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*TO THE INSTRUCTOR . . .*

The Instructor's Answer Manual for *Solve it! 4.0* contains a brief description of the learning objectives for each case and a step-by-step detailed answer. The accompanying diskette contains a copy of the answer files that can be printed out or used for class demonstration. The Instructor's Answer Manual assumes that the instructor has a working knowledge, but not necessarily a detailed knowledge, of spreadsheet and database packages for the PC.

Each case seeks to advance an identified management skill and one or several software skills. The software skills are easily identified, but there is a much looser correspondence between a case and related management skills. Sometimes, several management skills are obviously involved in a case but only one is identified. In other instances, certain management skills are exercised in a case but not identified in the schema. For instance, communications skills are exercised in many cases, but they are not identified in the schema.

**Problem Ambiguities**

The cases in *Solve it!* Version 4.0 for Windows have been made more straightforward, with more emphasis on defining the business problem that drives the assumptions for each worksheet. Nevertheless, the more advanced cases contain ambiguities that will require decisions on the part of the student and/or the instructor to resolve. These ambiguities are planned aspects of the learning tool and reflect the real world origin of the cases. Just like the real world, there is often more than one way to solve a problem, and in many cases, assumptions must be made to arrive at an answer.

Students should be instructed to resolve these ambiguities as required and note how they resolved the ambiguities in writing. Students should identify ambiguities, discover alternative solutions, and finally choose a specific solution. They should write their reasons for choosing an alternative, and be prepared to defend their decisions. These written aspects of the case are an important part of the learning process because the student learns to justify his or her judgments.

The problem tasks in *Solve it!* for Windows were designed to accommodate a range of different software tools. In a few problems, some of the tasks may be inappropriate or extremely difficult for students using one of these software tools. We have noted what aspects of the cases and tasks could pose difficulties in the Instructor's Answer Manual.

**Answers**

The answers given are not keystroke-by-keystroke answers. Instead, the authors assume that the instructors have a basic working knowledge of the command structure of the software and the keyboard. The Excel spreadsheet solution worksheets and graphs have been printed out for the instructor. Excel solution files can be found on the

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Spreadsheet Solutions disk and on the Instructor area of the [www.mysolveit.com](http://www.mysolveit.com) Web site.. There are also separate sets of solution files for Access, and they can be found on the ACCESS\_A solution file disks and on the Solve it! Web site.

For spreadsheet cases, students should clearly identify all of their assumptions. Students should also be encouraged to print and submit the cell formulas for each spreadsheet case solution. These formulas are a basic control point for the instructor to ensure that the students actually performed the work of the exercise.

Likewise, students should be encouraged to print and submit the programs required by the more advanced database cases. Instructors should insist on neat, professional work. Papers with tractor-feed ribbons attached should not be accepted; all pages should be separated. A one-page description of the solution as in a consultant's report is also a good teaching aid. The instructor should emphasize that illegible reports, and/or spread sheets which cannot be explained and defended, are unacceptable.

### *Feedback and Copying*

This product was written by professors for other professors and their students. We seek to develop a high quality management case service that will help professors and their students stay current with the latest PC software and management issues.

We need your comments and suggestions to continue delivering a quality service. If problems develop with a case, or if new cases come to your attention that you believe would be useful additions to the package, please send us your comments in writing.

The License Agreement does permit students to make a single back-up copy of the data diskette. We have made every effort to deliver a high quality service at the lowest possible cost. Illegal copying of this product will prevent us from delivering a low-cost product. If you and your students benefit from this product, it is in your interest and theirs to prevent illegal copying.

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## Instructor's Answer to Spreadsheet Case 3 Using Excel

### The Confidential Executive Payroll

The purpose of this problem is to reinforce the notion that spreadsheet software can be used in powerful ways by managers to accomplish seemingly simple yet very important organizing tasks. The objective is a template that serves simultaneously as a payroll file and payroll register for a small number of employees. The worksheet can both identify individual paychecks and amounts, and provide all calculation factors for management at a glance.

The spreadsheet formatting skills learned in the first problem are reinforced. In addition, the problem introduces the student to formulas, as well as absolute and relative addressing.

The most difficult concept in this problem is relative and absolute addressing using the copy command and formulas. Because this is one of the most powerful functions in spreadsheet software, the instructor should ensure that students fully understand relative, mixed, and absolute addressing.

#### Detailed Instructions

See files EFFICIENT\_A.XLS, EFFICIENT\_A1.XLS, and EFFICIENT\_A2.XLS.

1. Column labels should be centered. Use the **Format/Cell** menu item and select Center from the Alignment tab in the Format Cells dialog box, or use the corresponding button on the Formatting toolbar.
2. Use the Number tab in the Format Cells dialog box to change the format for the ranges containing gross pay, deductions, and net pay to a format that has two decimal places and comma separators between thousands. We suggest the #,##0.00 or #,##0.00\_);(#,##0.00) formats. Dollar amounts should be right-aligned so decimal places line up in columns.
3. Use the **Insert/Rows** command to insert several blank rows below the documentary entries at the top of the worksheet. Enter the heading "Assumptions," the variables in column A, and the values in column B. Include all deduction rates or amounts. Format all deductions (except Insurance) to percent format with two decimal places (e.g. 1.45%).
4. Use formulas with absolute and relative addresses to calculate all values from gross pay through net pay. Copy these formulas down the columns. Calculate monthly gross

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pay by dividing annual salary by 12. Net pay equals monthly gross pay minus all deductions. Many of the formulas reference a fixed cell in the Assumptions section of the worksheet. Make sure that students use absolute cell addressing in their formulas to refer to the data in the Assumptions section. The **F4** key is the function key that rotates the addressing in a formula from relative addressing, to absolute, to mixed, to mixed, and back to relative addressing. *Ensure that the students gain familiarity with this key.*

5. Use the =SUM function to calculate totals. Students should place these formulas in the row in which the word **Total** appears, just below the name of the last employee. To total the columns, students can type in the appropriate formula using =SUM, and click once and then again on the AutoSum button, or use the Insert Function button to build the =SUM formula.

6. In Additional Problem 1, the before-tax savings plan allows 8% of gross pay to be put away. Add a column for this deduction using the **Insert/Column** command. Insert this column before the Net Pay Column. Put 8% in a cell in the Assumptions section of the worksheet and enter the absolute address of that cell in the top row of the new column. Then copy the formula into the tenth employee's row. (See EFFICIENT\_A1.XLS.)

7. Additional Problem 2 is solved most easily by changing the federal tax withholding value to 35% in the Assumptions section of the worksheet. The change will automatically be reflected in the FIT and the Net Pay columns of the worksheet. (See file EFFICIENT\_A2.XLS.)

