AL-MUSTAQBAL UNIVERSITY
COLLEGE OF Sciences
Department biology

Computer Sciences I

Lecture 7-8

Introduction to Excel

Asst. lec. Fatima Ayad

Learning Objectives

Understand and apply the following skills:

- Explore and identify MS Excel user interface elements.

- Moving around worksheets.

- Selecting cells, rows, and columns.

- Editing & formatting worksheets.

- Inserting & deleting rows and columns.

- Deleting rows & columns.

- Changing row heights & column widths.

Outlines

- Introduction
- MS Excel 2010 Interface
- Moving Around Worksheets
- Selecting Cells, Rows, and Columns
- Editing & Formatting Worksheets
- Formatting Numbers
- Inserting Rows and Columns
- Deleting Rows and Columns
- Changing Row Heights
- Changing Column Widths

Introduction

A spreadsheet: is a table of values arranged in rows and columns; the intersection of a Row & Column is called a Cell.

• Each cell can have a predefined relationship to the other cells.

• If you change the value of one cell, the values in the other cells may also be changed according to their relationships with that cell.
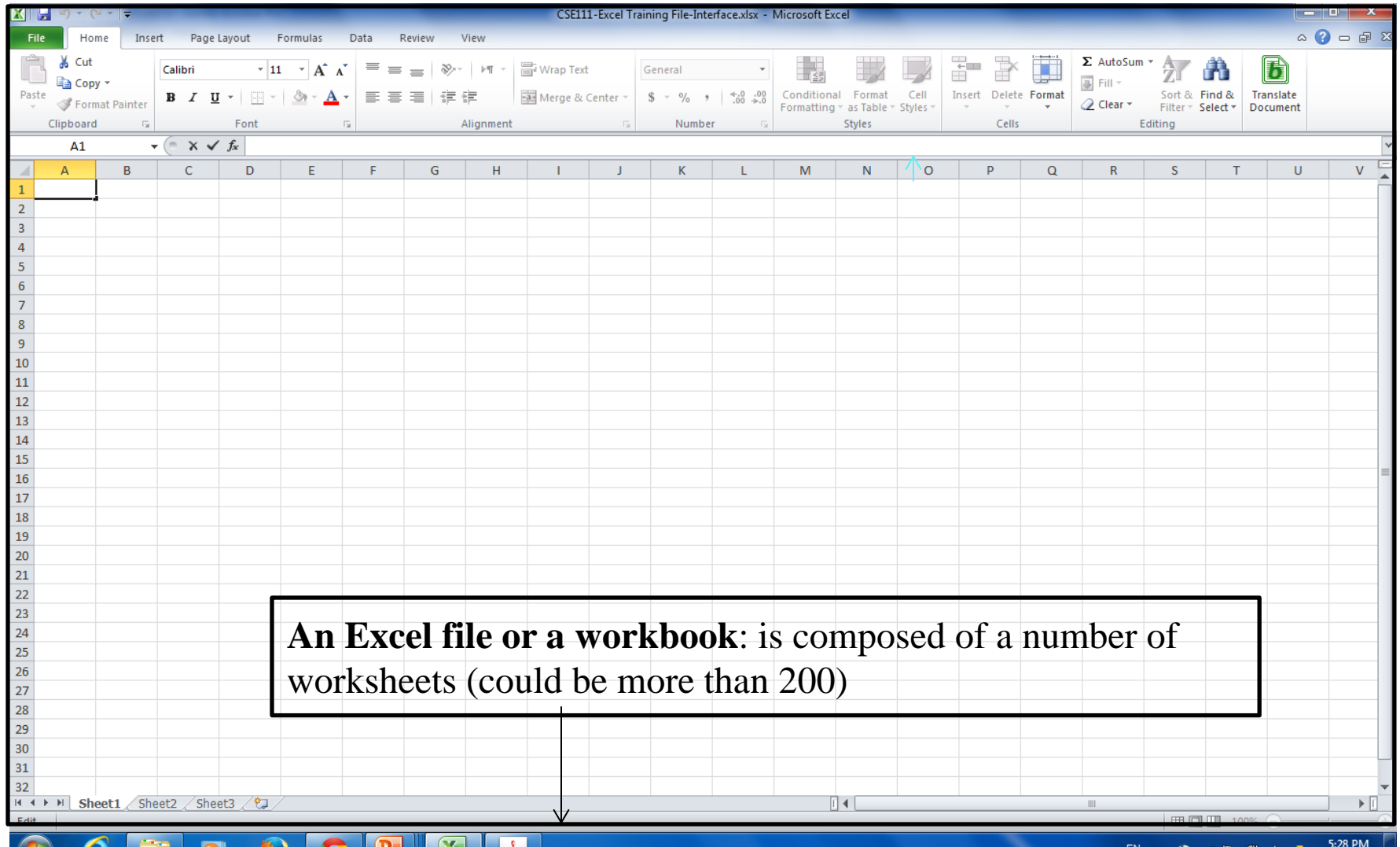
My Expenses Table

