

Excel Spreadsheet

Formatting – Formulas - Tables

Professor N Anderson

Class Objectives

1. Review basic formatting
2. Practice working with formulas in tables

Assignments:

- Excel Tutorial

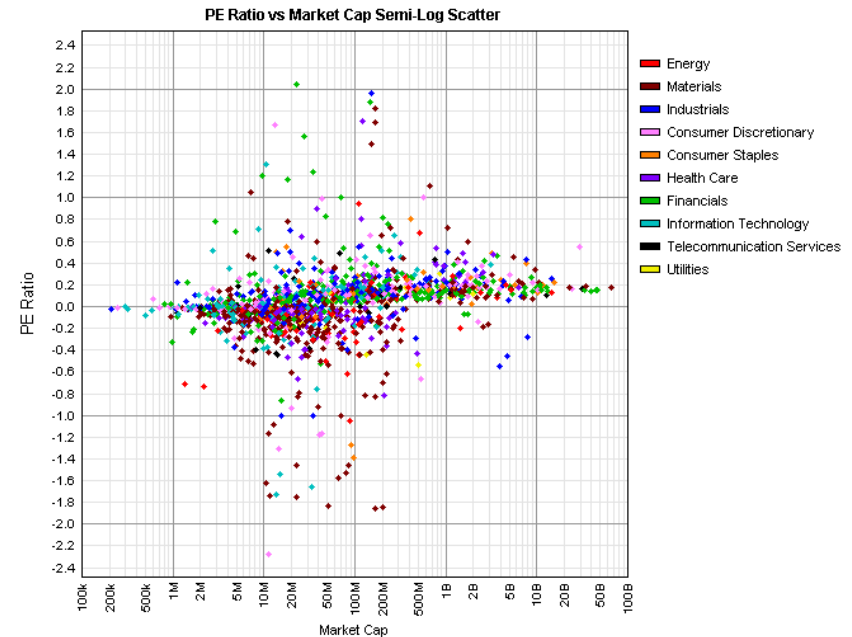
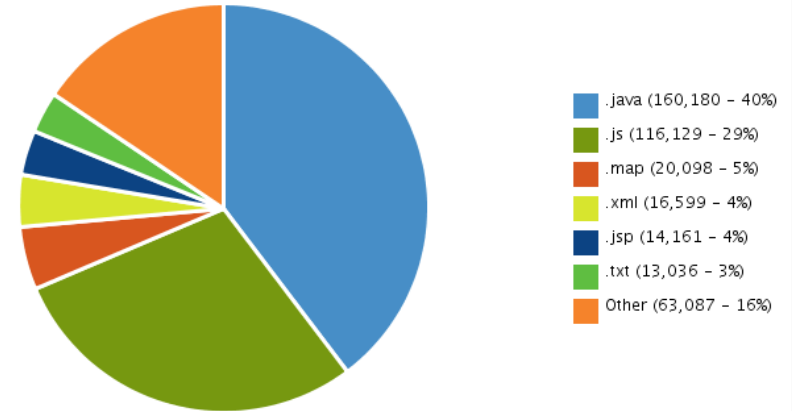
Create a worksheet to demonstrate completion of tutorial, email submission

