

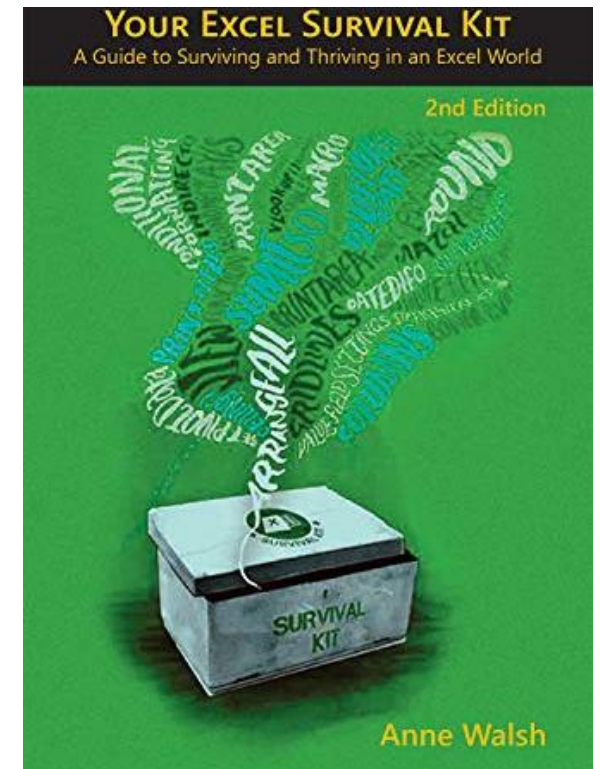
IFS() Functions

MY PRECIOUSSSSS.. WHEN YOU ARE IN, YOU ARE IN



Who am I?

- ▶ Anne Walsh – living in the west of Ireland
- ▶ **Website:** www.the-excel-expert.com
- ▶ Freelance Excel trainer since the mid-90s
- ▶ Author of...
 - ▶ [Your Excel Survival Kit – your guide to surviving and thriving in an Excel world \(2nd edition\)](#) out now
 - ▶ BookBoon books
 - ▶ [Create Great Reports in Excel](#)
 - ▶ [Get and Transform Data](#)
 - ▶ [Create Great Reports in Word](#)
 - ▶ [How to track your training records in Excel -](#)
 - ▶ Loves movies, puns and crime fiction. Married for 27 years. Has one son who is a software engineer – wonder where that comes from.....



Definition

3

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Functions that allow you to find the value of X but only where it meets certain conditions

- E.g. only count values that are blue and over 50
- Find me the highest number in a list but only where the age range is 18-65
- Add up the value of deliveries but only when it is to a specific location between specific dates



These are the main ones....

4

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▶ Old School

- ▶ **COUNTIF** – Counts values but only allows ONE condition
- ▶ **SUMIF** – Adds values but only allows ONE condition

▶ Modern (127/132 pairings)

- ▶ **COUNTIFS()**
- ▶ **SUMIFS()**
- ▶ **MAXIFS()**
- ▶ **MINIFS()**
- ▶ **AVERAGEIFS()**



Assumptions and Conditions

5

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► Data Layout

- That the data for the formula is laid out in a table format i.e. with headings and rows

► Formula set up

- Criteria ranges and value ranges all have the same height
- If using a table, reference the table name and column name by calling up the table name and then [to call up the column name.

