AppleWorks Tip

If you add new categories, you probably will want to insert information into those categories. If the entries are short, you may find it easy to insert in multiple-record layout with the cursor going down after you press (RETURN). Then you can easily go from one record to another, inserting new information in each.

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Reporting With the Data Base

This chapter tells all about reporting using the Data Base. It includes general information describing report styles, report formats, and the Report menu. It also tells how to create a tables-style report and a labels-style report and how to set printer options for reports.

Report Styles

AppleWorks lets you create **tables-style reports** and **labels-style reports**. Tables-style reports list records in rows and columns, down the page. Figure 5-1 illustrates a tables-style report, which inventories the contents of your wine cellar.

Figure 5-1. Tables-Style Report

	Wine Inventory : Wine Inventory			March	Page 1 20, 1984
Year	Origin	Vintner	Туре	Quantity	Cost
1978	Napa Valley	Heitz Cellars	Cabernet	2	12.75
1980	Alexander Valley	Grand Cru	Cabernet	5	8.00
1978	Napa Valley	Robert Mondavi	Cabernet	8	40.00
1978	Ohio	Mitchell Bros.	Cabernet	5	14.00
1981	New York State	Lissner Brothers	Chenin Blanc	8 5 3	12.00
1981	Napa Valley	Burgess Cellars	Chenin Blanc	3	9.00
1980	Napa Valley	Burgess Cellars	Chenin Blanc	3	10.00
1979	Sonoma Co., Cali	J. W. Morris	Vintage Port	3	10.00
1980	Alexander Valley	Woodbury	Petite Sirah	4	7.50
1979	Napa Valley	Caymus Vineyards	Cabernet Sauvi	9	12.50
1979	Napa Valley	Burgess	Cabernet Sauvi	3	18.00
1980	Sonoma County, C	Bellerose Vineyard	Cabernet Sauvi	2	12.00
1977	Napa Valley	Beaulieu	Cabernet Sauvi	3	15.75
1980		Robert Mondavi			8.00
1981	Napa Valley	Silverado Vineyard	Sauvignon Blan	3	8.00
1979	Santa Ynez Valle	J. Carey Cellars	Merlot	3	7.00
1977	Sonoma County, C	Chateau St. Jean	Merlot	3	9.00
1979	Alsace, France	Trimbach	Pinot Blanc	5	6.00
1978	Cotes du Rhone,	E. Guigal	Cotes du Rhone	3	4.50
1978	Bordeaux	Bagel Brothers	Bordeaux Red	8	5.50

A labels-style report, on the other hand, lists records with categories printed vertically down the page. Mailing labels are examples of labels-style reports. Figure 5-2 illustrates a labels-style report from the same file as the Wine Inventory. This time, though, more specific information about each type of wine is included.

```
File:
     Wine Inventory
                                                                         Page 1
                                                                   March 20, 1984
Report: Comments about Wine
1978
Heitz Cellars
Cabernet
Medium-full bodied with simple favors of moderate depth. Drink now
1980
Grand Cru
Cabernet
Briary, tannic quality. Best right away
1978
Robert Mondavi
Cabernet
Supple and well balanced. Best in about 1985
1978
Mitchell Bros.
Cabernet
Volatile smells, firm structure suggestions of varietal fruit
1981
Lissner Brothers
Chenin Blanc
Medium sweet. Full, distinctly varietal aromas. Melony
1981
Burgess Cellars
Chenin Blanc
Spicy, slightly grassy fruit and toasty oak elements
1980
Burgess Cellars
Chenin Blanc
Medium intense, slightly complex, fruity-earthy
1979
J. W. Morris
Vintage Port
Deep, fruity, plummy, ripe aromas. Curranty, chocolatey character
1980
Woodbury
Petite Sirah
Surprisingly berryish, fruity, sweet. Full and rich
1979
Caymus Vineyards
Cabernet Sauvignon
Good buy! Balance of oak, boysenberries, spice. Mint and truffles
```

When you think about whether you want to create a tables-style report or a labels-style report, decide whether you want your records in rows and columns across the page, like the Wine Inventory, or grouped vertically down the page, like the Wine Descriptions.