- Assignment 03: Cost Estimate

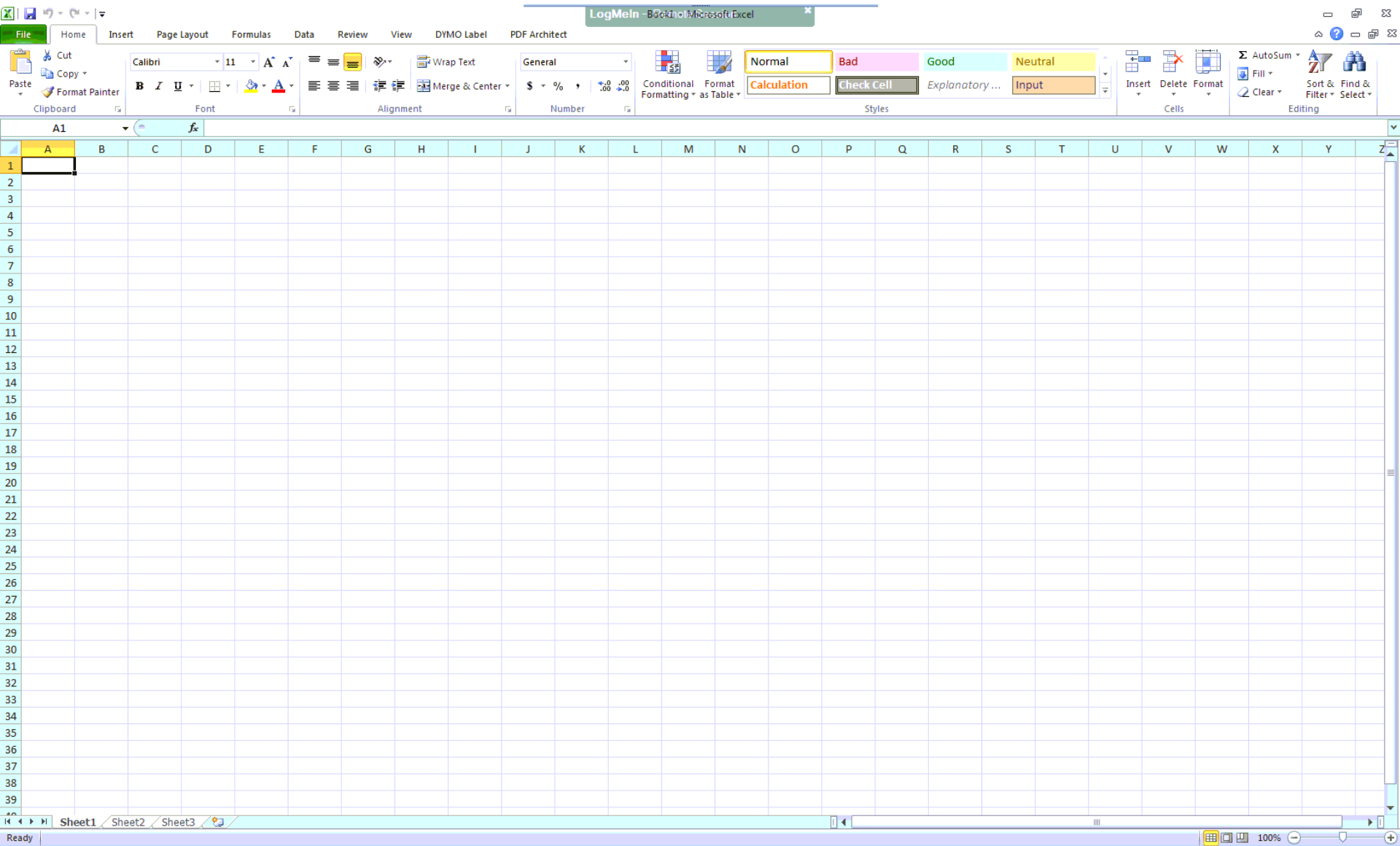
Due before the start of next class

Output

DESCRIPTION	QUAN.	@	MAT.	HRS.	LABOR	SUB UNITS	UNIT S	SUBS	TOTAL
Plans/Permit application	1	25		25.00	5.00			0.00	\$250.00
Travel				0.00				0.00	\$0.00
Floor & Dust protection				0.00				0.00	\$0.00
Set-up				0.00				0.00	\$0.00
Debris	2	8		16.00	5.00	1	325	325.00	\$566.00
Demo Porch				0.00	2.00			0.00	\$90.00
footings	2	40		80.00	16.00			0.00	\$800.00
flashing	10	1		10.00	1.00			0.00	\$55.00
ledger	10	0.85		8.50	2.00			0.00	\$98.50
2x10 joists	200	0.85		170.00	6.00			0.00	\$440.00
support posts	16	1.4		22.40	2.00			0.00	\$112.40
2x10 stringers	24	1.01		24.24	4.00			0.00	\$204.24
primed pine	240	1.2		288.00	3.00			0.00	\$423.00
1x4 se fir	320	0.75		240.00	3.00			0.00	\$375.00
colonial rails	30	8.4		252.00	12.00			0.00	\$792.00
paint stain	4	25		100.00		1	550	550.00	\$650.00
CLEAN-UP	1	12		12.00	4.00			0.00	\$192.00
TOTALS			\$1,248.14	65.00	\$2,925.00			\$875.00	\$5,048.14
Permit fee									\$170.53
Admin Hrs. for Lead Carp.				17.88					\$804.38
Sales tax on materials									\$68.65
Total job cost									\$6,091.69
Mark-up									\$4,873.35
COMPANY SELL PRICE:									\$10,965.05



Excel Environment



Excel Environment

The Ribbon

Similar to other Office applications (Word)

Layout

Rows and Columns

Cells- enter data

Formula Bar- displays data in cell, can enter/edit data

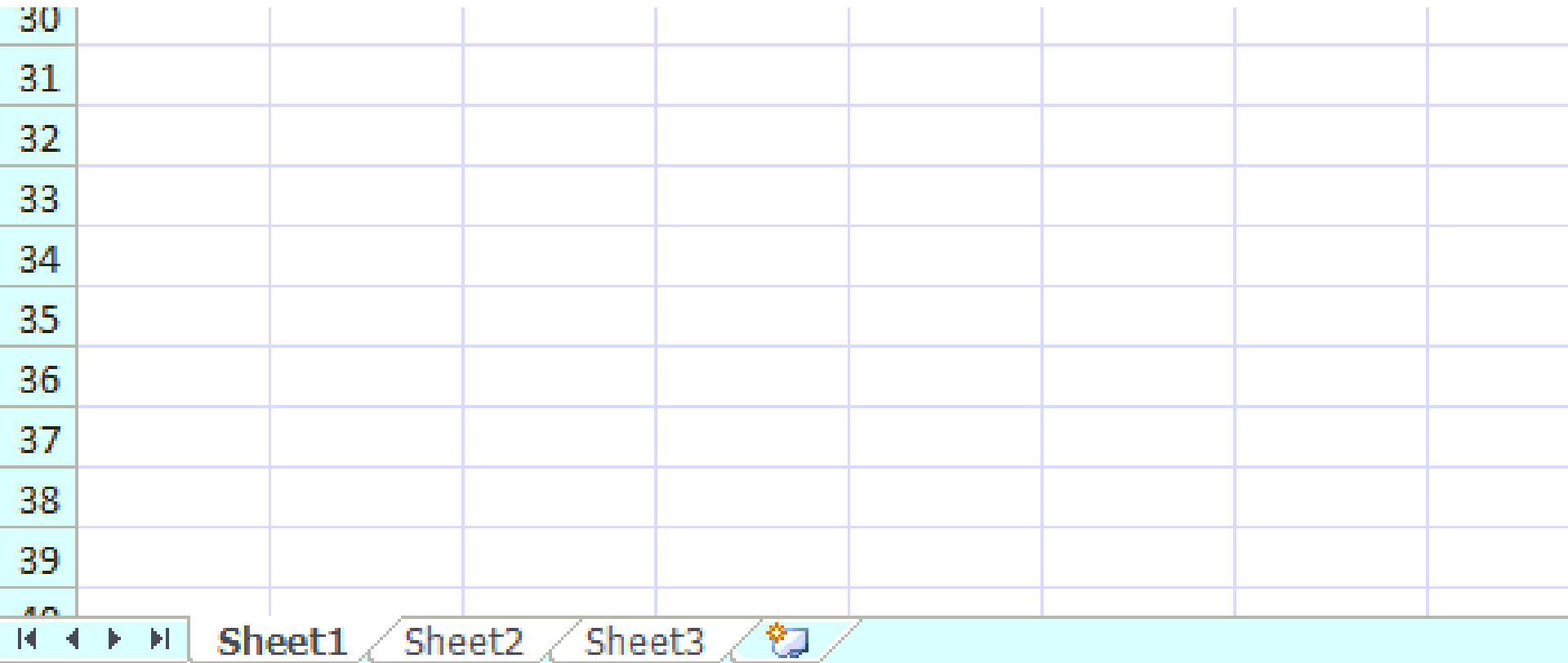
The image shows the Microsoft Excel interface. At the top, the ribbon is visible with tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, and DYMO Label. The Home tab is active, showing the Clipboard group (Paste, Cut, Copy, Format Painter) and the Font group (Calibri, 11, Bold, Italic, Underline, Font Color, Background Color). The Alignment group (Wrap Text, Merge & Center) is also visible. Below the ribbon is the Formula Bar, which shows the active cell address A1 and the formula bar icon. The worksheet grid is displayed below the Formula Bar, with columns A through I and rows 1 through 3. Cell A1 is selected and highlighted in yellow.

