

# Office 2016– Excel Basics 03

## Video/Class Project #15

### Introduction to Excel 3: Counting & Adding: COUNT, COUNTA, SUM, COUNTIFS, SUMIFS Functions

**Goal in video:** Learn how to count or add all the items. Learn how to count or add with conditions or criteria.

Topics Covered in Video:

1) Excel functions for counting and adding:

i. Counting:

1. **COUNT function:** Counts numbers in a range of cells.

i. Counts only the Numbers!

ii. Will ignore text items.

iii. Example Seen in Class:

C	D	E
		COUNT
		Counts Numbers
		Count ALL Numbers
Sales		=COUNT(C5:C13)
\$100		
\$200		<b>**When you specify a "criteria</b>
\$100		<b>calculation on all the items, j</b>
\$300		
\$700		
\$100		Criteria
\$200		Gigi
\$500		Criteria
\$200		10/23/2017

2. **COUNTA function:** Count all the cells that are not empty in a range of cells.

i. Can be used for counting words.

B	C	D	E	F
			COUNT	COUNTA
			Counts Numbers	Counts cells not empty
			Count ALL Numbers	Count ALL Words
SalesRep	Sales		9	=COUNTA(B5:B13)
Chin	\$100			
Gigi	\$200			
Dawn	\$100			
Chin	\$300			
Chin	\$700			
Dawn	\$100			
Gigi	\$200			
Gigi	\$500			
Gigi	\$200			
			10/23/2017	

3. **COUNTIFS function:** Counts just some of the items in a range of cells based on a condition of set of criteria.

- i. **Example:** Can count how many times the word "Gigi" appears in a range of names.

SalesRep	Sales		9	9
7 Chin	\$100			
7 Gigi	\$200	<b>**When you specify a "criteria" or "condition" you are saying: "don't make the calculation on all the items, just on some of the items".</b>		
7 Dawn	\$100			
7 Chin	\$300		COUNTIFS	
7 Chin	\$700		Count w/ 1 or more criteria	
7 Dawn	\$100	Criteria	Count	
7 Gigi	\$200	Gigi	=COUNTIFS(B5:B13,E11)	
7 Gigi	\$500	Criteria	Count	
7 Gigi	\$200	10/23/2017		4

- ii. Adding:

1. **SUM function:** Adds numbers in a range of cells.
2. **SUMIFS function:** Add just some of the numbers in a range based on a condition of set of criteria.

- 2) **Example:** Can add the sales for just the Sales Representative "Gigi".

SalesRep	Sales		9	9	\$2,400
7 Chin	\$100				
7 Gigi	\$200	<b>**When you specify a "criteria" or "condition" you are saying: "don't make the calculation on all the items, just on some of the items".</b>			
7 Dawn	\$100				
7 Chin	\$300		COUNTIFS	SUMIFS	
7 Chin	\$700		Count w/ 1 or more criteria	Add w/ 1 or more criteria	
7 Dawn	\$100	Criteria	Count	Sum	
7 Gigi	\$200	Gigi	4	=SUMIFS(C5:C13,B5:B13,E11)	
7 Gigi	\$500	Criteria	Count	Sum	
7 Gigi	\$200	10/23/2017		4	\$600

## COUNTIFS

- i. Counts just some of the items in a range of cells based on a condition of set of criteria. Can count with 1 or more conditions/criteria.
- ii. **criteria\_range1** argument will contain the range with all the items to possible count.
- iii. **criteria1** argument contains the condition or criteria that tells the function what to count. Conditions and criteria could be things like:
  1. Text (like "Gigi").
  2. Dates or Numbers like: 10/23/2017

## 3) SUMIFS

- i. Add just some of the numbers in a range based on a condition of set of criteria. Can add with 1 or more conditions/criteria.
- ii. **sum\_range** argument will contain the range with the numbers.
- iii. **criteria\_range1** argument will contain the range with all the items to possible consider.
- iv. **criteria1** argument contains the condition or criteria that tells the function what to consider. Conditions and criteria could be things like:
  1. Text (like "Gigi").
  2. Dates or Numbers like: 10/23/2017