

Twitter Thread by Clint Murphy



Clint Murphy
@IAmClintMurphy



10 Excel Formulas To 10x Your Productivity:

You have a table of cookie sales and have to answer:

- Who sold least / most cookies by month
- Who are the top 25% / bottom 25%
- Who has the most winning months
- Who has the most losing months
- Who sold the most cookies
- How is each girl trending

Let's dive in.

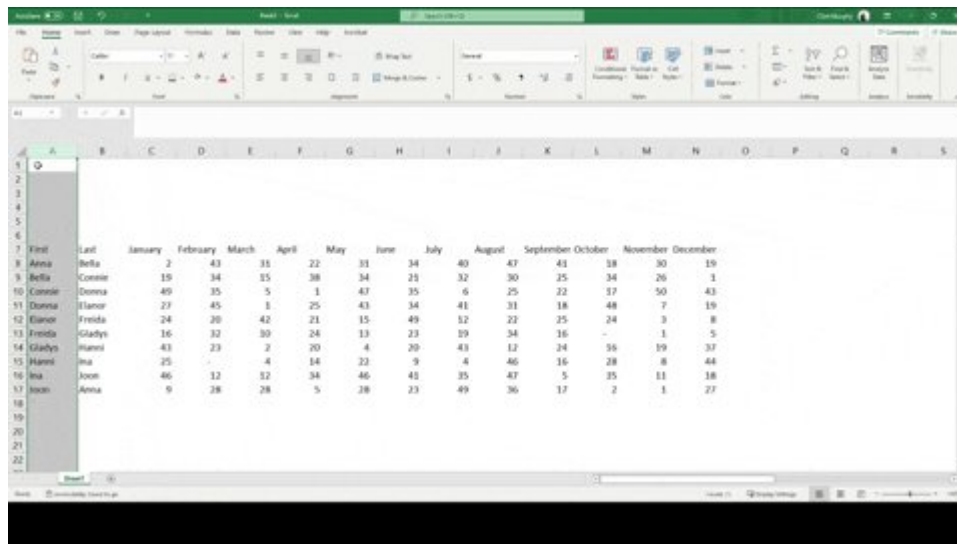
First	Last	January	February	March	April	May	June	July	August	September	October	November	December
Anna	Bella	2	43	31	22	31	34	40	47	41	18	30	19
Bella	Connie	19	34	15	38	34	21	32	30	25	34	26	1
Connie	Donna	49	35	5	1	47	35	6	25	22	17	50	43
Donna	Elanor	27	45	1	25	43	34	41	31	18	48	7	19
Elanor	Freida	24	20	42	21	15	49	12	22	25	24	3	8
Freida	Gladys	16	32	10	24	13	23	19	34	16	-	1	5
Gladys	Hanni	43	23	2	20	4	20	43	12	24	16	19	37
Hanni	Ina	25	-	4	14	22	9	4	46	16	28	8	44
Ina	Joon	46	12	12	34	46	41	35	47	5	35	11	18
Joon	Anna	9	28	28	5	28	23	49	36	17	2	1	27

- Format & shortcuts

Before you start, format your worksheet and lay out what you want to build.

Shortcuts used:

- Ctrl + space bar = Insert Column
- Shift + space bar = Insert Row
- Ctrl + shift + + = Insert
- Ctrl + R = Fill Right
- =Sum(G8:G17)



	January	February	March	April	May	June	July	August	September	October	November	December
Anna	2	43	35	22	31	34	40	47	41	38	30	19
Bella	19	34	15	38	34	21	32	30	25	34	26	1
Connor	40	35	5	1	47	35	6	25	22	17	50	43
Dennis	27	45	1	25	43	34	41	31	18	48	7	19
Elmer	24	30	42	21	15	49	32	27	25	24	3	8
Freda	16	32	30	24	13	23	19	34	16	-	1	5
Gladys	43	23	2	20	4	20	43	12	24	56	19	37
Hanni	25	-	4	14	22	9	4	46	16	28	8	44
Ira	46	32	32	34	46	41	35	47	5	35	11	18
Jocin	9	28	28	5	28	23	49	36	17	2	1	27

- Min and Max

Min and Max are helpful when working with large data sets.