ProductCode	ProductName	Cost	Color	Sales	ProductModel	ScdStatus	ScdStartDate
HL-U509-R	Sport-100 Helmet, Red	12.0278	Red	€ 33.64	Sport-100		01/07/2005
HL-U509-R	Sport-100 Helmet, Red	13.8782	Red	€ 33.64	Sport-100		01/07/2006
HL-U509-R	Sport-100 Helmet, Red	13.0863	Red	€ 34.99	Sport-100	Current	01/07/2007
HL-U509	Sport-100 Helmet, Black	12.0278	Black	€ 33.64	Sport-100		01/07/2005
HL-U509	Sport-100 Helmet, Black	13.8782	Black	€ 33.64	Sport-100		01/07/2006
HL-U509	Sport-100 Helmet, Black	13.0863	Black	€ 34.99	Sport-100	Current	01/07/2007
SO-B909-M	Mountain Bike Socks, M	3.3963	White	€ 9.50	Mountain Bike Socks		01/07/2005
SO-B909-L	Mountain Bike Socks, L	3.3963	White	€ 9.50	Mountain Bike Socks		01/07/2005
HL-U509-B	Sport-100 Helmet, Blue	12.0278	Blue	€ 33.64	Sport-100		01/07/2005
HL-U509-B	Sport-100 Helmet, Blue	13.8782	Blue	€ 33.64	Sport-100		01/07/2006
HL-U509-B	Sport-100 Helmet, Blue	13.0863	Blue	€ 34.99	Sport-100	Current	01/07/2007
CA-1098	AWC Logo Cap	5.7052	Multi	€ 8.64	Cycling Cap		01/07/2005



Structure of Value/ifs() function

6

► Part One

- **SUM_RANGE/AVERAGE_RANGE/MAX_RANGE/MIN_RANGE**
- This is the column with the values you want to add up
- **Criteria range1 and Criteria1**
 - **Criteria range 1** = column of data
 - **Criteria 1** = what you are looking for
- Carries on with further pairings e.g. CriteriaRange2, Criteria2

Function Arguments

SUMIFS

Sum_range	<input type="text"/>		= reference
Criteria_range1	<input type="text"/>		= reference
Criteria1	<input type="text"/>		= any

Adds the cells specified by a given set of conditions or criteria.

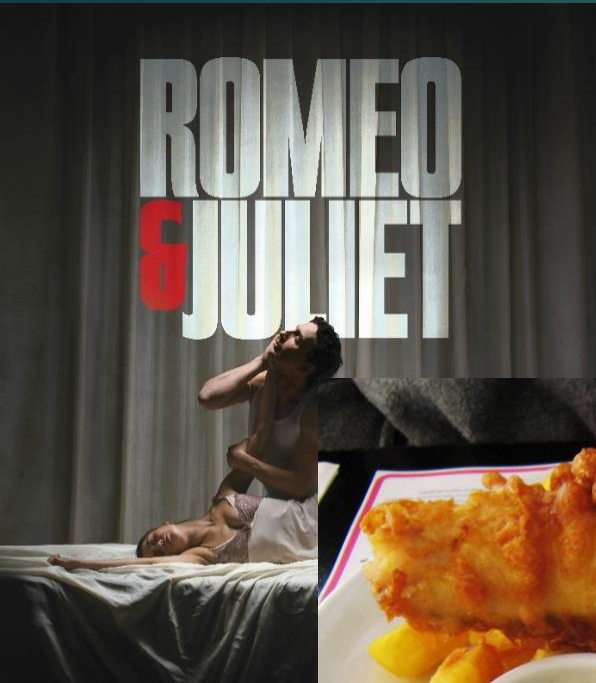
Criteria_range1: is the range of cells you want evaluated for the part

Formula result =

[Help on this function](#)

Think of some great pairings..

7



Criteria syntax – in formula

8

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What you use	What it is asking
">=" & B1	Greater than or equal to entry in B1. After or on if used with dates
"<=" & B1	Less than or equal to entry in B1. Before or on if used with dates
"<> Blue"	Not equal to Blue/
"<>" & J12	Not equal to whatever you have in J12 ("Anything but")
"=A*"	Anything that starts with A
Oranges	The thing itself..

Beware.....

What you use

Have to use either...

`>=1/1/2021` in cell OR

`">="&formula`

Steps

10

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- ▶ Click where you want the answer to go
- ▶ **SUMIFS**
 - ▶ **Formulas | Math & Trig | Sumifs**
 - ▶ **Highlight the Sum_range i.e. the data you want to add up**
 - ▶ **Click in Criteria_Range1 and highlight the column with the data you want to match on**
 - ▶ Click in **Criteria1** – enter the criteria you want to use
 - ▶ Rinse and repeat for the other pairings...
- ▶ **Note**
 - ▶ **Value Ranges and Criteria Ranges must be the same height e.g. select entire column for them all**
 - ▶ **What you reference in Criteria1 - should match with data in Criteria_range1 etc.**