

What Are Algorithmic Problems?

This edition of PKL's Algorithmic Work4Me has been developed for the first year accounting and business student. It is an excellent tool for familiarizing accounting students with accounting procedures, starting with basic debit and credit journal entries and progressing through the more complex journal entries associated with adjusting, closing, sales, purchases, and bad debts transactions.

What does algorithmic entail? After the first two problems, each student will start with different balances in beginning ledger and subsidiary accounts. Many of the transactions will require unique values to be journalized.

Evaluation questions at the end of each problem will require answers unique to The first demonstration problem introduces the software and basic entries illustrating the concept of double-entry bookkeeping. The balance of the computerized exercises provide a hands-on review of daily entries, maintaining subsidiary ledgers for customers and vendors, adjusting entries, closing entries, and simple analysis of financial statements. All of the clerical functions are handled by the computer. When answering ten to fifteen evaluation questions, the student must use their printed documents to answer the questions. The questions include analysis of the accuracy of the student's work, and analysis of the effects of the business transactions on the financial condition of the business. The student's exam may be taken a preset number of times and is auto-graded and recorded in the instructor's grade book.

Students can and should be encouraged to work together, but obviously the examinations must be answered independently of any other individual student.

An additional feature of Algorithmic Work4Me is Accounting Coach, which is under Support on the far right of the Algorithmic Work4Me main menu. Accounting Coach provides users an opportunity to review accounting topics, such as journalizing, posting, adjusting and closing entries, purchases, sales, inventory valuation, bad debts expense, depreciation expense, notes, and cash control. It too is algorithmic, so students can review the topics as many times as necessary to become competent in those topics.

Descriptions of the problems

A short description of each problem is given with some detail about the algorithmic portion(s) of the problem.

Problem Number	Description	Algorithmic
1	<p>Demonstration Problem This is a short, introductory problem with eight entries, and instructions to get the student acquainted with the computerized data entry system and printing accounting documents.</p>	No
2	<p>Daily Journal Entries The student records daily journal entries. An end-of-period Trial Balance is verified for accuracy.</p>	No
3	<p>Adjusting Entries Adjusting entries are recorded and an Adjusted Trial Balance is prepared.</p>	Yes Beginning ledger account balances are unique for each user.
4	<p>Daily and Adjusting Entries Daily entries are recorded for the last half of the month and a Trial Balance is prepared and verified. Adjusting entries are recorded and Financial Statements are prepared and analyzed.</p>	Yes Beginning ledger account balances are unique for each user. Many of the adjusting entries are unique for each user.
5	<p>Closing Entries Automated closing entries are demonstrated.</p>	Yes Beginning ledger account balances are unique for each user.

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| 6 | <p>Adjusting, Closing, and Analysis
 In addition to adjusting entries and automated closing entries, the student must complete a 20 question analysis.</p> | <p style="text-align: center;">Yes</p> <p>Beginning ledger account balances are unique for each user. Many of the adjusting entries are unique for each user.</p> |
| 7 | <p>Accounts Receivable with Perpetual Inventory
 This problem is an introduction to Perpetual Inventory and to the Accounts Receivable Subsidiary Ledger. The student records each update entry to Merchandise Inventory and Cost of Goods Sold as Sales and Sales Returns are recorded.</p> | <p style="text-align: center;">Yes</p> <p>Beginning ledger account balances and subsidiary ledger balances are unique for each user. The financial statements are unique for each user.</p> |
| 8 | <p>Accounts Payable with Perpetual Inventory
 This problem is an introduction to Perpetual Inventory and to the Accounts Payable Subsidiary Ledger.</p> | <p style="text-align: center;">Yes</p> <p>Beginning ledger account balances and subsidiary ledger balances are unique for each user. The financial statements are unique for each user.</p> |
| 9 | <p>Accounts Receivable and Accounts Payable
 This problem combines accounts receivable and accounts payable transactions. It includes an automatic updating of the Merchandise Inventory and Cost of Goods Sold accounts when sales or sales returns are recorded.</p> | <p style="text-align: center;">Yes</p> <p>Beginning ledger account balances and subsidiary ledger balances are unique for each user. The financial statements are unique for each user.</p> |
| 10 | <p>Accounting for Bad Debts
 This problem requires the write off of accounts receivable through the allowance method of accounting for bad debts. The problem includes the recovery of accounts written off in the current period and in a prior accounting period. A year-end adjusting entry for bad debt expense is made on the basis of an aging of accounts receivable.</p> | <p style="text-align: center;">Yes</p> <p>Beginning ledger account balances and subsidiary ledger balances are unique for each user.</p> |