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## Lesson 4 Document Protection and Display Options

### Lesson Topics

- Document Protection
- Hiding Columns and Rows

### Lesson Objectives

At the end of the lesson, you will be able to:

- Protect or unprotect an entire worksheet against changes;
- Select individual cells to be protected or unprotected;
- Hide the contents of cells —especially formulas;
- Use several techniques to hide and unhide selected columns and rows.

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### Student Files Used

You will use the following files from your student folder:

- Dairy 5
- Monthly Sales 2

## Document Protection

Excel lets you protect cells so that the information in them cannot be altered. This is useful for text and formulas that you would not want changed accidentally. You might also want to protect some values before beginning extensive changes to a workbook.

You are going to protect some cells to prevent them from accidental alteration. Protection is a two-step process:

- *Unlock* the cells which are to remain editable. All cells, by default, are *locked*. The cells you unlock will be the only ones editable by a user when the worksheet is protected.
- Turn on Document Protection. The cells that remain locked will then be *protected* and not editable. The cells that were *unlocked* will be the only cells a user can modify.

### 1. Open *Dairy 5*.

This is the same file as *Dairy 5* in the last lesson.

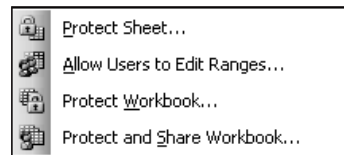
- ### 2. By default, Excel specifies that all cells are *locked*. Therefore, at the moment, all cells in *Dairy 5* will be protected when *Protection* is turned on.

#### On the Tools menu, point to *Protection*.

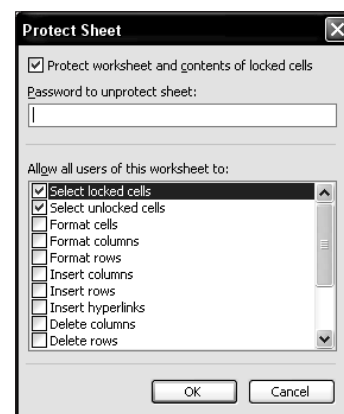
Notice the submenu.

- ### 3. On the submenu, choose *Protect Sheet*.

The Protect Sheet dialog box appears. Notice that *Protect worksheet and contents of locked cells* is checked. This means that all cells that are formatted as *locked* will be *protected* when you click OK. At the moment, this will be the entire worksheet. By default, users can only *select* locked



cells once they are protected — they cannot format them or change their contents in any way. You can



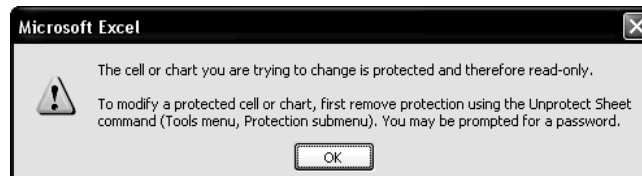
change the behavior of protected cells by selecting and de-selecting the items in the *Allow all users of this worksheet to list*. The *Password to unprotect sheet* box lets you enter a password so unauthorized users cannot remove protection.

**4. Verify that only the first two options are selected, and click OK.**

All cells of the worksheet, including empty cells, are now protected.

**5. Select any cell and try to enter something in it.**

An alert box appears, informing you that the cell you are trying to change is protected.



**6. Click the OK button.**

**7. You are going to indicate that certain cells are not to be protected when *Protect Sheet* is chosen. First, you have to unprotect the document.**

**On the Tools menu, point to *Protection* and then choose *Unprotect Sheet*.**

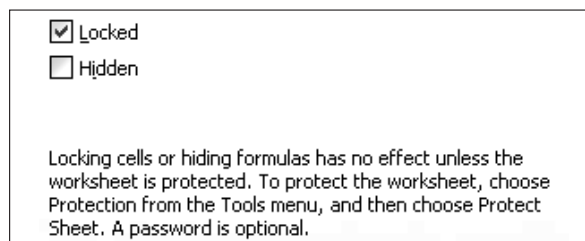
All cells can now be altered normally, as was true before you turned on protection.

**8. Select cells B4:D12.**

**9. On the Format menu, choose *Cells*.**

**10. Click the Protection tab.**

Notice that the *Locked* option is chosen, indicating that the selected cells are locked. *Locked* is really a *cell format* that is on by default. This means that,



unless you "unlock" cells, all cells will be protected when you protect the worksheet.

**11. De-select the *Locked* option and click OK.**

Range B4:D12 will not be protected.

**12. Click to remove the highlight.**

**13. On the Tools menu, point to *Protection*.**

**14. On the submenu, choose *Protect Sheet*.**

**15. In the Protect Sheet dialog box, click OK to protect all of the sheet except B4:D12.**

**16. Go to B4 and enter a different value.**

Notice that the value is accepted. The cell is not protected.

**17. Go to A4 and try to enter something.**

Notice the alert box as before. This cell is protected.

**18. Click OK.**

**19. You are going to turn protection off.**

**On the Tools menu, point to *Protection*.**

**20. On the submenu, choose *Unprotect Sheet*.**

You can now enter information into any cell.

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## Hiding Formulas

You may have noticed the *Hidden* option on the Protection tab of the Format Cells dialog box. If you are making a *template*, this allows you to hide a cell's contents — usually helpful with formulas.

**1. Select B14:D14.**

**2. On the Format menu, choose *Cells*.**

**3. On the Protection tab, choose *Hidden* and click OK.**

**4. On the Tools menu, choose *Protection*, and on the submenu, choose *Protect Sheet*.**

**5. On the Protect Sheet dialog box, click OK.**

**6. Click in B14:D14 and notice that the formulas do not appear on the Formula bar, although the results appear in the cells.**

If you were to copy the cells, only their results would be copied, not the formulas.