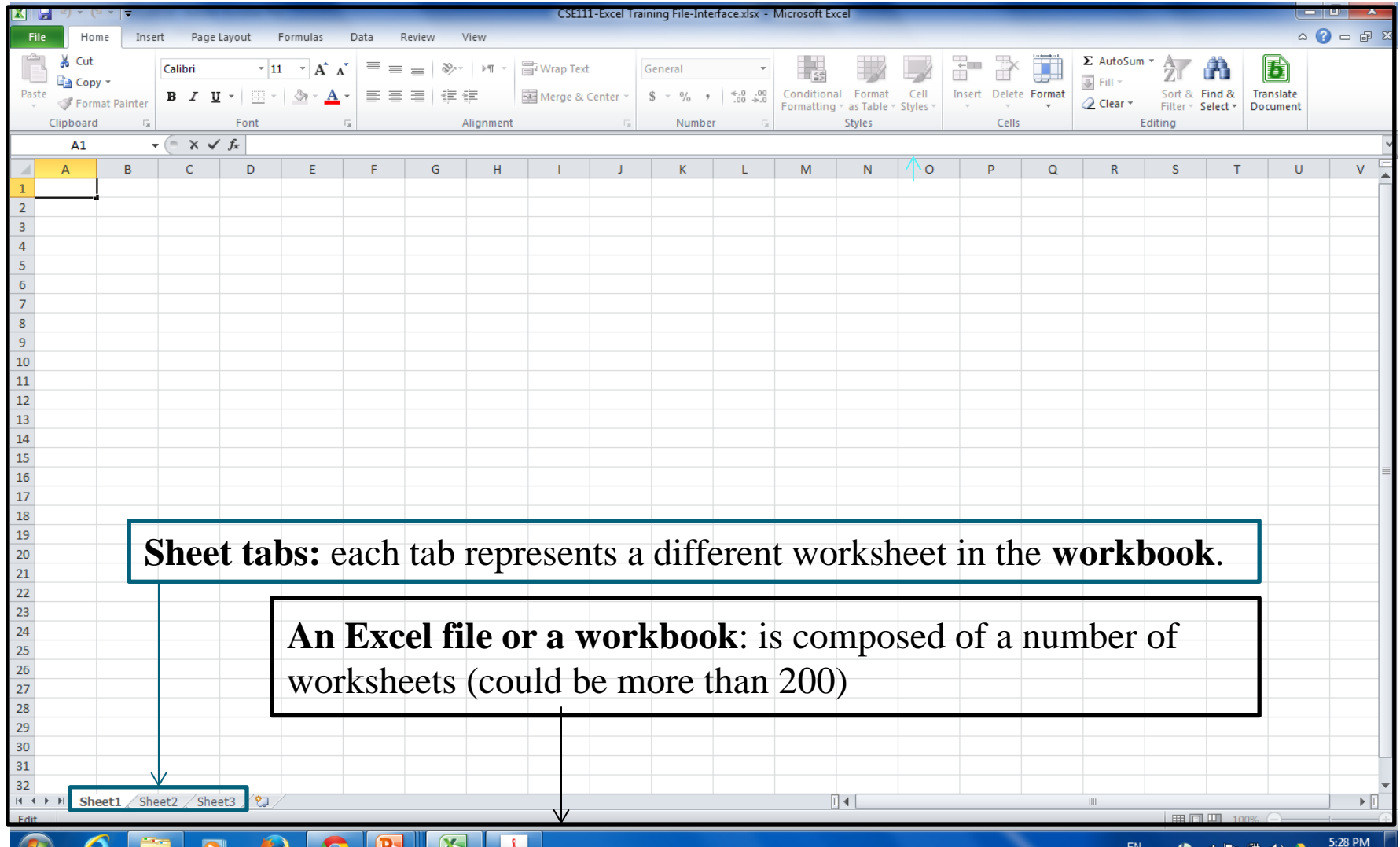| Expense Type	October	November	December	Total	Average	Over Budget
Tutions	0	0	0	0	0	
Books	0	26.5	0	26.5	8.833333333	
Rents	625	625	625	1875	625	
Food	900	800	475	2175	725	no
Transportaion	79	150	100	329	109.6666667	
Other	55	136	87	278	92.66666667	
Total	1659	1737.5	1287	4683.5	1561.166667	

Introduction

- Excel is the MS-Office Application program used for creating spreadsheets.

- You can use Excel to enter all sorts of data and perform financial, mathematical, or statistical calculations.

- Excel operates like other MS Office programs and has many of the same functions and shortcuts as MS Word & MS PowerPoint.

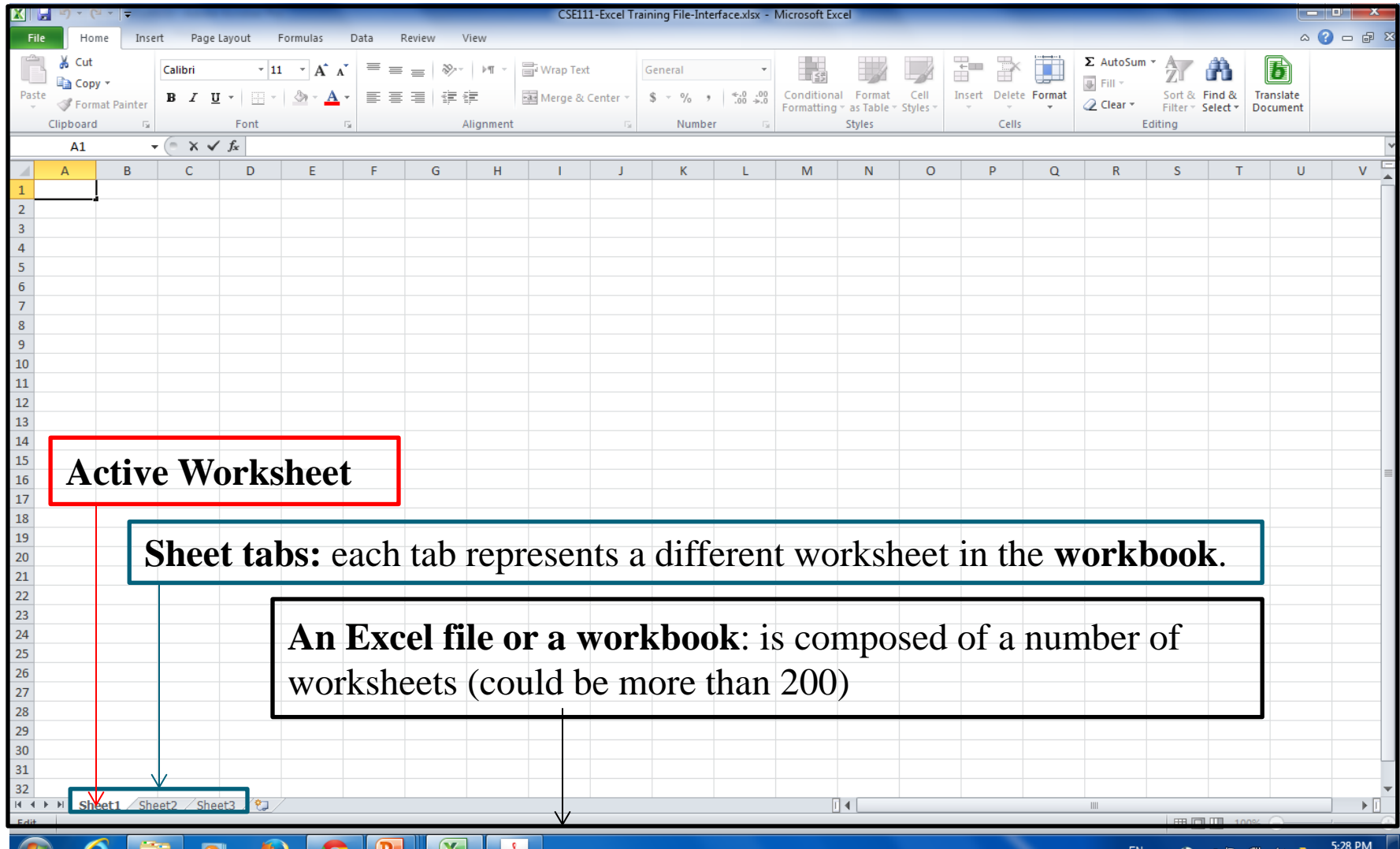- Excel is more widespread, quick, and easy.