Min returns the lowest value in a series of data.

Max returns the highest value in a series of data.

Min Formula: =Min(number1, number2...)

Max Formula: =Max(number1, number2...)

Product	January	February	March	April	May	June	July	August	September	October	November	December	Total	Max	Min
Anna	2	83	31	22	31	38	40	47	41	38	30	18			
Bella	19	34	35	39	34	23	32	30	25	34	26	5			
Camille	49	36	5	1	47	35	6	25	22	17	50	43			
Elaine	27	45	1	25	43	34	41	31	38	48	7	18			
Frank	24	20	42	23	33	49	12	22	25	24	5	8			
Grace	16	30	30	24	33	29	39	24	36	-	5	5			
Heidi	63	23	2	20	8	30	43	12	24	16	19	17			
Irene	25	-	4	14	23	9	4	46	36	28	8	44			
John	46	12	12	34	46	40	35	47	5	25	13	18			
Kim	9	18	38	5	28	23	49	36	17	3	5	17			
Total	340	272	290	254	288	288	281	390	268	222	186	232			

- Concatenate

Concatenate will bring strings of data together.

When you want to combine a first and last name into a single cell, it's your tool.

The formula is:

=concatenate(text1, text2, text3)

Remember to add a " " between the first and second name as text2

Product	January	February	March	April	May	June	July	August	September	October	November	December	Total	Max	Min
Anna	2	83	31	22	31	38	40	47	41	38	30	18			
Bella	19	34	35	39	34	23	32	30	25	34	26	5			
Camille	49	36	5	1	47	35	6	25	22	17	50	43			
Elaine	27	45	1	25	43	34	41	31	38	48	7	18			
Frank	24	20	42	23	33	49	12	22	25	24	5	8			
Grace	16	30	30	24	33	29	39	24	36	-	5	5			
Heidi	63	23	2	20	8	30	43	12	24	16	19	17			
Irene	25	-	4	14	23	9	4	46	36	28	8	44			
John	46	12	12	34	46	40	35	47	5	25	13	18			
Kim	9	18	38	5	28	23	49	36	17	3	5	17			
Total	340	272	290	254	288	288	281	390	268	222	186	232			

- Sparklines

Sparklines let's us answer the question: How is each girl trending.

With Sparklines, we can insert graphical data directly into a cell of our table as simply as:

- Select Range
- Insert Sparkline

- I choose Column

Excel spreadsheet showing a sales data table for 2011. The table has columns for months (January to December) and rows for salespeople (Anna, Bella, Carlos, etc.). A summary section at the bottom shows 'Total', 'Min', and 'Max' values for each month.

- Quartile

In statistics, a quartile divides the number of data points into four parts, or quarters, of more-or-less equal size.

It lets us know the bottom 25% of sales people and the top 25% of sales people are.

Formula: =quartile(array,quart)

quart = the quartile we want.

