

# Key concepts through Excel Basic videos 01 to 04

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- 1) Row and Colum make up Cell
- 2) All Cells = Worksheet = Sheet
- 3) Name of Sheet is in Sheet Tab
- 4) All Worksheets = Workbook File
- 5) What Excel can do:
  - i. **Make Calculations:** like calculate % Grade or Net Income.
  - ii. **Data Analysis:** Converting Raw Data into Useful Information, like taking table of data and creating a Reginal Sales Report.
- 6) Default Alignment In Excel:
  - i. Text aligned Left
  - ii. Numbers aligned Right
- 7) Formulas
  - i. Equal sign start all formulas
  - ii. Built-in functions like SUM or AVERAGE can make calculations for us
  - iii. Excel's Golden Rule:
    1. If a formula input can change, put it into a cell and refer to it in the formula with a cell reference.
    2. If a formula input will not change, you can type it into a formula (like 12 months in a year or 7 days in a week).
    3. Always label your formula inputs so that the formula input can be clearly understood by any user of the spreadsheet solution.
  - iv. Relative Cell Reference: Cell references will move throughout the copy action.
  - v. Absolute Cell References are Cell References that "Do Not Move" as you copy a formula.
- 8) The beauty of Excel: When formula inputs are changed, everything updates in the workbook!!
- 9) Number Formatting
  - i. Façade that sits on top of the numbers
  - ii. The number that is actually in the cell can be different than what you see in the cell
  - iii. Formulas do not see Number Formatting – they act on the underlying number.
- 10) Style Formatting like: Borders, Fill Color, Font Color.
- 11) Page Setup: Be sure to do it WHEN you are printing.
- 12) Charts can show the data visually.
- 13) Counting with a condition or criteria (counting just some of the items, not all of them) can be done with COUNTIFS
- 14) Adding with a condition or criteria (adding just some of the numbers, not all of them) can be done with SUMIFS
- 15) Proper Data Set contains:
  - i. "Column Headers" / "Field Names" in First Row.
  - ii. Each row contains a record or transaction
  - iii. Leave empty cells or Excel column/row headers around the entire Proper Data Set.
- 16) If you have a Proper Data Set, PivotTables can quickly create Summary Reports that contain calculations with conditions or criteria. You can add conditions or criteria to the PivotTable Values area by dropping Fields into the Rows area or Columns area or by adding a Slicer.

17) Making Calculations with Conditions or Criteria

- i. "Calculations with Conditions or Criteria " is an important concept in business because most reports contain calculations with conditions or criteria
- ii. Example of adding sales with one condition using SUMIFS. Here we are adding the sales for "Northwest":

13	Date	Region	SalesRep	Sales	Region	Total
14	10/20/17	West	Gigi	\$620	Northwest	=SUMIFS(\$D\$14:\$D\$35,\$B\$14:\$B\$35,F14)
15	10/20/17	Northwest	Gigi	\$484	Southwest	
16	10/20/17	West	Freddy	\$376	West	

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- iii. Example of adding sales with one condition using PivotTable. The selected cell shows adding the sales for "Northwest":

13	Date	Region	SalesRep	Sales
14	10/20/17	West	Gigi	\$620
15	10/20/17	Northwest	Gigi	\$484
16	10/20/17	West	Freddy	\$376
17	10/20/17	Northwest	Freddy	\$1,141
18	10/20/17	Northwest	Chin	\$725
19	10/20/17	West	Chin	\$222
20	10/20/17	West	June	\$1,038
21	10/21/17	Northwest	Chin	\$154
22	10/21/17	Northwest	Gigi	\$205
23	10/21/17	Southwest	Gigi	\$895
24	10/21/17	West	Chin	\$1,254
25	10/22/17	Northwest	June	\$596
26	10/24/17	Southwest	Gigi	\$799
27	10/24/17	Northwest	Gigi	\$651
28	10/24/17	West	June	\$1,235
29	10/24/17	Southwest	Chin	\$684
30	10/24/17	Northwest	June	\$127
31	10/24/17	West	June	\$269

  

Region	Sum of Sales
Northwest	\$4,791
Southwest	\$3,117
West	\$6,215
<b>Grand Total</b>	<b>\$14,123</b>

  

**PivotTable Fields**

Choose fields to add to report:

Search

Date

Region

SalesRep

Sales

More Tables

Drag fields between areas below:

**Filters**

**Columns**

**Rows**

**Values**

Region

Sum of Sales

- iv. Example of averaging sales with one condition using PivotTable. The selected cell shows an average of sales in "Northwest" Region:

13	Date	Region	SalesRep	Sales
14	10/20/17	West	Gigi	\$620
15	10/20/17	Northwest	Gigi	\$484
16	10/20/17	West	Freddy	\$376
17	10/20/17	Northwest	Freddy	\$1,141
18	10/20/17	Northwest	Chin	\$725
19	10/20/17	West	Chin	\$222
20	10/20/17	West	June	\$1,038
21	10/21/17	Northwest	Chin	\$154
22	10/21/17	Northwest	Gigi	\$205
23	10/21/17	Southwest	Gigi	\$895
24	10/21/17	West	Chin	\$1,254
25	10/22/17	Northwest	June	\$596
26	10/24/17	Southwest	Gigi	\$799
27	10/24/17	Northwest	Gigi	\$651
28	10/24/17	West	June	\$1,235
29	10/24/17	Southwest	Chin	\$684
30	10/24/17	Northwest	June	\$127
31	10/24/17	West	June	\$269

  

Region	Average of Sales
Northwest	\$479
Southwest	\$779
West	\$777
<b>Grand Total</b>	<b>\$642</b>

  

**PivotTable Fields**

Choose fields to add to report:

Search

Date

Region

SalesRep

Sales

More Tables

Drag fields between areas below:

**Filters**

**Columns**

**Rows**

**Values**

Region

Average of Sales

- v. Example of adding sales with two condition / criteria using PivotTable. The interesting cell is an example of adding sales that were by the SalesRep "Chin" in the Region "Northwest":

	Sum of Sales	Region			
SalesRep		Northwest	Southwest	West	Grand Total
June	\$1,269			\$2,542	\$3,811
Chin	\$1,041		\$1,423	\$1,476	\$3,940
Freddy	\$1,141			\$376	\$1,517
Gigi	\$1,340		\$1,694	\$1,821	\$4,855
<b>Grand Total</b>	<b>\$4,791</b>		<b>\$3,117</b>	<b>\$6,215</b>	<b>\$14,123</b>

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