

Date Calculations

In this chapter you will look at some spreadsheet applications that involve doing calculations on dates. It will use of more detailed IF statements. You will complete prepared templates for a library book overdues system and a debt collection company.

Creating a Library Book Overdue System

A school library needs a simple overdue books table. It should calculate automatically the return date and any overdue fees that need to be charged. Three weeks is the borrowing period after which 5 cents is charged for each day the book is overdue. All the librarian should need to do is enter the Borrow Date, the book's accession number and the student's name after which the overdue list should complete itself.

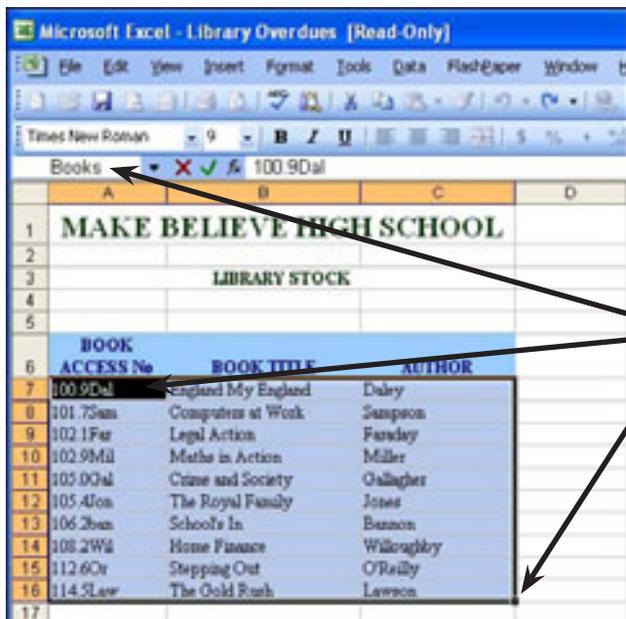
Opening the Prepared Template

- 1 Load Microsoft Excel or close the current file.
- 2 Select OPEN from the FILE menu and access the EXCEL SUPPORT FILES.
- 3 Open the CHAPTER 18 folder and load the file:
Library Overdues
- 4 Select YES to the READ-ONLY dialogue box.
- 5 The template has two worksheets:
 - the OVERDUES sheet which will keep track of which books are overdue.
 - The BOOK LIST sheet which is a list of the books that the school has.

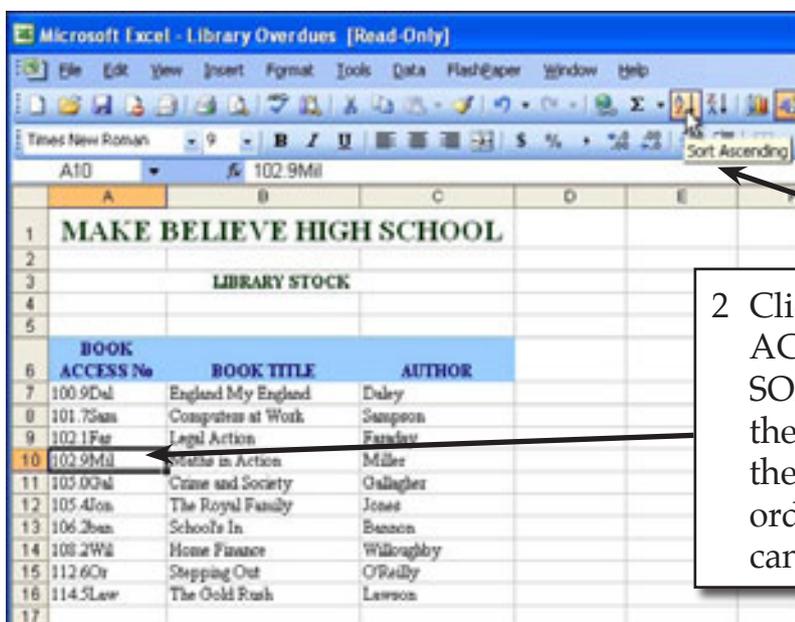
Look at both worksheets.

Naming the Book List

To make the formulas easier to understand the Book List should be named



1 Open the BOOK LIST sheet, highlight cells A7 to C16 and use the NAME BOX to name the cells:
BOOKS



2 Click in one of the BOOK ACCESS NO cells and click on the SORT (ASCENDING button in the STANDARD *Tool Bar* to sort the cells into BOOK ACCESS. No. order so that the lookup formula can be used on the table.

3 Save the file in your STORAGE folder as:

Library Overdues

Remember to turn off READ-ONLY RECOMMENDED.

Looking up the Book Title and Author

The BOOK TITLE and AUTHOR can be inserted into the OVERDUES sheet using the VLOOKUP command.

- 1 Return to the OVERDUES sheet.