By the Way: Tables-style reports are similar to records in multiple-record layout, and labels-style reports are similar to records in single-record layout.

Report Formats

Report formats are specifications you give AppleWorks to describe how a report should be put together. For a tables-style report format, you tell how records should be arranged, whether all categories should be included or whether some should be deleted, and where categories should go. Your specifications about group totals and grand totals are also included in a tables-style report format.

In the Wine Inventory report, the year, the vintner, the type, the quantity on hand, and the cost per bottle are included in the report format. So is a total cost category, called a **calculated category**, which is a total of quantity-on-hand times cost-per-bottle. The total cost category has a grand total.

For labels-style reports, you tell which categories should be included and how they should be placed. In the Comments About Wine report, cost information is left out, but a comment category is included.

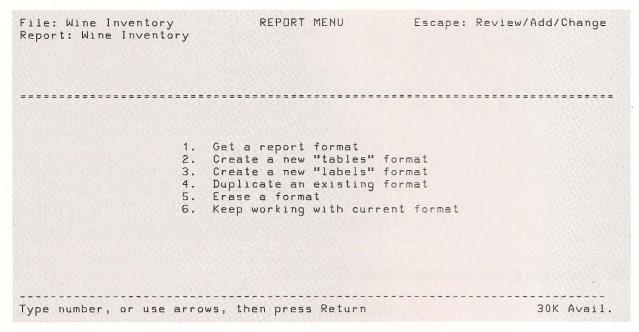
Report formats are saved with and become a part of the Data Base file, although they don't affect the data itself in any way. They are always available when the file is on the Desktop.

One Data Base file can have up to eight report formats.

Report Menu

When you are in Review/Add/Change for a file and indicate you want to report ((<u>G</u>)-(<u>P</u>)), AppleWorks displays the Report menu, which is illustrated in Figure 5-3. It presents all your options for beginning reporting.

Figure 5-3. Report Menu



- 1. Get a report format displays the Report Catalog, which lists the report formats you have already created for the file. After you select one, you get the Report Format display for the report, so you can make any necessary changes and print the report.
 - Option 1 isn't highlighted if you have no report formats. If you choose it anyway, AppleWorks replies that you have none, and lets you choose whether you want to create a tables-style or labels-style report format.
- 2. Create a new "tables" format asks for a report name for your new report. Then it presents the Report Format display for tables-style reports for the file.

- 3. Create a new "labels" format asks for a report name for your new report. Then it presents the Report Format display for labels-style reports for the file.
- 4. Duplicate an existing format presents the Report Catalog so you can select an existing format from the file and duplicate it. After you give it a new name, AppleWorks presents the Report Format display for the report.

Choose this option if you want to use an existing format as a basis but change its name and any other of its specifications.

- 5. Erase a format presents the Report Catalog for the file, so you can select the report you want to erase.
 - You must choose Yes in response to the double-check erase question to make it definite that you really want to erase the format.
- 6. Keep working with current format appears only when you have report formats. When you select it, AppleWorks returns you to the report format you have just been working with.

Creating a Tables-Style Report

To create a tables-style report:

- Start in Review/Add/Change of the file you want to create a report for.
- 2. Press (&)-(P). AppleWorks presents the Report menu.
- 3. Choose Create a new "tables" format.

 AppleWorks prompts you for the name of the report.
- 4. Type the name of the report, which can have up to 19 letters, numbers, or special characters. The name can be the same as the filename. Press (RETURN). AppleWorks presents the Report Format display.

Figure 5-4 illustrates the tables-style Report Format display for the Wine Inventory file.

