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

Why Excel?

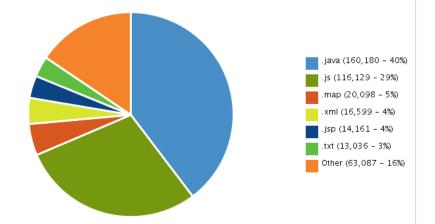
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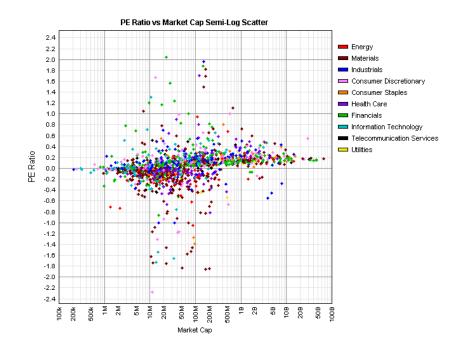


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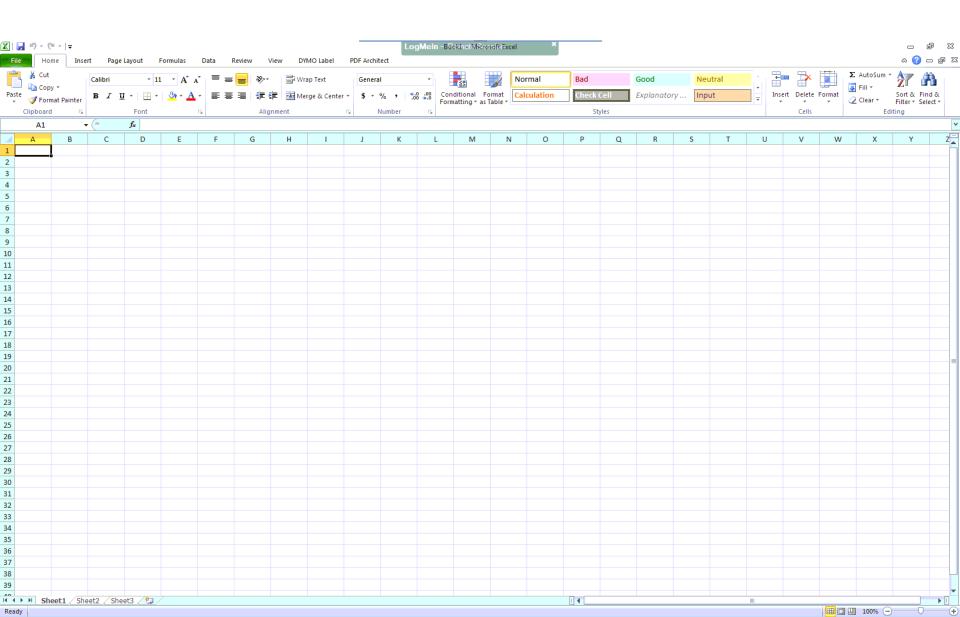
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Excel Environment

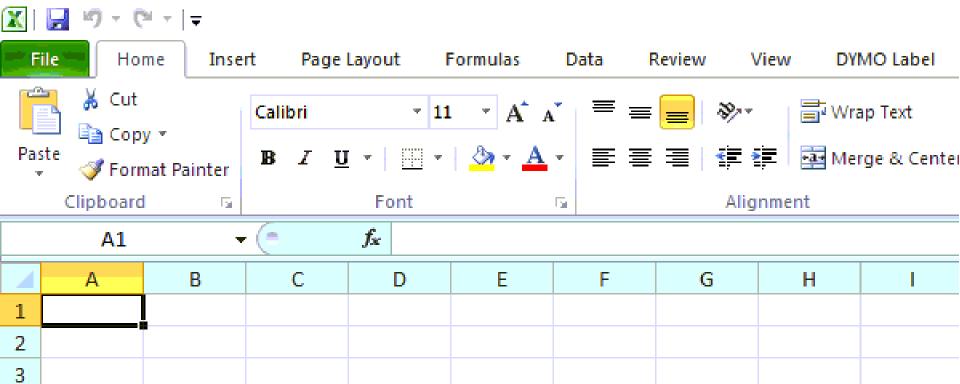


Excel Environment

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



Excel Environment

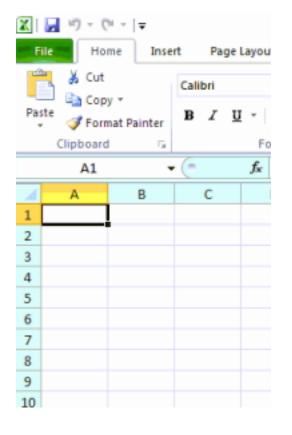
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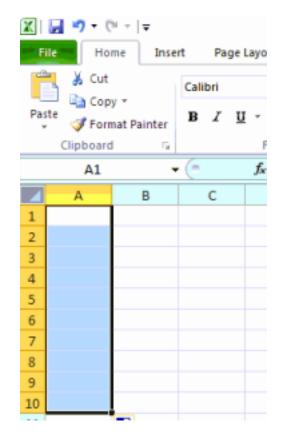
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Selecting Cells

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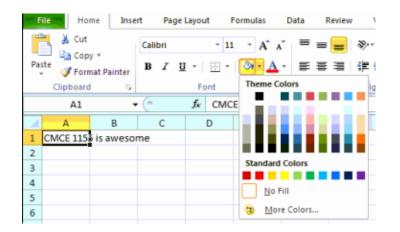