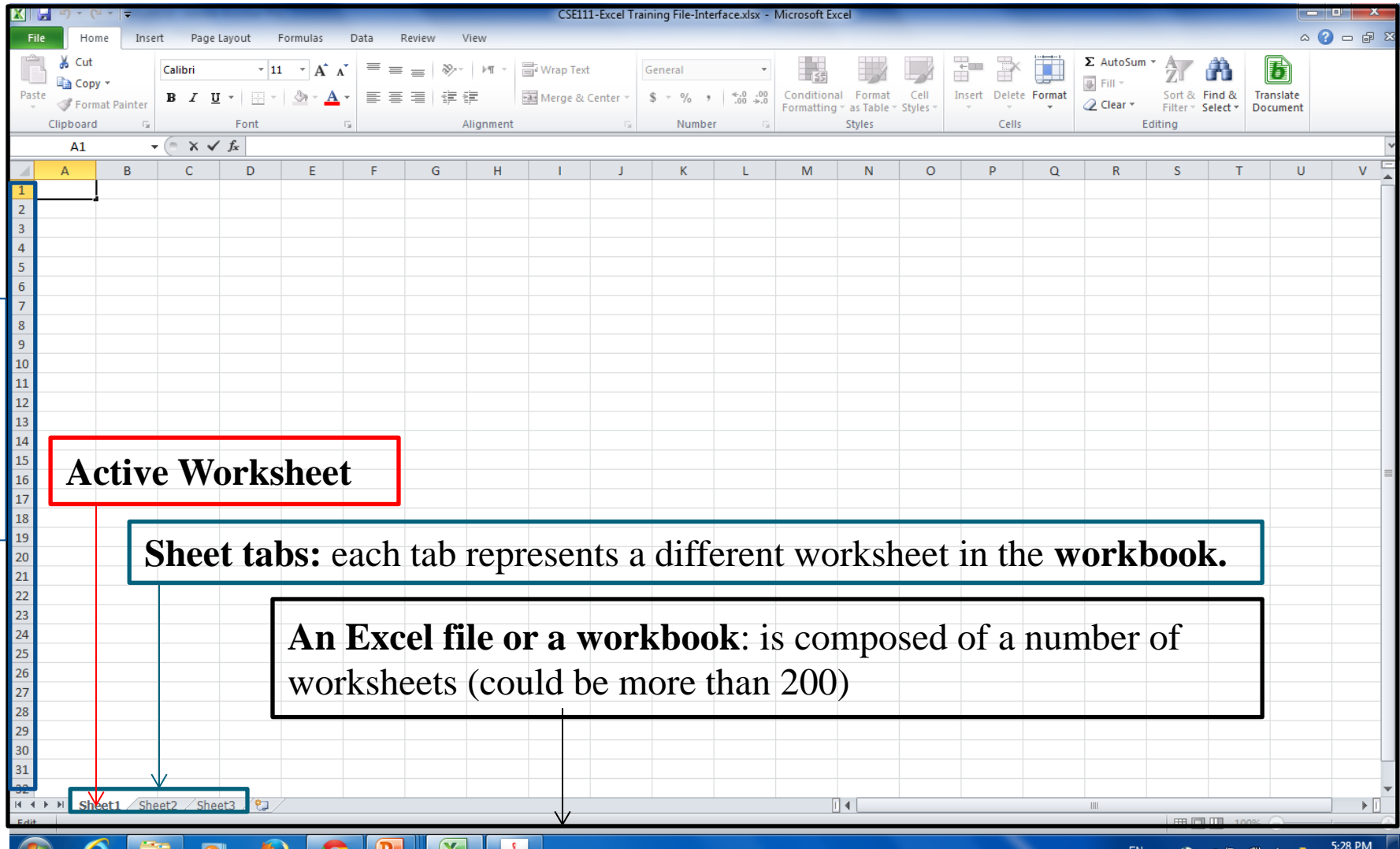- Excel file extension (.xlsx).
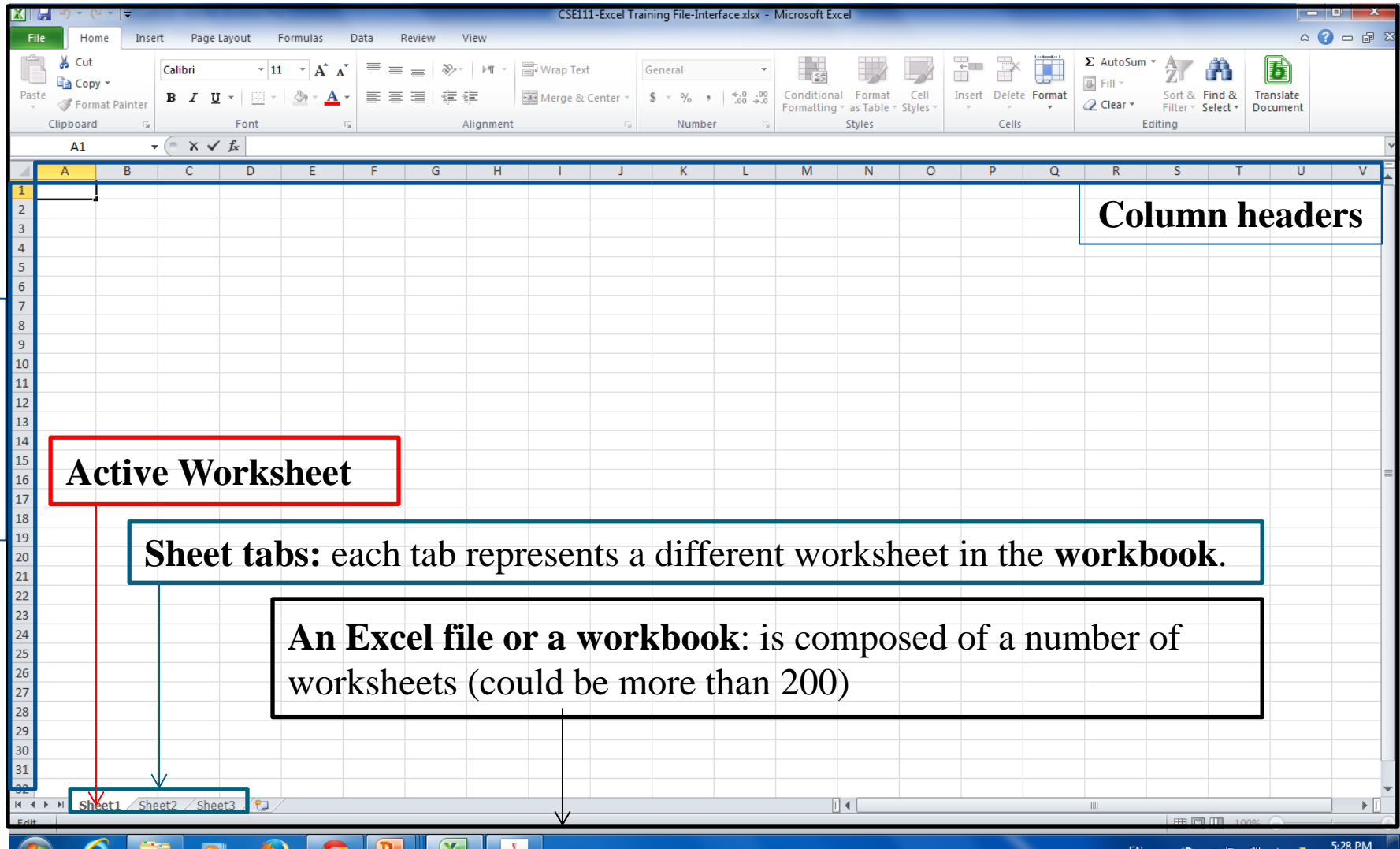
MS Excel 2010 Interface