Excel Environment

Workbook and Worksheets

Organize

Rename Sheets



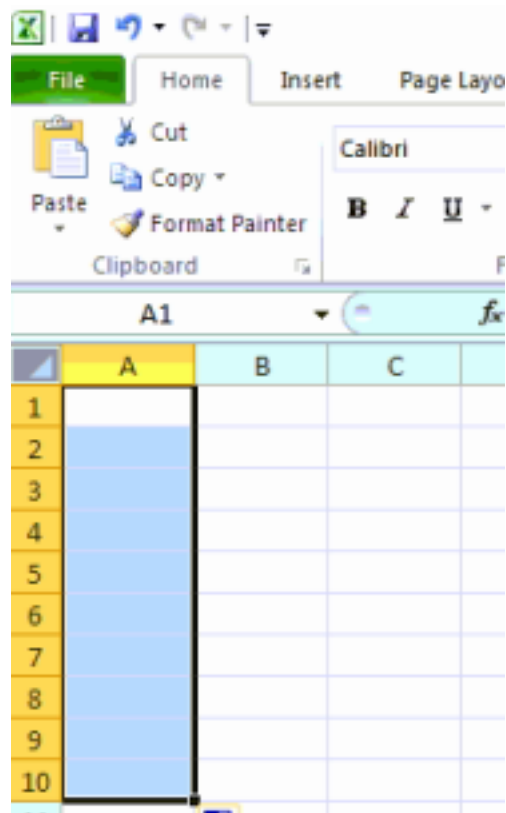
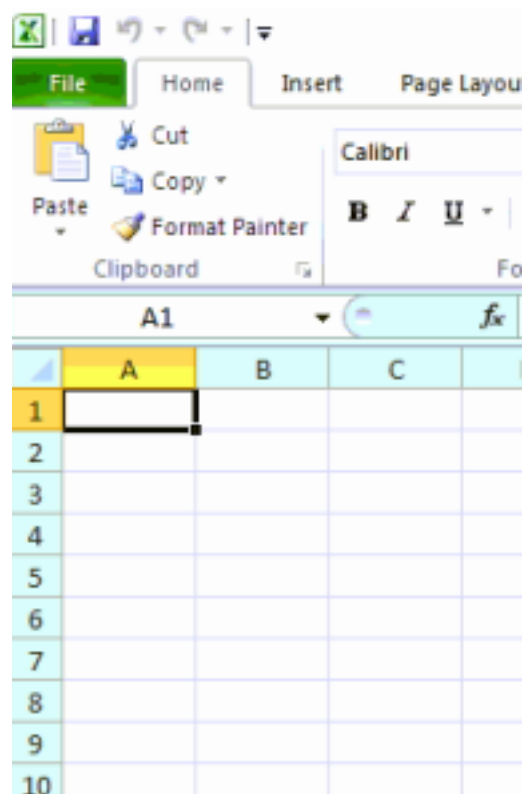
Ready

Selecting Cells

Cells and Ranges

Cell (A1)

Cell Range (A1:A10 = A1, A2, A3...)- a block of cells



Formatting Text and Cells

Home Tab

Font

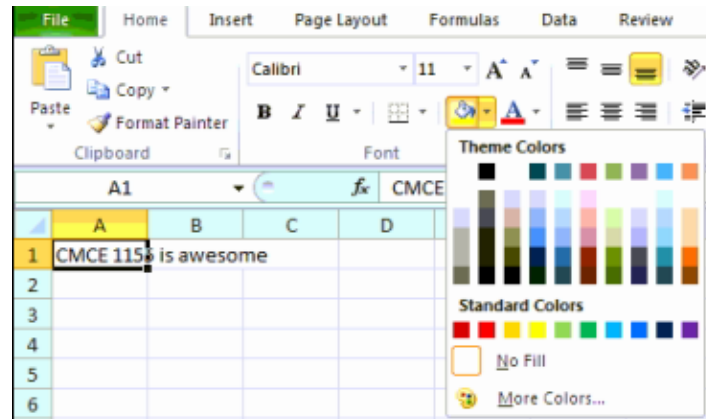
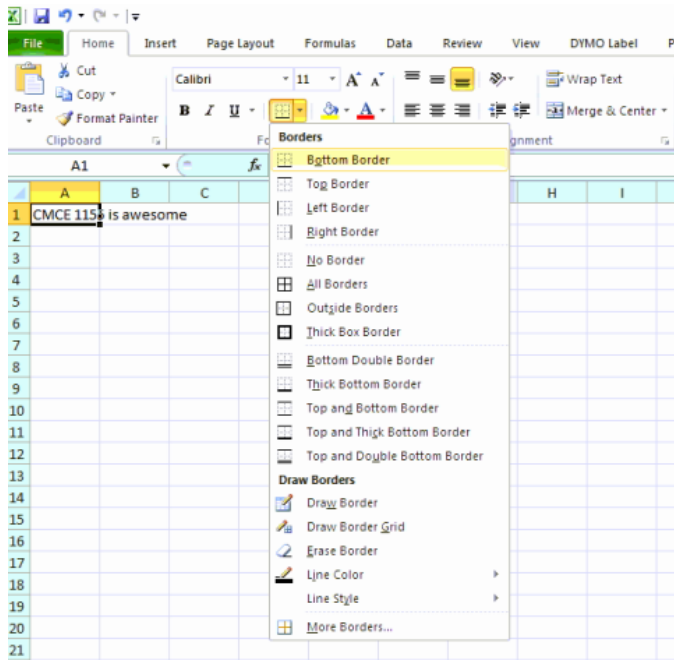
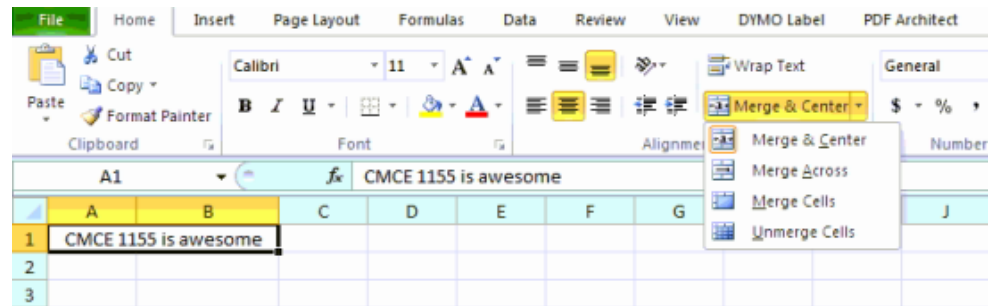
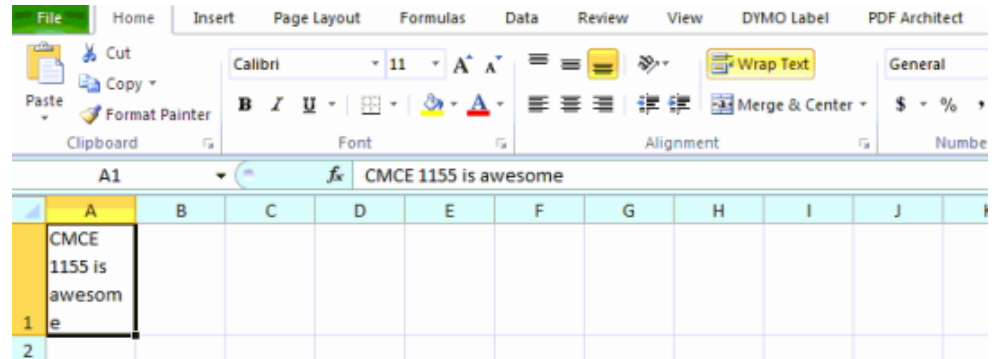
Alignment