Figure 5-4. Tables-Style Report Format Display

File: Wine Inven Report: Wine Inv Selection: All r	entory	FORMAT	Escape: Rep	ort Menu
> A < Chang A-A Arrange (so A-D Delete this A-G Add/remove	h category positions e column width rt) on this category category	A-K Define a A-N Change re A-O Printer o A-P Print the A-R Change re	ptions report	egory or title
Year Origin	Vintner	Type	Quantity	
1978 Napa Vall 1980 Alexander	ey Heitz Cellars Valley Grand Cru ey Robert Mondav	Cabernet Cabernet	2	12,75 8.00 40.00
Use options show	n above to change rep	ort format		Nore>
Examples of records from The changes you make ar In the record examples, so	e reflected		The options y creating the r	rou have now fo eport format.

see exactly what you are doing as you go along.

Categories are designated A through Z, to make it easy for you to create calculated categories.

> Options for creating the tables-style report format are described in the following sections.

Summary of Considerations and Features

You have several main considerations in creating a tables-style report format. These main considerations are listed in Table 5-1, along with the Data Base reporting features that relate to them.

Table 5-1. Main Considerations for Tables-Style Reports

Main Consideration	See This Section
Moving the cursor on the Report Format display	"Moving the Cursor"
Placing categories on the report	"Changing Column Width" "Switching Category Positions"
Including the categories you want	"Deleting Categories" "Inserting Previously Deleted Categories"
Including the records you want	"Changing Record Selection Rules"
Getting records in the right order	"Arranging Records for the Report"
Lining up entries	"Right Justifying Categories"
Providing a title for your report	"Adding or Changing Report Names and Titles"
Calculating in reports	"Creating Calculated Categories"
	"Adding and Removing Totals"
	"Controlling Group Totals"
Communicating with your printer	"Working With Printer Options" Chapter 13, "Printers and Printing"

Moving the Cursor

When you move the cursor from category to category in the record examples, use the following cursor movement keystrokes:

What You Want	What You Use
Move the cursor one category to the right	→
Move the cursor one category to the left	· -

Changing Column Width

You can increase the width of a column for a report because information in the category is too wide for the current column width. Or you can decrease the width of a column because information in the category is narrower than the column. Increasing or decreasing column width helps you make a report look exactly the way you want it and shows the information most effectively. It also ensures that information fits correctly on your printer.

To change the width of columns:

What You Want	What You Do
Increase the width of a column	Put the cursor on the column
	Press (g)-(-)
Decrease the width of a column	Put the cursor on the column Press (a)-(+)

AppleWorks Tip

Be sure columns are wide enough to hold information in the categories. Columns that are too narrow to hold the widest entry for numerical categories cause AppleWorks to display pound signs (#) instead.

Switching Category Positions

You can switch categories with each other, thus placing categories exactly where you want on the report. To do this:

What You Want	What You Do
Switch a column with the one on its right	Place the cursor on the category to be moved. Press (a)-> (do not press (SHIFT)).

What You Want

What You Do

Switch a column with the one on its left

Place the cursor on the category to be moved. Press (a)-(<) (again, don't press (SHIFT)).

AppleWorks Tip

You can also move a category where you want it by deleting it from one position (③-①) and inserting it where you want it (⑤-①).

Deleting Categories

You can delete unnecessary categories from a report format without affecting the file. You can reinsert the category into the report format any time you want.

To delete a category:

- 1. Place the cursor on the category you want to delete.
- 2. Press (ப்)-(D).

AppleWorks Tip

To insert or delete a category from your file, use the (a)-(N) function while you are in Review/Add/Change. Remember, though, that you lose your report formats when you delete a category from the file.

Inserting Previously Deleted Categories

After you delete a category from a report format by using the (a)-(D) feature, you can insert it again whenever you want. You can also insert new categories.

To reinsert a previously deleted category:

- 1. Decide where you want to reinsert the previously deleted category. Then place the cursor on the category just to the right of that position.
- 2. Press (1)-(1). AppleWorks presents a numbered list of previously deleted categories.
- 3. Choose the category you want to insert.

Changing Record Selection Rules

When you first create a report format, you'll see the record selection rule in effect on the Review/Add/Change display. You can change record selection rules so that only records that meet the rule you specify are printed. Record selection rules stay with the report format until you change them.

To change the record selection rule, use the (3)-(R) command.

See "Changing Record Selection Rules" in Chapter 4.