2 Enter the test BOOK ACCESS. No. in cell C9:
102.1Far

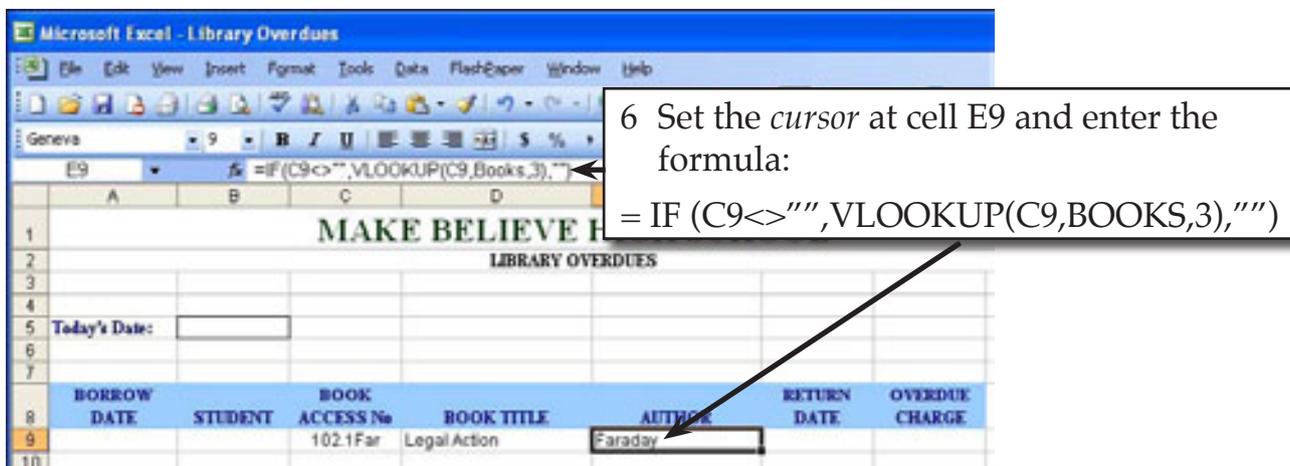
MAKE BELIEVE HIGH SCHOOL LIBRARY OVERDUES						
BORROW DATE	STUDENT	BOOK ACCESS No	BOOK TITLE	AUTHOR	RETURN DATE	OVERDUE CHARGE
		102.1Far				

- 3 The Book Title is found by a formula that checks whether a book accession number has been entered, then looks up the book STOCK table and displays the Book Title (COLUMN 2), otherwise a blank is displayed.

4 Set the cursor at cell D9 and enter the formula:
= IF (C9<>""',VLOOKUP(C9,BOOKS,2),""')

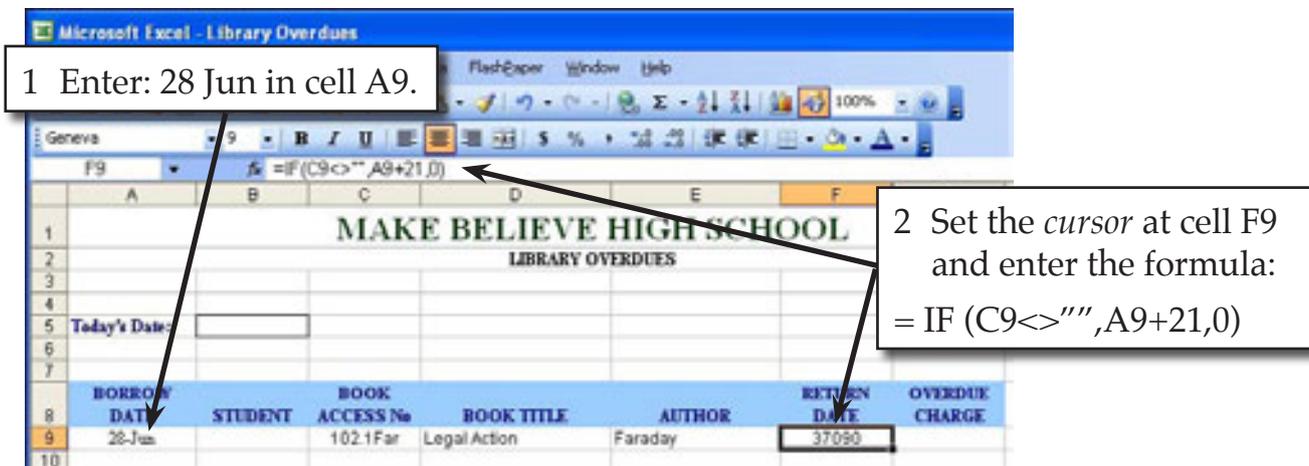
MAKE BELIEVE HIGH SCHOOL LIBRARY OVERDUES						
BORROW DATE	STUDENT	BOOK ACCESS No	BOOK TITLE	AUTHOR	RETURN DATE	OVERDUE CHARGE
		102.1Far	Legal Action			

- The Book Author is obtained through a similar formula to the Book Title, except that COLUMN 3 is used.



Calculating the Return Date

The RETURN DATE is calculated if an accession number has been entered. It is the BORROW DATE plus 21.



NOTE: Because the result is a calculation, use 0 instead of "" in the OTHERWISE section of your IF formula.