Borders

Shading

Wrap Text

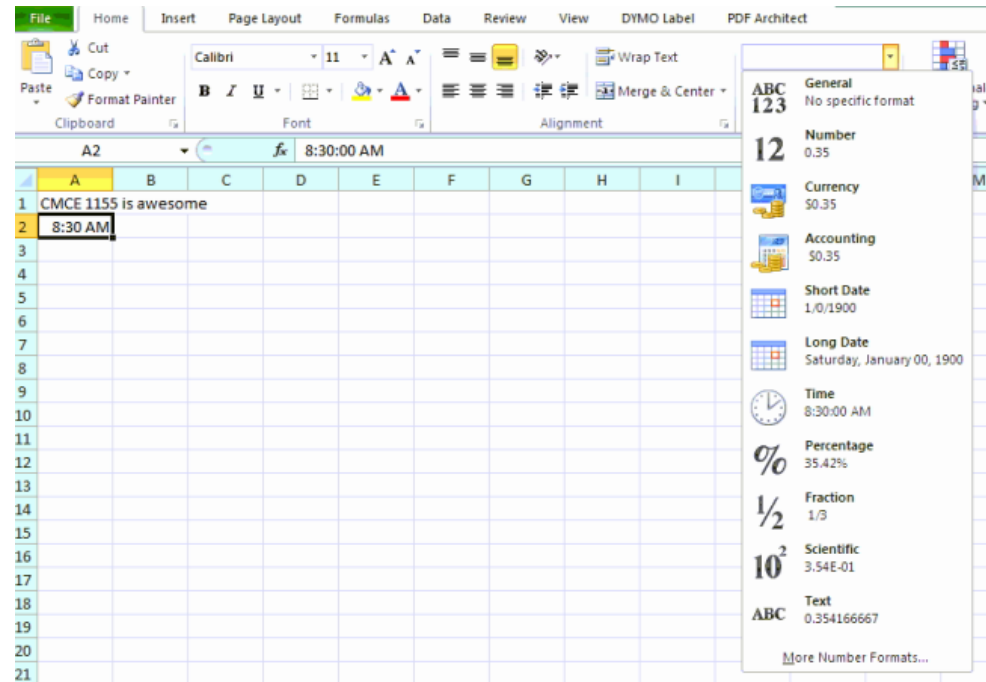
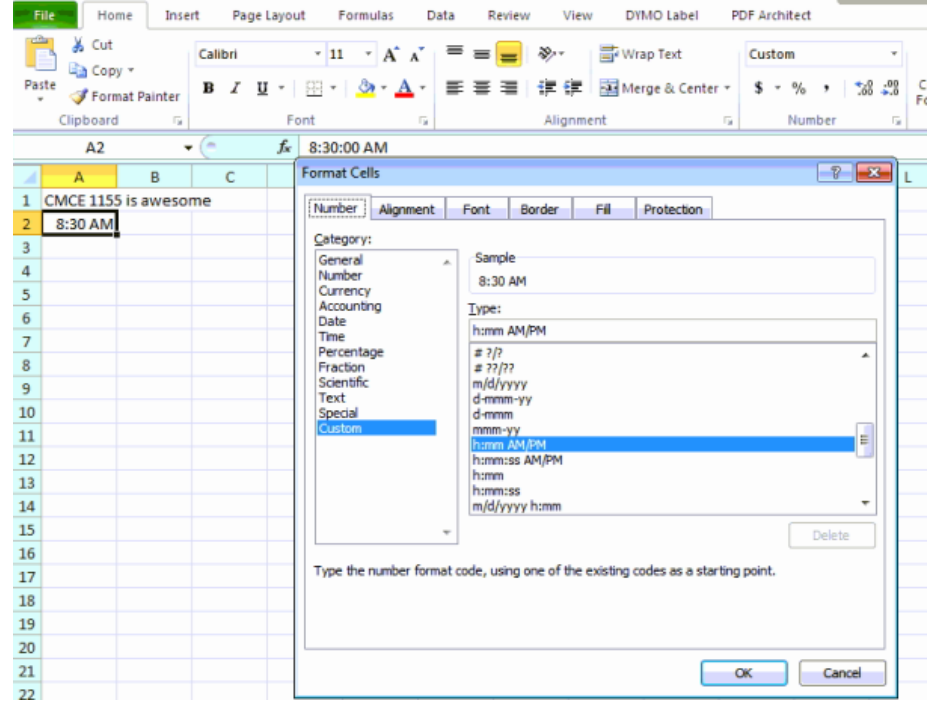
Merge cells