7. Even though the formulas are hidden, they are still functioning.

**Type some values in B4:D12 to see the results change in B14:D14.**

8. **On the Tools menu, choose *Protection*, and on the submenu, choose *Unprotect Sheet*.**

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Remember that all cells except B4:D12 are formatted as locked. You are going to format B4:D12 as locked, so that when you choose *Protect Sheet*, the cells of this range will be protected as well.

1. **Select B4:D12.**
2. **On the Format menu, choose *Cells*.**

On the Protection tab, notice that *Locked* is not selected, because you unlocked the selected cells.

3. **Choose the *Locked* option and then click OK.**
4. **Click to remove the highlight.**

The selected cells are formatted as locked. When *Protect Sheet* is chosen, these cells will be protected.

**Note:** You can also protect the entire workbook *Structure* (e.g., sheets cannot be deleted, inserted, or renamed), and its *Windows* (e.g., windows cannot be resized, minimized, or moved). Another option lets you add a password for the workbook. Select *Protect Workbook* on the *Protection* submenu of the Tools menu. A dialog box will appear with options that let you protect the workbook's *Structure*.

**Remember:** When you protect a worksheet, all cells will be protected unless you first unlock them on the Format Cells dialog box.

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## Hiding Columns and Rows

Sometimes you may want to hide rows and columns. For example, you may want to see only the results of calculations, rather than all the columns and rows that were calculated.

1. ***Dairy 5* should be the active workbook.**

2. You are going to hide column B.

**Click the column B heading to select the column.**

3. **On the Format menu, point to *Column* and then choose *Hide*.**

Notice that column B is hidden. Column C follows column A.

	A	C
1		FEB
2		
3	INCOME	
4	Ice Cream	30000
5	Sherbet	9500
6	Ice Milk	2500

4. The bar between columns A and C indicates a selected hidden column. It is only temporary.

**Click in any cell.**

Notice that the bar disappears. If you look closely, however, you will see a slightly thicker line between the column A and C headings, which signifies a hidden column.

5. To unhide the column, you have to select both the column before it and the column after it.

**Drag through the column A and C headings to select the columns.**

6. **On the Format menu, point to *Column*.**

7. **Choose *Unhide*.**

Column B is once again displayed.

8. You can hide as many columns as you want. You are going to hide columns B-G.

**Drag through the column B-G headings to select the columns.**

9. **On the Format menu, point to *Column* and choose *Hide*.**

Columns B-G are hidden.

10. You are going to unhide them.

**Drag through the column A and H headings to select these columns.**

11. You are going to use the Shortcut menu to unhide the columns.

**Point to the selected columns and right-click.**

**12. On the Shortcut menu, choose *Unhide*.**

Columns B-G are once again displayed.

**13. Click to remove the highlight.**

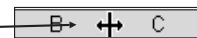
You can also hide columns by dragging the vertical lines between the headings.

1. You are going to hide column B.

**Click the column B heading to select the column.**

2. To hide a column, you merely change its width to 0.

**On the column heading line, point to the line separating columns B and C until the pointer turns into a vertical bar with arrows pointing left and right.**



3. **Drag left until 0.00 is displayed in a ToolTip above the Formula bar.**

Notice that column B is hidden.

4. You are going to unhide column B.

**On the column heading line, point to the line separating columns A and C.**

The pointer turns into a vertical bar with arrows pointing left and right.

5. If the vertical line between the arrows is solid, dragging now would resize column A instead of unhide column B.

**Move the pointer slightly to the right until two vertical lines are between the arrows.**



This pointer will allow you to unhide column B.

6. **Drag right until the width of the heading is 9.00.**

Column B is again in view.

7. You can do the same thing with several columns.

**Drag through the headings to select columns B-G.**

8. **Position the pointer over the vertical line between any two selected columns.**

9. **Drag anywhere into column A.**

Columns B-G are hidden.

10. You can unhide the columns by dragging through the headings as you did before, but the width of column A will change to the width of the other columns.

**Select columns A and H.**

11. **Position the pointer just to the right of the line separating columns A and H, until it turns into two vertical lines with arrows pointing left and right.**

12. **Drag right until the width of the heading is 9.00.**

Notice that columns B-G are no longer hidden.

Column A, however, is now the width of the other selected columns. For this reason, it is usually easier to use the *Unhide* command to unhide columns of different widths.

13. **Click the column A heading to select the column.**

14. **Change the width of column A to 15 by dragging the vertical line between columns A and B to the right until 15.00 is displayed in a ToolTip above the Formula bar.**

**Tip:** You can also hide selected columns by using CTRL/0 (that is a zero). You can unhide selected columns by using CTRL/SHIFT/0.

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Rows can be hidden by using the same procedures. You are going to hide row 5.

1. **Click the row 5 heading to select it.**
2. **On the Format menu, point to *Row* and then choose *Hide*.**

Notice that row 5 is hidden. As with columns, the bar between rows 4 and 6 indicates a selected hidden column.

3	INCOME		
4	Ice Cream	56500	30000
6	Ice Milk	12000	2500
7	Yogurt	2500	4000

3. **Click in any cell.**

The bar disappears. The thick line between the row 4 and 6 headings indicates a hidden column.



4. You are going to unhide the column.

**Drag through the headings to select rows 4 and 6.**

5. **On the Format menu, choose *Row*.**

6. **On the submenu, choose *Unhide*.**

Row 5 is again displayed.

**Tip:** As you did with columns, you can also hide rows using the Shortcut menu or by dragging the row heading separator lines. You can also use the Row Height dialog box to change the height to zero.

**Tip:** To hide selected rows, you can use CTRL/9. To unhide selected rows, you can use CTRL/SHIFT/9.

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*End of Lesson 4*