Formatting Text and Cells

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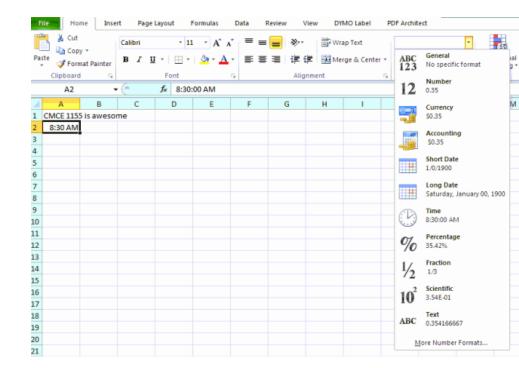
Formatting Cells

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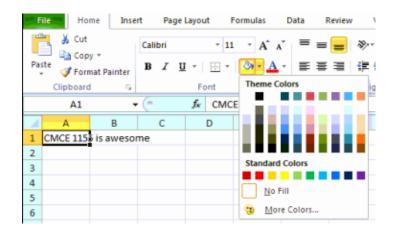


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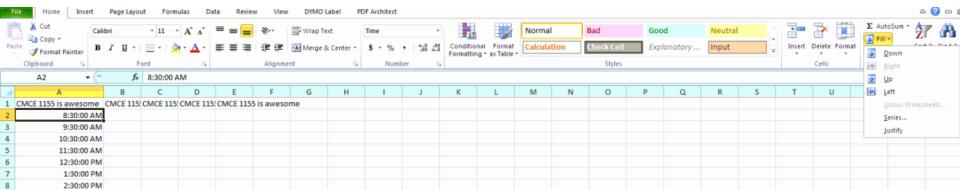
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Filling Content

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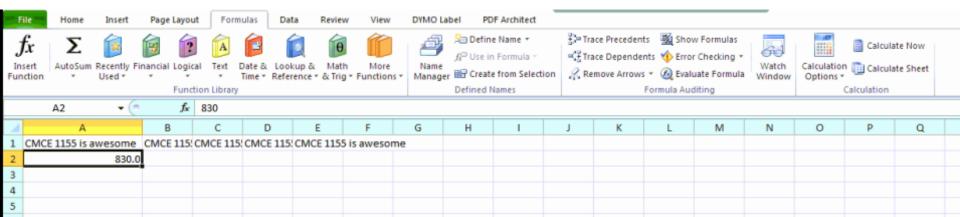
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Formula

Used to perform a calculation

Basic mathematical computation Complex engineering and statistical calculation Always start with "=" Contain function, cell reference, constants and operators



Entering a Function

Insert Function icon Function drop down menu

Basic mathematical computation Complex engineering and statistical calculation

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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)< td=""></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 =sum(a1:b4, j10) Will add the range of								
argument. The character used to	values between a1 through b4 with j10								
separate arguments can be mathematical operators, commas,									
and colons.									

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

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Mixed (B\$5 or \$B5)

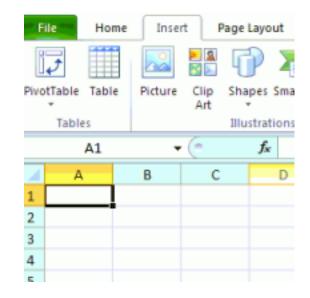
\$B5: Column is absolute but the row is relative B\$5: Column is relative but row is absolute

Tables

Convert range of cells into table

Insert Table Creates header drop down buttons to sort and filter Table styles Hide or Show header

Total Row at bottom and choose formula



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Working with Data

Sort

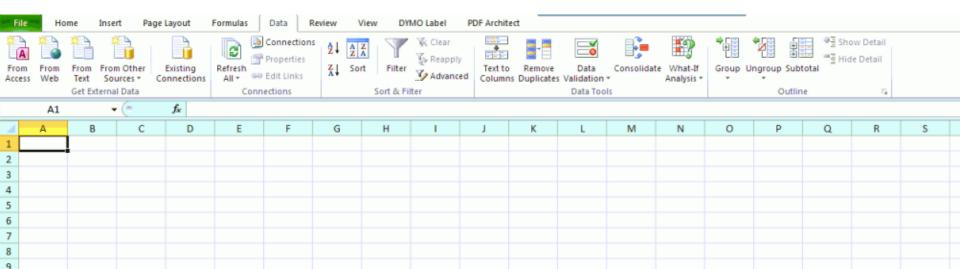
Organize data in ascending or descending order

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

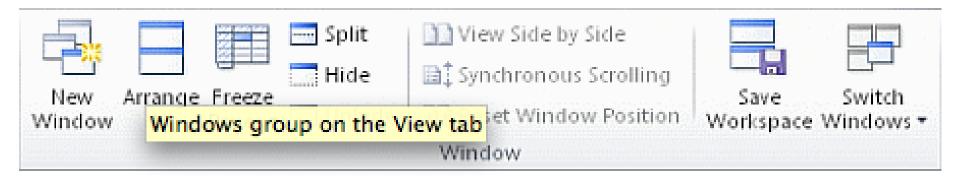
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Stationary Header

Freeze Panes

View header row or column while browsing data

Freezing Panes



Excel Spreadsheet

Formatting – Formulas - Tables

Professor N Anderson

Class Objectives

- 1. Review basic formatting
- 2. Practice working with formulas

Assignments:

- Excel Tutorial

Create a worksheet to demonstrate completion of tutorial, email submission

- Assignment 03: Cost Estimate

Due before the start of next class