Formatting Cells

Number Group

Rounding- Decimal precision



Deleting / Inserting

Home Tab

Font

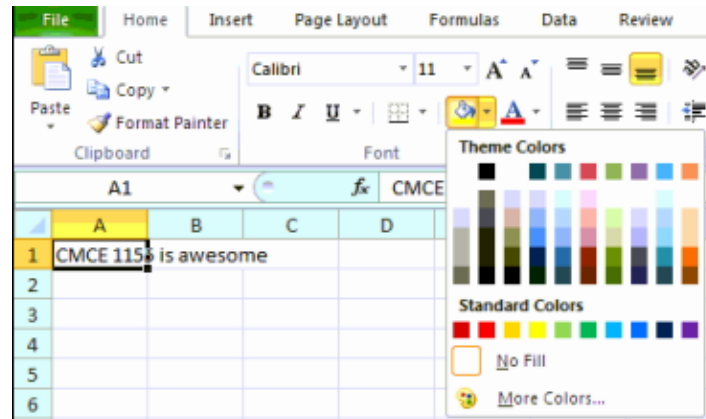
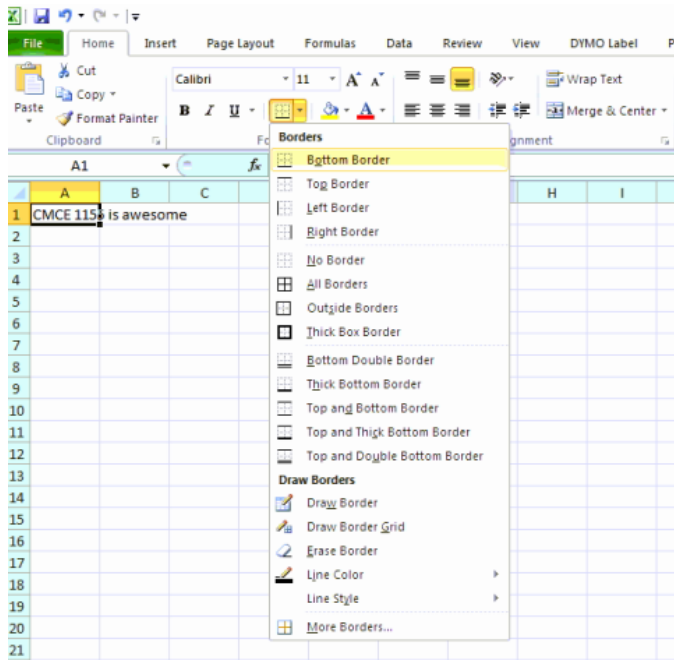
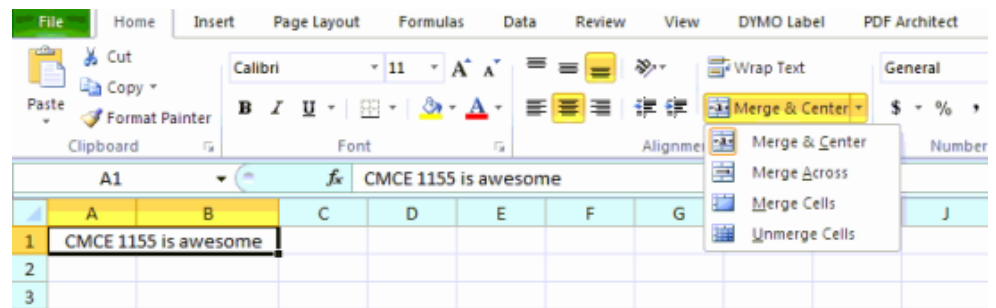
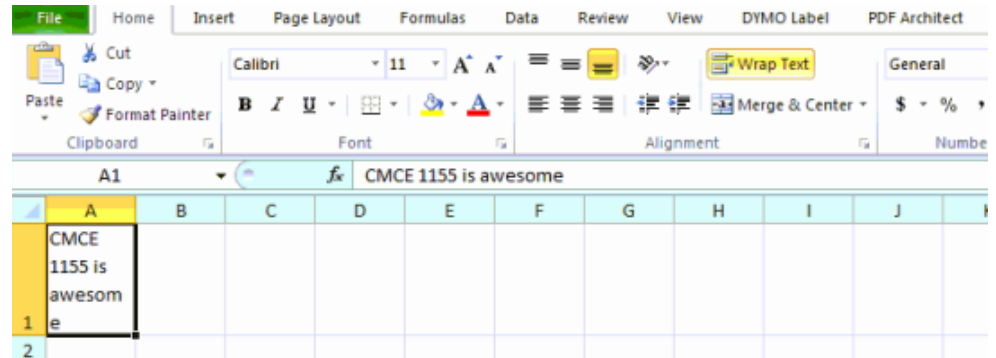
Alignment