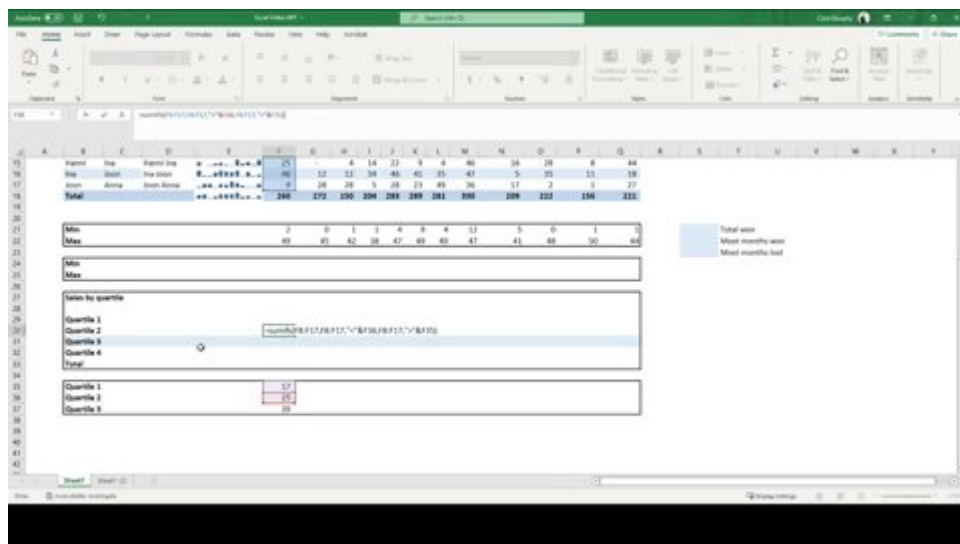
Excel spreadsheet showing the same sales data table as before, but with the 'Sales by quartile' section highlighted. The section shows 'Quartile 1', 'Quartile 2', 'Quartile 3', and 'Total' values for each month.

- Sumifs

We use sumifs when we want to add cells that meet multiple criteria, generally in a list.

In our scenario, we want to sum numbers between two quartiles.

Formula = sumifs(range, criteria1 range, criteria1, criteria2 range, criteria2)

[illegible]

Formula: =countif(range, criteria)

Quarterly sales of America
2023 Quarterly Sales
February 2023

First	Last	January	February	March	April	May	June	July	August	September	October	November	December	Total
Anna	Bella	40	31	22	31	34	40	47	41	38	30	19	18	358
Bella	Camille	38	34	23	38	34	21	32	30	23	34	26	1	309
Camille	Donna	49	35	5	1	47	35	6	25	21	17	50	43	335
Donna	Elanor	27	40	1	25	43	34	41	31	38	46	7	19	339
Elanor	Freida	24	29	42	25	23	46	12	37	25	24	3	8	263
Freida	Gladys	38	32	30	34	33	23	39	34	36	-	5	5	283
Gladys	Hanni	43	23	3	29	6	30	43	12	24	16	19	37	263
Hanni	Ira	25	-	4	14	23	9	4	46	36	28	8	44	230
Ira	Ira Joan	46	12	12	34	46	41	35	47	5	35	11	18	342
Ira Joan	Joan Ann	9	29	28	5	28	23	49	36	17	3	1	27	253
Total		290	270	190	204	289	288	281	300	209	212	136	211	2,877

Max
2 0 1 1 6 8 8 11 5 0 1 0

Min
49 42 42 38 47 49 47 41 49 30

Anna Bella Total won
Camille Donna Most months lost
Hanni Ira Most months lost

Max
Anna Hanni Donna Camille Gladys Hanni Hanni Gladys Ira Freida Freida Bella
Camille Donna Elanor Bella Camille Elanor Joan Anna Anna Donna Camille Hanni

Values by quartile

• Conditional formatting

Conditional formatting lets us highlight information for the readers.

We can either set our own rules or use preset rules, as we will in our example.

By using different colors it draws your eyes to the good, and bad.

February 2023

First	Last	January	February	March	April	May	June	July	August	September	October	November	December	Total	Max	Min
Anna	Bella	40	31	22	31	34	40	47	41	38	30	19	18	358	2	2
Bella	Camille	38	34	23	38	34	21	32	30	23	34	26	1	309	5	1
Camille	Donna	49	35	5	1	47	35	6	25	21	17	50	43	335	9	1
Donna	Elanor	27	40	1	25	43	34	41	31	38	46	7	19	339	2	1
Elanor	Freida	24	29	42	25	23	46	12	37	25	24	3	8	263	2	-
Freida	Gladys	38	32	30	34	33	23	39	34	36	-	5	5	283	-	2
Gladys	Hanni	43	23	3	29	6	30	43	12	24	16	19	37	263	-	2
Hanni	Ira	25	-	4	14	23	9	4	46	36	28	8	44	230	-	5
Ira	Ira Joan	46	12	12	34	46	41	35	47	5	35	11	18	342	-	1
Ira Joan	Joan Ann	9	29	28	5	28	23	49	36	17	3	1	27	253	-	1
Total		290	270	190	204	289	288	281	300	209	212	136	211	2,877		