An Excel file or a workbook: is composed of a number of worksheets (could be more than 200)

MS Excel 2010 Interface

Sheet tabs: each tab represents a different worksheet in the **workbook**.

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MS Excel 2010 Interface

Active Worksheet

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MS Excel 2010 Interface

Column headers

Row headers

Active Worksheet

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MS Excel 2010 Interface

Row headers

Column headers

The Active Cell: is the selected cell, and has a thicker black border around it.

Active Worksheet

Sheet tabs: each tab represents a different worksheet in the **workbook**.

An Excel file or a workbook: is composed of a number of worksheets (could be more than 200)

MS Excel 2010 Interface

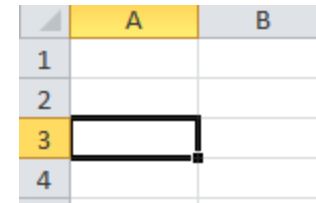**The Name Box:** displays the active cell address or the name of the selected cell, range, or object.

Column headers

Row headers

The Active Cell: is the selected cell, and has a thicker black border around it.

Active Worksheet

Sheet tabs: each tab represents a different worksheet in the **workbook**.

An Excel file or a workbook: is composed of a number of worksheets (could be more than 200)

MS Excel 2010 Interface

The Name Box: displays the active cell address or the name of the selected cell, range, or object.

Column headers

Row headers

Formula Bar: displays the data or formula stored in the active cell.

The Active Cell: is the selected cell, and has a thicker black border around it.

Active Worksheet

Sheet tabs: each tab represents a different worksheet in the **workbook**.

An Excel file or a workbook: is composed of a number of worksheets (could be more than 200)

Moving Around Worksheets

There are various ways to navigate through a worksheet:

- Use the mouse and the scroll bars to scroll through the worksheet in any direction.

- Use the navigational keys on the keyboard:
  - **Down** arrow or **Enter:** for moving the active cell one cell down.
  - **Up** arrow or **Shift+ Enter:** for moving the active cell one cell up.
  - **Right** arrow or **Tab:** for moving the active cell one cell to the right.
  - **Left** arrow or **Shift+Tab:** for moving the active cell one cell to the left.
  - **Page Down** for moving the active cell down one page.
  - **Page Up:** for moving the active cell up one page.
  - **Alt**+**Page Down:** for moving the active cell right one page.
  - **Alt**+**Page Up:** for moving the active cell left one page.
  - **Ctrl**+**Home:** for moving the active cell to cell A1.
  - **Ctrl**+**End:** for moving the active cell to the last used cell in the worksheet.