Borders

Shading

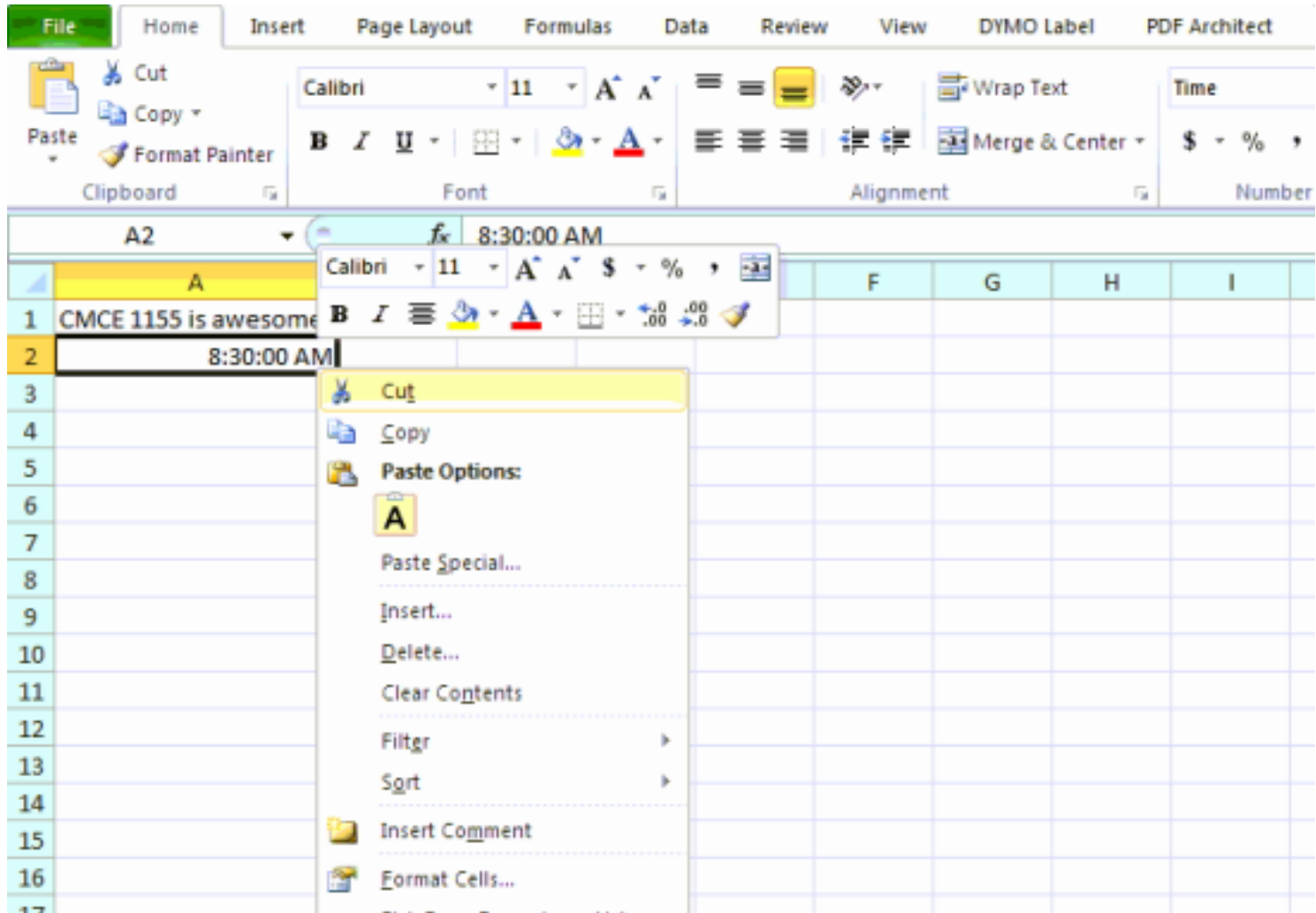
Wrap Text

Merge cells



Duplicating Content

Copy/Paste- Ctrl+C/Ctrl+V, Clipboard, Right click cut/paste



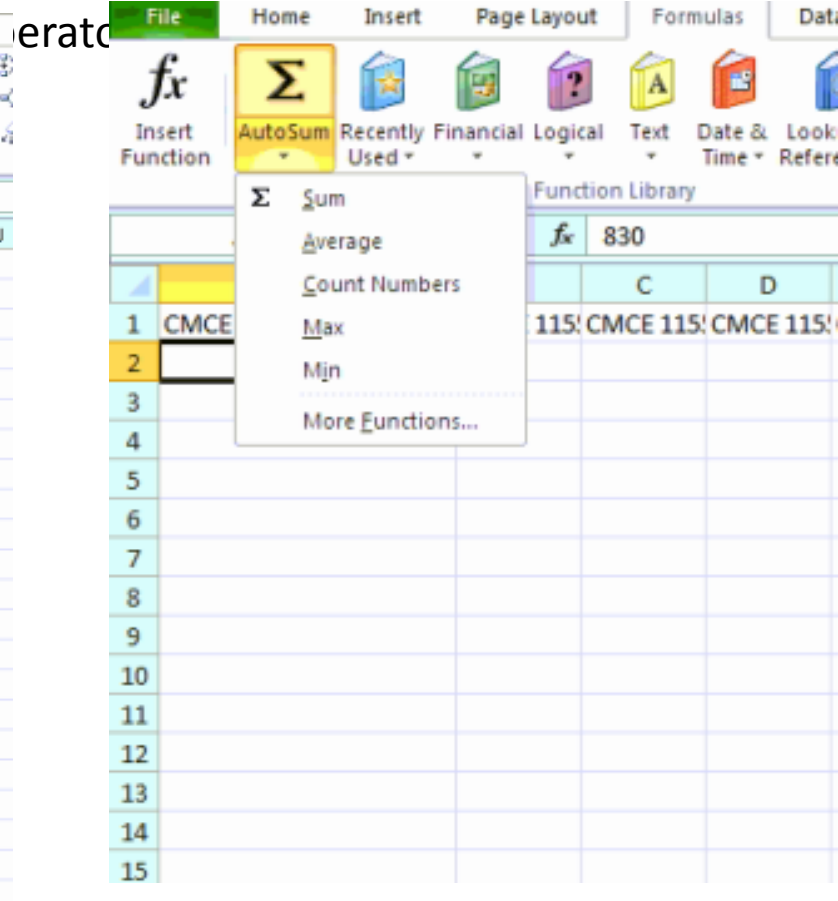
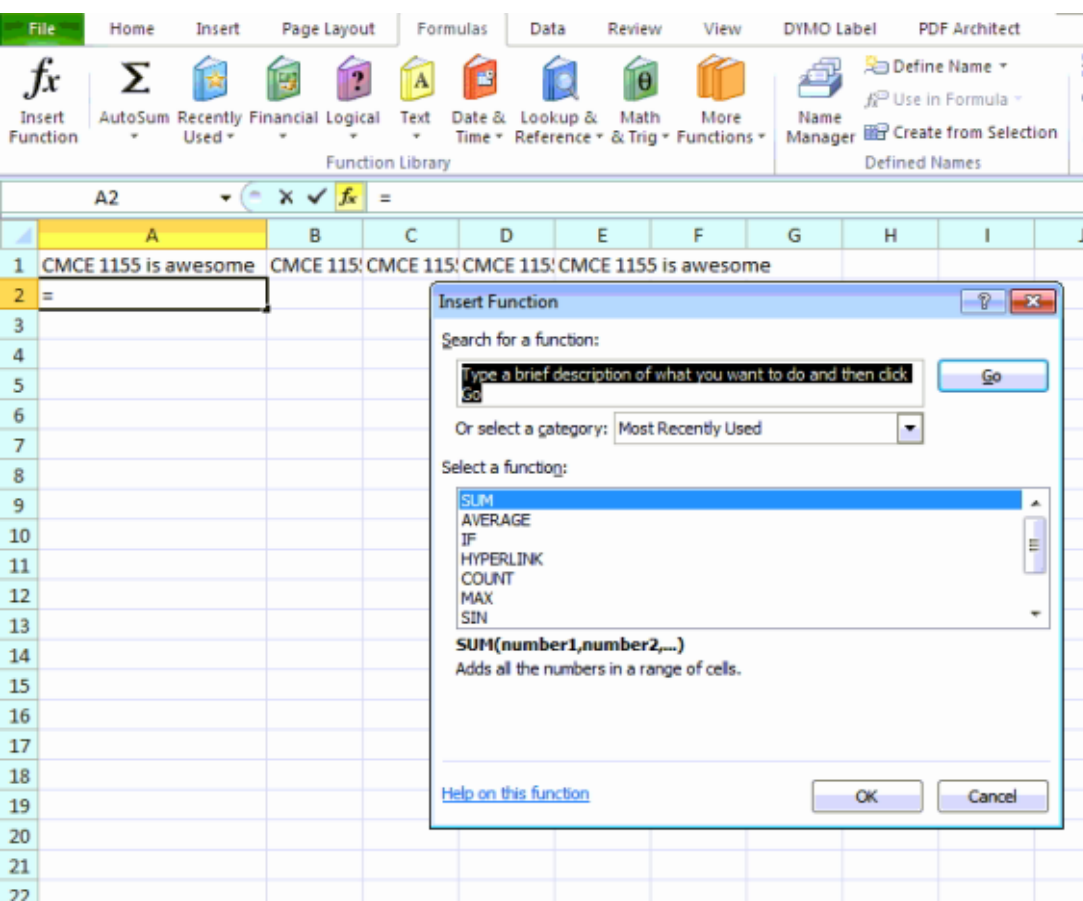
Entering a Function