See "Arranging Records" in Chapter 4 for information on how records are arranged.

Arranging Records for the Report

You can arrange records for the report so they are printed in any order you want. To arrange records:

- Move the cursor to the category by which you want your records arranged.
- 2. Press (d)-(A).
- 3. Choose the way you want the records arranged.

The record arrangement specification is not saved with the report format.

Right Justifying Categories

You can right justify information in categories with alphabetic or numeric information in them. When you right justify information in alphabetic categories, the entries in the category line up right under each other, with an even right margin. When you right justify information in categories with numeric information, the decimal points line up under each other.

To right justify a column, follow these steps:

- 1. Move the cursor to the column you want to right justify.
- 2. Press (a)-(J). AppleWorks asks you to specify the number of decimal places that should be included in each entry in the specified column.
- 3. Type the number of decimal places and press (RETURN). (If you are right justifying alphabetic information, type 0 and press (RETURN).) AppleWorks asks you how many blank spaces should be placed after each entry. This is important in spacing columns across the page.
- 4. Type the number of blank spaces you want included and press (RETURN).

After you respond to these prompts, AppleWorks fills the appropriate column in the record examples with 9's to show how the information will line up when it is printed.

AppleWorks Tip

When you specify columns for totals using (台)-丁, they are automatically right justified, and you don't have to use 台-①.

Adding or Changing Report Names and Titles

The report name you give a report format appears at the top left of the report and at the top-left corner of the REPORT FORMAT display. You can change this name whenever you want.

In addition, you can give a report a title. The title can be up to 78 characters wide. It is printed at the top of each page of your report.

To change a report name or to give the report a title:

- 1. Press (ம்)-N. AppleWorks prompts you for the new report name.
- 2. Type in the new name of the report, which can be up to 19 characters long. Then press (RETURN). Just press (RETURN) if you don't want to change the report's name.
- 3. Type in the report's title at the cursor position just above the category names, and press (RETURN). Just press (RETURN) if you don't want to change the title you previously gave the report.

Creating Calculated Categories

AppleWorks lets you create a new category by manipulating numerical information contained in other categories. If you are keeping an inventory file for the parts you sell in your bicycle shop, for example, you want a total for the amount invested in each part. To get that total, you multiply the quantity of each part (in one category) by the cost of each part (in the second category). You can have up to three calculated categories in each AppleWorks Data Base report.

To use a category as part of a formula for a calculated category, you use the letter under the category name. That is, if the quantity of each part in the inventory file is in column B and the cost of each part is in column D, then the formula for the total investment per part is B * D.

To get the total of an order for a sales invoice, on the other hand, you multiply the cost of the item (in column A) by the sales tax percentage (a constant you include in the formula) and add this number to the cost of the item. The formula for this calculated category is $A^*.05+A$ (or $A^*1.05$ or 1.05^*A).

The first 26 columns in a report format are lettered from A through Z under the category name and can therefore be included in calculated categories. If you have more than 26 categories, and thus more than 26 columns in your report, columns 27 through 30 won't have letters. If you want to use information in columns 27-30 as the basis for your calculations, you must make sure the columns you want to include have letters. To do so, either delete columns in the A-Z group, thus moving columns 27 through 30 into the A-Z group, or physically move columns 27-30 to the left into the A-Z group.

The calculated categories are part of the report format, not part of the information in Review/Add/Change.



Warning

Calculation rules are based on column letters. If you rearrange columns, your calculated categories may need to be revised. If you delete a category used in a calculation, the results will be incorrect.

Rules for Calculated Categories: If there is more than one calculated category, the leftmost calculation is done first. Successive calculated categories, therefore, can refer to a calculated category to the left. If a calculated category refers to a calculated category to the right, the result of the calculation will be a zero. Calculated categories can refer to any noncalculated category, to the right or to the left.

Here are the steps for creating a calculated category:

- 1. Place the cursor one column to the right of where you want the calculated category to appear.
- 2. Press (a)-(k) (for calculated category). A column called Calculated appears in the space. The 9's you see in the column are placeholders, and mean that the category will be right justified. (You only see the real numbers when you print the report.)