- You can also navigate to a specific cell in the worksheet by entering its address in the **Name box**, and then pressing **Enter.**

Selecting Cells, Rows, and Columns

• To select a single cell, just click on it.

Selecting Cells, Rows, and Columns

- To select a single cell, just click on it.

- To select a range of cells, click the first cell that you want to include in the range, hold down the **Shift** key, and then click the last cell in the range. Or, drag from the first cell in the range to the last cell.

  NOTES:

  - When a range is selected, every cell in the range is highlighted, except for the active cell.

  - You can deselect a range by pressing any arrow key or by clicking any cell in the worksheet.

Selecting Cells, Rows, and Columns

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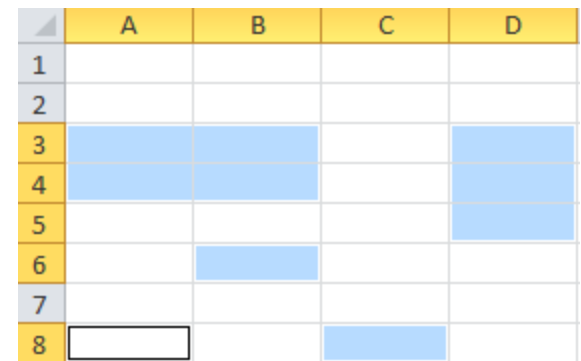
  NOTES:
  - When a range is selected, every cell in the range is highlighted, except for the active cell.
  - You can deselect a range by pressing any arrow key or by clicking any cell in the worksheet.

- To select nonadjacent cells or ranges, select the first cell or range, hold down the **Ctrl** key, and then select the other cells or ranges.
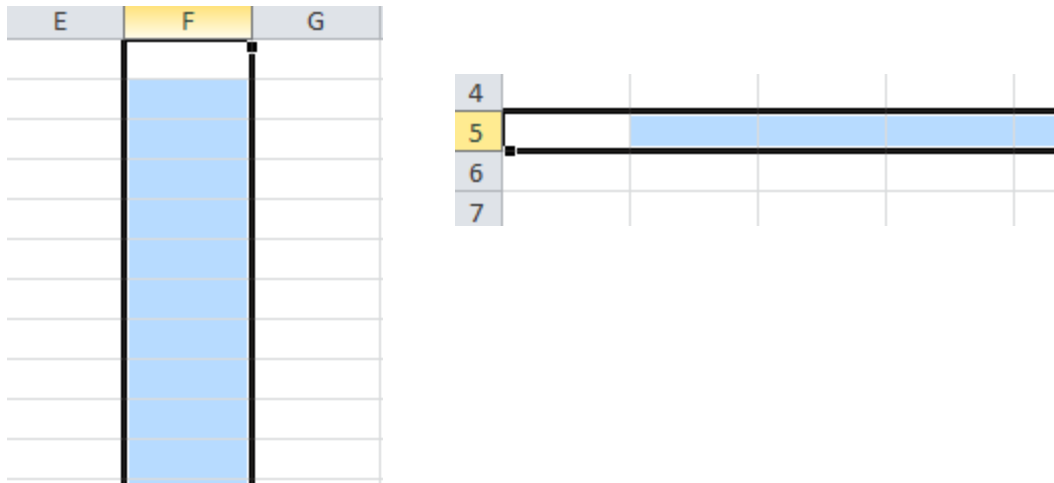
Selecting Cells, Rows, and Columns

- To select a single row or column, click the header of the row or column that you want to select.

- To select multiple adjacent rows or columns, click the header of the first row or column that you want to select, hold down the **Shift** key, and then click the header of the last row or column. Or, drag across the headers of the rows or columns that you want to select.

- To select multiple nonadjacent rows or columns, hold down the **Ctrl** key, and then click the headers of the rows or columns that you want to select.

- To select all cells in a worksheet, click the **Select All** button in the upper-left corner of the worksheet. Or, press **Ctrl+A**.

Editing & Formatting Worksheets

- The simplest way to add data to a worksheet is to select a cell and enter data.

- A cell can contain a maximum of 32,767 characters and can hold any of three basic types of data: text, numbers, or formulas.

| E8		f_x =B8+C8+D8		
	A	B	C	D	E
1	My Expenses Table				
2		October	November	December	Total
3	Tutions	0	0	0	0
4	Books	0	26.5	0	26.5
5	Rents	625	625	625	1875
6	Food	900	800	475	2175
7	Transportaion	79	150	100	329
8	Other	55	136	87	278

Editing & Formatting Worksheets

- MS Excel shares a lot of features with MS Word and PowerPoint.

- Moving and copying cells, and copying cell formats can be done using the **Copy, Cut, Paste, Format Painter** buttons in the **Clipboard** group, on the **Home** tab.

- Formating cells and cells contents can be done using the **Mini Toolbar** or the **Paragraph** group, on the **Home** tab.

- Aligning, indenting, wrapping, rotating, and merging can be done using the **Aligmnet** group, on the **Home** tab.

- Style changing can be done, using the **Styles** group, on the **Home** tab.

My Expenses Table				
	October	November	December	Total
Tutions	0	0	0	0
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Transportaion	79	150	100	329
Other	55	136	87	278

Formatting Numbers

To format numbers, select the cell that you want to format, on the **Home** tab, in the **Number** group, do one of the following:
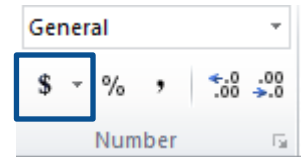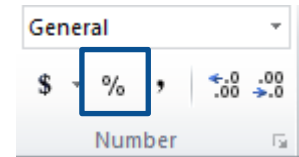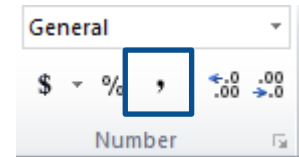
- Click the **Accounting Number Format** button to display the number with a dollar sign.