Insert Function icon

Function drop down menu

Basic mathematical computation

Complex engineering and statistical calculation



Entering a Function Manually

Operators

Begin with =

Use operator to write an equation

Follow standard order of mathematical operations: [Excel Operators](#)

Arithmetic operators To perform basic mathematical operations such as addition, subtraction, or multiplication; combine numbers; and produce numeric results, use the following arithmetic operators.

ARITHMETIC OPERATOR	MEANING (EXAMPLE)
+ (plus sign)	Addition (3+3)
- (minus sign)	Subtraction (3-1) Negation (-1)
* (asterisk)	Multiplication (3*3)
/ (forward slash)	Division (3/3)
% (percent sign)	Percent (20%)
^ (caret)	Exponentiation (3^2)

Comparison operators You can compare two values with the following operators. When two values are compared by using these operators, the result is a logical value either TRUE or FALSE.

COMPARISON OPERATOR	MEANING (EXAMPLE)
= (equal sign)	Equal to (A1=B1)
> (greater than sign)	Greater than (A1>B1)
< (less than sign)	Less than (A1<B1)
>= (greater than or equal to sign)	Greater than or equal to (A1>=B1)
<= (less than or equal to sign)	Less than or equal to (A1<=B1)
<> (not equal to sign)	Not equal to (A1<>B1)

Notation

Sum	Adds up all the numbers in a selected range
Minimum	Finds the smallest number in a selected range
Maximum	Finds the largest number in a selected range
Average	Returns the average (arithmetic mean) of a selected range

Excel Notation For the Above functions

Sum	=sum(a1:b4)
Minimum	=min (a1:a30)
Maximum	=max(a1:j1)
Average	=average(a1:a4)
Parentheses Information within parentheses is called an argument. The character used to separate arguments can be mathematical operators, commas, and colons.	Argument =sum(a1:b4, j10) Will add the range of values between a1 through b4 with j10

Cell Reference

Relative (B5)

When you copy/paste a formula, Excel adjusts the formula relative to the row and column where the copy is located

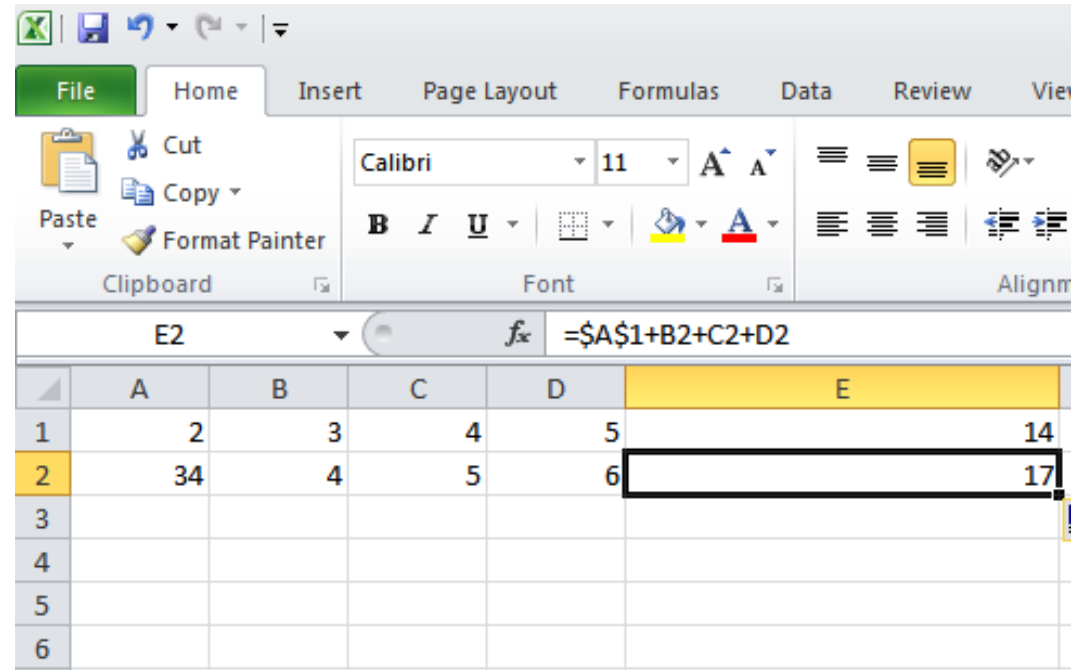
Absolute (\$B\$5)

Copies the formula exactly; it does not change when it is copied to a different cell

Mixed (B\$5 or \$B5)