In addition, AppleWorks requests a name for the calculated category.

- 3. Type the name of the category and press (RETURN). The category's name can be up to 20 characters long. This is the name that will appear on the report.
- 4. Type the calculation rules using the letters associated with the appropriate columns. The rules define what the calculated category will equal, so you don't use = in your calculation rules.

Use the following keys to designate the four functions:

plus +
minus multiply *
divide /

All operations are performed from left to right.

5. AppleWorks then asks you how many decimal places to include in this category. Type the number of decimal places to include and press (RETURN). Just press (RETURN) if you want to accept AppleWorks' default value for this number. AppleWorks asks you how many blank spaces to include after this category.

6. Type the number of blank spaces you want to follow the category and press (RETURN). Or accept the default by pressing (RETURN).



Warning

Be sure there are enough 9's on both sides of the decimal point to hold the largest and smallest calculated numbers. If #### appears when the column is printed or displayed, the field is too short.

AppleWorks Tip

You can't see the contents of the new column until you either print the report on a printer or display it on the screen. To do either, you use (a)-(P).

You can use (a)-(T) to get a group total and a grand total for the numbers in the calculated category. You can't, however, use (a)-(a) on the calculated category to make it control group totals in *other* categories. Neither can you arrange records by the value in the calculated category.

Adding and Removing Totals

It's easy to get group totals (or subtotals) and report totals for specified categories. Here's how:

- 1. Place the cursor on the column you want to total.
- 2. Press (a)-(T). AppleWorks asks the number of decimal places that should be included in the category total.
- 3. Type the number of decimal places for the total and press (RETURN). Or accept AppleWorks' default by pressing (RETURN). AppleWorks asks the number of blank spaces to include to the right of the total.
- **4.** Type the number of blank spaces to include and press RETURN. Or accept AppleWorks' default by pressing RETURN.

AppleWorks inserts 9's in the category with the appropriate number of decimal places. The 9's will be replaced by the entries in the category when you print the report or by blanks if there is no information in the entry.

See "Adding and Removing Totals" and "Controlling Group Totals."

The double dashed line below the category indicates that the report will include totals for this category.

If you are creating group totals, use the (a)-(G) feature on the category that should *control* the group totals.

Here's how to remove totals:

- 1. Place the cursor on the category with totals.
- 2. Press (a)-(T). Information from the sample records will replace the 9's.

Controlling Group Totals

To specify group totals, or subtotals, for a category, follow the directions in "Adding and Removing Totals." In addition, specify which category will control the group totals. To do so, use (a)-(a). Whenever a change in value occurs in this controlling category, a group total is calculated and printed for categories you specified with (a)-(T).

To specify the controlling category for group totals:

- 1. Put the cursor on the controlling category.
- 2. Press (d)-(G).
- 3. Choose No or Yes depending on whether you want to print group totals only, or whether you want to print all the records as well.
- 4. Choose No or Yes depending on whether you want to go to a new page after each group total. Your answer is probably yes if many records will be included in each group total.

AppleWorks displays the controlling category for the group totals to the left and above the double line on the Report Format display.

AppleWorks Tip

You may want to arrange the records in your report according to the controlling category, too.

Creating a Labels-Style Report

To create a labels-style report, follow these instructions:

- Start in Review/Add/Change of the file you want to create a report for.
- 2. Press (a)-P). AppleWorks presents the Report menu.
- 3. Choose Create a new "labels" format.

 AppleWorks prompts you for the name of the report.
- **4.** Type the name of the report, which can have up to 19 letters, numbers, or special characters. Press (RETURN). AppleWorks presents the Report Format display.

Figure 5-5 illustrates the labels-style Report Format display for the Wine Inventory file.

Figure 5-5. Labels-Style Report Format Display



Options for creating the labels-style report are described in the following sections.

Summary of Considerations and Features

You have several main considerations in creating a labels-style report format. These main considerations are listed in Table 5-2, along with the Data Base reporting features that relate to them.