  NOTE: You can select a different currency symbol by clicking the **Accounting Number Format** arrow and selecting the desired symbol from the menu.

Formatting Numbers

To format numbers, select the cell that you want to format, on the **Home** tab, in the **Number** group, do one of the following :

- Click the **Accounting Number Format** button to display the number with a dollar sign.

  NOTE: You can select a different currency symbol by clicking the **Accounting Number Format** arrow and selecting the desired symbol from the menu.

- Click the **Percent Style** button to convert the number to a percentage and display it with a percent sign.

Formatting Numbers

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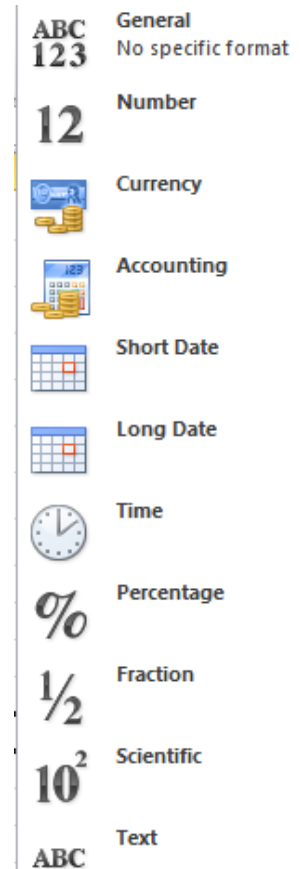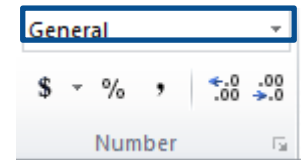
- Click the **Accounting Number Format** button to display the number with a dollar sign.

  NOTE: You can select a different currency symbol by clicking the **Accounting Number Format** arrow and selecting the desired symbol from the menu.

- Click the **Percent Style** button to convert the number to a percentage and display it with a percent sign.

- Click the **Comma Style** button to display the number with comma separators and two decimal places.

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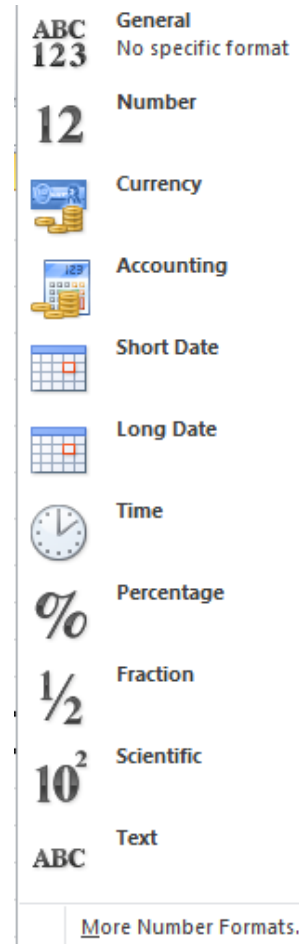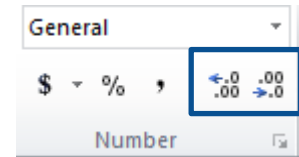
- Click the **Percent Style** button to convert the number to a percentage and display it with a percent sign.

- Click the **Comma Style** button to display the number with comma separators and two decimal places.

  NOTE: You can access additional number formats from the **Number Format** menu

Formatting Numbers

To format numbers, select the cell that you want to format, on the **Home** tab, in the **Number** group, do one of the following :

- Click the **Accounting Number Format** button to display the number with a dollar sign.

   NOTE: You can select a different currency symbol by clicking the **Accounting Number Format** arrow and selecting the desired symbol from the menu.

- Click the **Percent Style** button to convert the number to a percentage and display it with a percent sign.

- Click the **Comma Style** button to display the number with comma separators and two decimal places.

   NOTE: You can access additional number formats from the **Number Format** menu

To change the number of decimal places, select the cell that you want to format, and then on the **Home** tab, in the **Number** group, do one of the following:

- Click the **Increase Decimal** button to increase the number of decimal places.

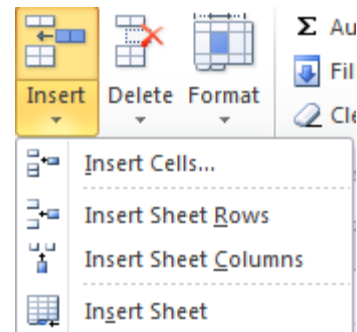- Click the **Decrease Decimal** button to decrease the number of decimal places.

Inserting Rows and Columns

To insert a row:

1. Select the row **<u>above</u>** which you want to insert a new row.

2. On the **Home** tab, in the **Cells** group, click the **Insert** arrow, and then click **Insert Sheet Rows**.

   NOTE: You can also insert a row by right-clicking the header of the row above which you want to insert the new row, and then clicking **Insert** on the shortcut menu.
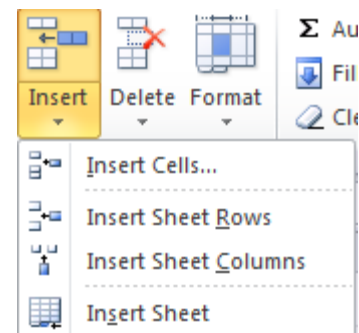
Inserting Rows and Columns

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1. Select the row **<u>above</u>** which you want to insert a new row.
2. On the **Home** tab, in the **Cells** group, click the **Insert** arrow, and then click **Insert Sheet Rows**.

   NOTE: You can also insert a row by right-clicking the header of the row above which you want to insert the new row, and then clicking **Insert** on the shortcut menu.