\$B5: Column is absolute but the row is relative

B\$5: Column is relative but row is absolute



Working with Data

Sort

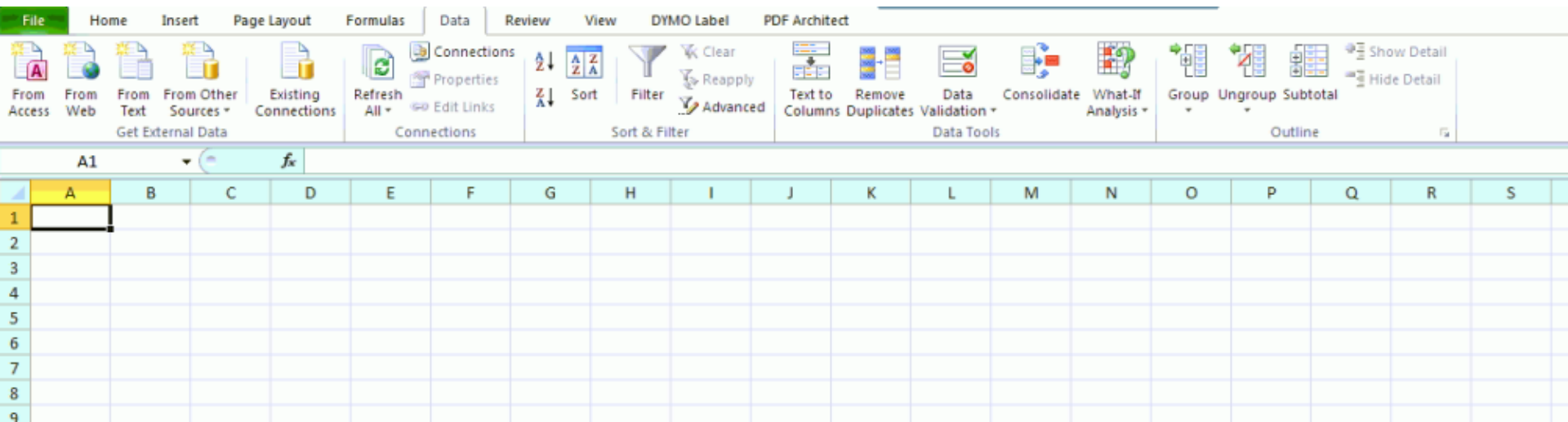
Organize data in ascending or descending order

Filter

Narrow down data to hide parts from view and show only needed information

Analyze

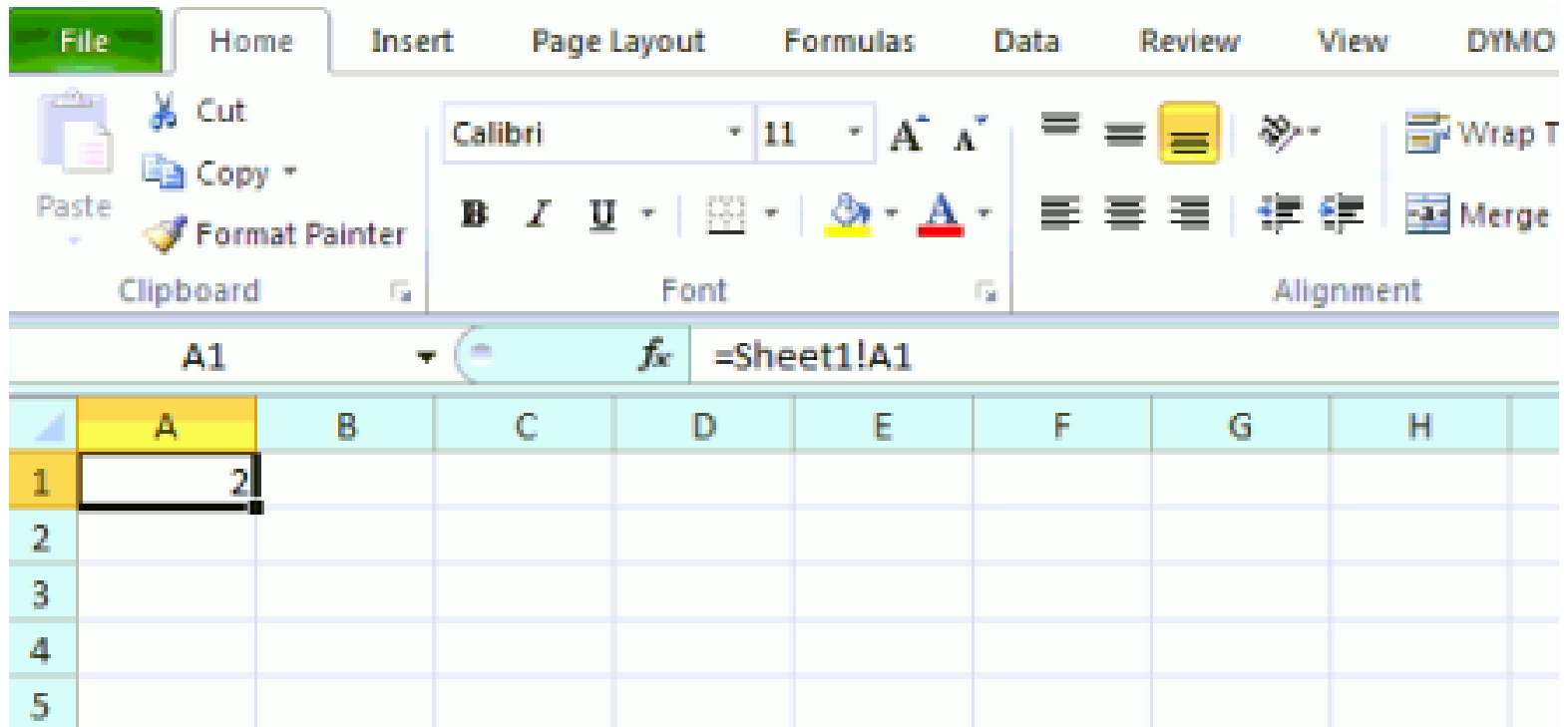
Provide statistical analysis of data range



Linking Data

Link data in various workbooks and worksheets

Enter = then select the cell you want to link

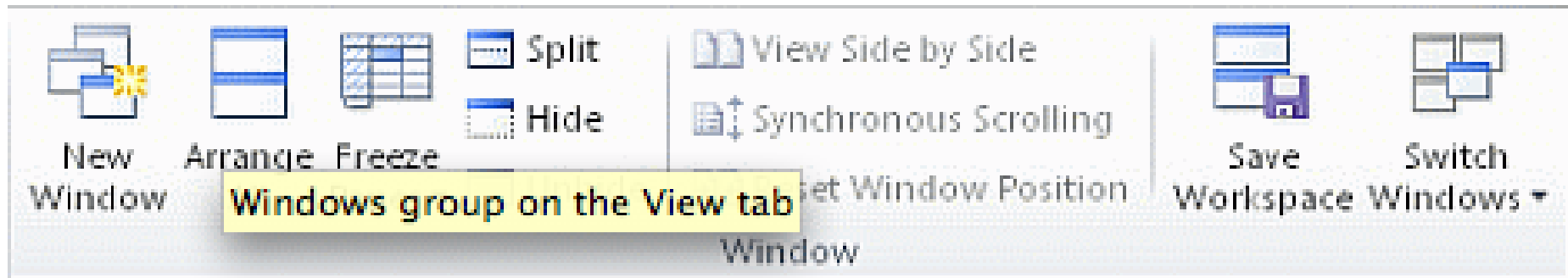


Stationary Header

Freeze Panes

View header row or column while browsing data

[Freezing Panes](#)



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