Table 5-2. Main Considerations for Labels-Style Reports

Main Consideration	See This Section	
Moving the cursor on the Report Format display	"Moving the Cursor"	
Placing categories on the	"Moving Categories"	
report	"Deleting Categories or Spacing Lines From the Report"	
	"Inserting Spacing Lines or Previously Deleted Categories"	
	"Left Justifying Categories"	
Getting records in the right order	"Arranging Records"	
Including the records you want	"Changing Record Selection Rules"	
Checking records in the format you created	"Looking at Records"	
Including category names with entries	"Printing Category Names on the Report"	
Providing a title for your report	"Adding or Changing Report Names or Titles"	
Communicating with your	"Working With Printer Options"	
printer	Chapter 13, "Printers and Printing"	

Moving the Cursor

To move the cursor about on the display, use the following cursor movement keystrokes:

What You Want

What You Use

Move the cursor left, right, up, (+), (+), (+), (+), (+), and (RETURN)or down



Moving Categories

To place categories where you want them on the report, AppleWorks lets you move them about on the display. To move categories:

- 1. Put the cursor on the first character of the category you want to move.
- 2. Use the following cursor movement keystrokes:

What You Want

What You Use

Move the category left, right, up, or down



AppleWorks protects the first two letters of a category name and thus won't let you move one category on top of or through these first two letters.

Deleting Spacing Lines or Categories From the Report

You can delete spacing, or blank, lines or categories you don't want to print on the report.

To delete spacing lines or categories:

- 1. Put the cursor on the first character of the category or on the spacing line you want to delete.
- 2. Press (a)-(D). When you delete a category, a spacing line remains, which you may delete if you want.

Deleting categories means they don't print on the report, not that they are deleted from the file. You can reinsert deleted categories any time you want by using the (3)-(1) feature.

AppleWorks Tip

Spacing lines enable you to place categories correctly in a labels-style report. You can control spacing lines by deleting and inserting them.

Inserting Spacing Lines or Previously Deleted Categories

You can insert spacing lines or previously deleted categories. To do so, follow these steps:

- 1. Put the cursor where you want the category or spacing line to be inserted.
- 2. Press (a)-(1). AppleWorks displays the names of deleted categories so that you can choose the one you want. It also gives you the option of inserting a spacing line above the cursor position or one below the cursor position, unless you already have the maximum, 15 lines. If you want to insert a line below the last category, just press (RETURN).
- Choose the option you want. It is inserted into the report format.

Left Justifying Categories

AppleWorks lets you place two categories so that they print right next to each other. This is called **left justifying** categories. It is most useful when you are creating a report format to print labels.

Here are examples of names on labels with and without justifying the last name category:

With Left Justifying

Without Left Justifying

Joe Maxwell

Joe

Maxwell

Josephine Maxwell

Josephine Maxwell

Follow these steps to left justify categories:

- 1. Place the categories side by side in the order you want them. (a) and the arrow keys move the categories around.
- 2. Put the cursor on the first character of the category you want to left justify. This is the category on the right.
- 3. Press ⓓ-J. AppleWorks displays the

 character to the left of the left justified category.

AppleWorks Tip

You can see the effect of left justifying a category only by using the (a)-(P) command to actually print the report or display it on the screen.

See "Arranging Records" in Chapter 4 for information on how records are arranged.

Arranging Records for the Report

You can arrange records for the report so the records are printed in any order you want. The record arrangement specification is not saved with the report format, however. To arrange records:

- **1.** Move the cursor to the category by which you want your records arranged.
- 2. Press (a)-(A).
- 3. Choose the way you want the records arranged.

Changing Record Selection Rules

When you first create a report format, you'll see the record selection rule in effect on the Review/Add/Change display. You can change record selection rules so that only records that meet the rule you specify are displayed or printed. Record selection rules stay with the report format and change only when you change them.

To change the record selection rule, use the (a)-(R) command.

Looking at Records

The Report Format display shows the category names for the report format you are working on. You can zoom in to check actual records, if you want. When you do, you see what the information looks like in the format you have specified. After

See "Changing Record Selection

Rules" in Chapter 4.