To insert a column:

1. Select the column to the **<u>left</u>** of which you want to insert a new column.
2. On the **Home** tab, in the **Cells** group, click the **Insert** arrow, and then click **Insert Sheet columns.**
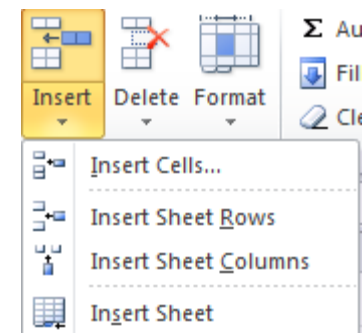
   NOTE: You can also insert a column by right-clicking the header of the column to the left of which you want to insert the new column, and then clicking Insert on the shortcut menu.
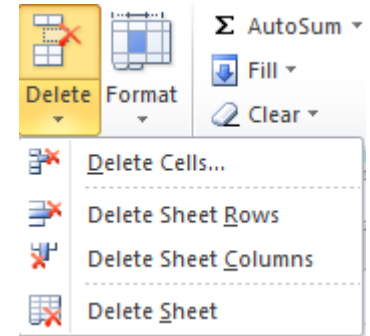
Inserting Rows and Columns

To insert a row:

1. Select the row **above** which you want to insert a new row.
2. On the **Home** tab, in the **Cells** group, click the **Insert** arrow, and then click **Insert Sheet Rows**.

   NOTE: You can also insert a row by right-clicking the header of the row above which you want to insert the new row, and then clicking **Insert** on the shortcut menu.

To insert a column:

1. Select the column to the **left** of which you want to insert a new column.
2. On the **Home** tab, in the **Cells** group, click the **Insert** arrow, and then click **Insert Sheet columns.**

   NOTE: You can also insert a column by right-clicking the header of the column to the left of which you want to insert the new column, and then clicking Insert on the shortcut menu.

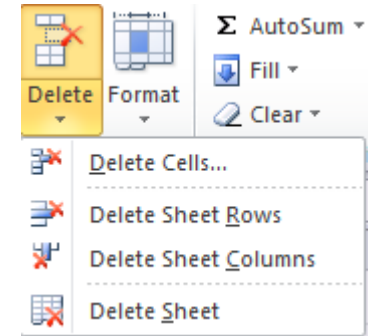|	A	B	C	D	E	F
1			My Expenses Table			
2		September	October	November	December	Total
3	Tutions	0	0	0	0	0
4	Books	0	0	26.5	0	26.5
5	Rents	600	625	625	625	1875
6	Food	1000	900	800	475	2175
7	Transportaion	89	79	150	100	329
8	Medical Care	0	300	0	0	300
9	Other	50	55	136	87	278

Deleting Rows and Columns

To delete a row:

1. Select the row that you want to delete
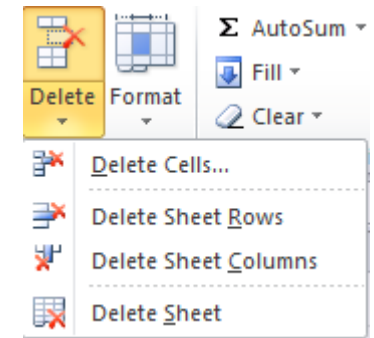2. On the **Home** tab, in the **Cells** group, click the **Delete** arrow, and then click **delete Sheet Rows**.

   NOTE: You can also delete a row by right-clicking the row header, and then clicking **Delete** on the shortcut menu.

Deleting Rows and Columns

To delete a row:

1. Select the row that you want to delete
2. On the **Home** tab, in the **Cells** group, click the **Delete** arrow, and then click **delete Sheet Rows**.

   NOTE: You can also delete a row by right-clicking the row header, and then clicking **Delete** on the shortcut menu.

To delete a column:

1. Select the column that you want to delete
2. On the **Home** tab, in the **Cells** group, click the **Delete** arrow, and then click **Delete Sheet columns.**

   NOTE: You can also delete a column by right-clicking the column header, and then clicking Delete on the shortcut menu.

Deleting Rows and Columns

To delete a row:

1. Select the row that you want to delete

2. On the **Home** tab, in the **Cells** group, click the **Delete** arrow, and then click **delete Sheet Rows**.

   NOTE: You can also delete a row by right-clicking the row header, and then clicking **Delete** on the shortcut menu.

To delete a column:

1. Select the column that you want to delete

2. On the **Home** tab, in the **Cells** group, click the **Delete** arrow, and then click **Delete Sheet columns.**

   NOTE: You can also delete a column by right-clicking the column header, and then clicking Delete on the shortcut menu.

My Expenses Table			
	October	November	December	Total
Tutions	0	0	0	0
Books	0	26.5	0	26.5
Rents	625	625	625	1875
Food	900	800	475	2175
Transportaion	79	150	100	329
Other	55	136	87	278

Changing Column Widths
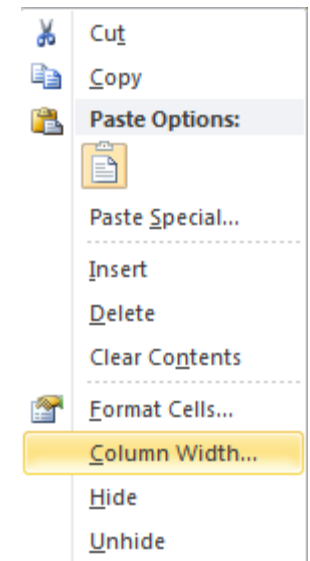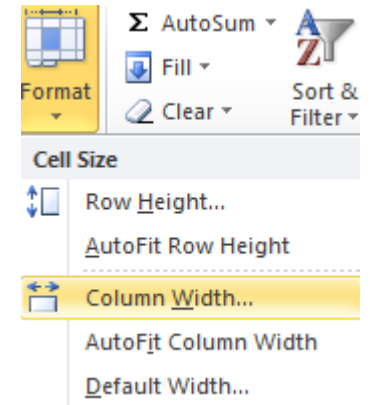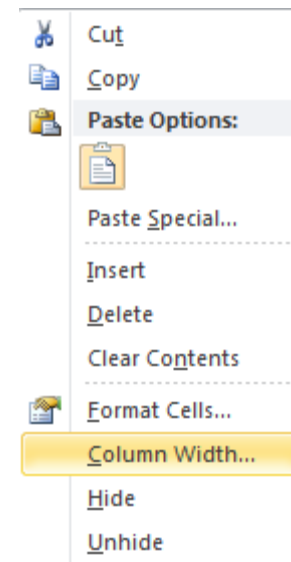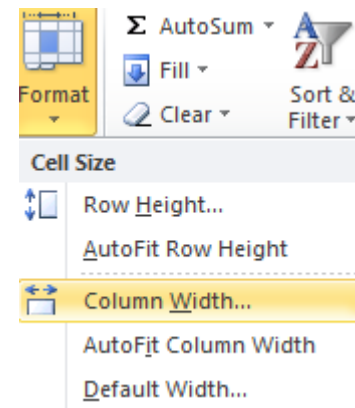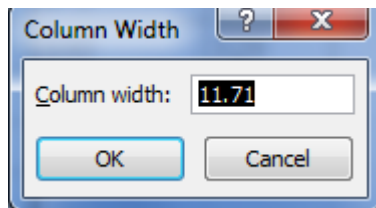
To change a column width:

1. Select the column that you want to resize.

2. On the **Home** tab, in the **Cells** group, click the **Format** button, and then click **Column Width**.
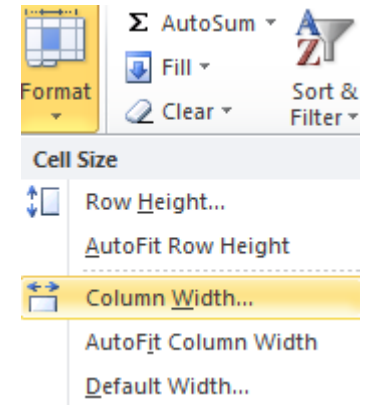
Changing Column Widths
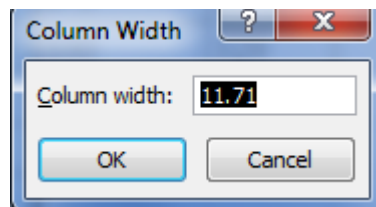
To change a column width:

1. Select the column that you want to resize.

2. On the **Home** tab, in the **Cells** group, click the **Format** button, and then click **Column Width.** Or, right-click the column header, and then click **Column Width** on the shortcut menu.

Changing Column Widths
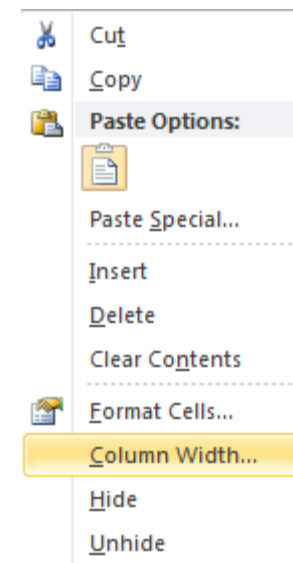
To change a column width:

1. Select the column that you want to resize.

2. On the **Home** tab, in the **Cells** group, click the **Format** button, and then click **Column Width.** Or, right-click the column header, and then click **Column Width** on the shortcut menu.

3. In the **Column Width** dialog box, type a value in the **Column width** box, and then click the **OK** button.
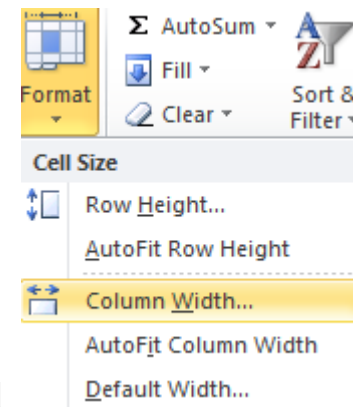
Changing Column Widths

To change a column width:

1. Select the column that you want to resize.

2. On the **Home** tab, in the **Cells** group, click the **Format** button, and then click **Column Width.** Or, right-click the column header, and then click **Column Width** on the shortcut menu.

3. In the **Column Width** dialog box, type a value in the **Column width** box, and then click the **OK** button.

NOTE:

You can also resize a column by dragging the right edge of the column header right to increase or left to decrease the column width.

Double-clicking the right edge of the column header changes the column width to automatically fits its contents.
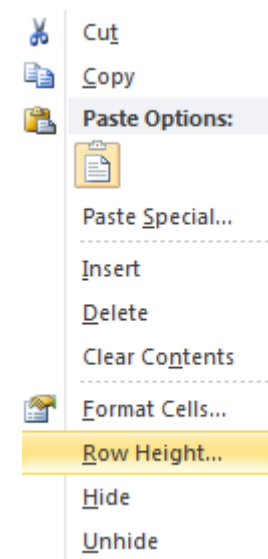
Changing Row Heights

To change a row height:

1. Select the row that you want to resize.

2. On the **Home** tab, in the **Cells** group, click the **Format** button, and then click **Row Height**. Or, right-click the row header, and then click **Row Height** on the shortcut menu.

3. In the **Row Height** dialog box, type a value in the **Row height** box, and then click the **OK** button.
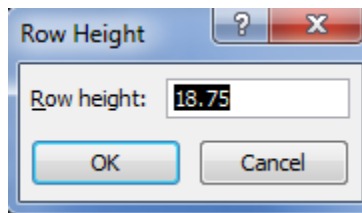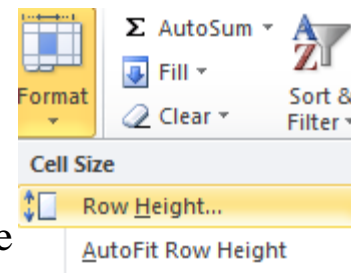
NOTE:

You can also resize a row by dragging the bottom edge of the row header down to increase or up to decrease the row height.

Double-clicking the bottom edge of the row header changes the row height to automatically fits its contents.

- Thank You