Max
2 0 1 1 6 8 8 11 5 0 1 0

Min
49 42 42 38 47 49 47 41 49 30

Anna Bella Total won
Camille Donna Most months lost
Hanni Ira Most months lost

Max
Anna Hanni Donna Camille Gladys Hanni Hanni Gladys Ira Freida Freida Bella
Camille Donna Elanor Bella Camille Elanor Joan Anna Anna Donna Camille Hanni

Values by quartile

Quartile 1	Quartile 2	Quartile 3
27	32	37
41	51	61
52	66	77

• Finished product

You always want your finished product to look good and be consistent.

When someone reads your work and it looks good, they ask less questions.

When you are asked less questions, you are more productive.

Make your work look good.

First	Last	January	February	March	April	May	June	July	August	September	October	November	December	Total	Max	Min		
Anna	Bella	Anna Bella	..#.....	2	43	35	22	31	34	40	47	43	18	30	19	354	2	1
Bella	Connie	Bella Connie	..#.....	19	34	15	18	34	21	32	30	25	34	26	1	309	1	1
Connie	Donna	Connie Donna	..#.....	49	35	5	1	47	35	6	25	22	17	50	43	335	3	1
Donna	Elanor	Donna Elanor	..#.....	27	45	1	25	43	34	41	31	18	48	7	19	388	2	1
Elanor	Freida	Elanor Freida	..#.....	26	20	42	21	15	49	12	22	20	24	3	8	265	2	-
Freida	Gladys	Freida Gladys	..#.....	16	32	39	24	13	23	19	34	16	-	1	5	234	-	2
Gladys	Hanni	Gladys Hanni	..#.....	43	23	2	20	4	20	43	12	24	16	19	37	263	-	2
Hanni	Ina	Hanni Ina	..#.....	25	-	4	14	22	9	4	46	16	28	8	44	230	1	3
Ina	Joon	Ina Joon	..#.....	46	32	12	34	46	43	35	47	5	35	11	18	342	-	1
Joon	Anna	Joon Anna	..#.....	9	28	28	5	28	23	49	36	17	2	1	27	253	1	-
Total			260	272	150	204	283	289	281	330	209	222	156	221	2,877		

Min	2	0	1	1	4	9	4	12	5	0	1	0
Max	49	45	42	38	47	49	49	47	43	48	50	48

Min	Anna	Hanni	Donna	Connie	Gladys	Hanni	Hanni	Gladys	Ina	Freida	Freida	Bella
Max	Connie	Donna	Elanor	Bella	Connie	Elanor	Joon	Anna	Anna	Donna	Connie	Hanni

Sales by quartile												
Quartile 1	27	32	7	20	32	50	22	39	37	18	5	34
Quartile 2	43	51	15	41	50	46	53	41	35	35	35	18
Quartile 3	52	66	27	46	65	64	75	70	46	52	30	60
Quartile 4	138	123	101	97	136	125	133	140	91	117	106	124
Total	260	272	150	204	283	289	281	330	209	222	156	221

Anna Bella Total won
Connie Donna Most months won
Hanni Ina Most months lost



TL;DR:

If you want to 10x your Excel productivity, learn these 10 formulas and techniques:

- Conditional formatting
- Format & shortcuts
- Min +Max formula
- Concatenate
- Sparklines
- X-Lookup
- Quartile
- Countif
- Sumifs

If you enjoyed this thread, please:

1. Follow [@IAmClintMurphy](#)
2. Share the first tweet

<https://t.co/zYFc73vj2C>

Until next time,

Clint Murphy

10 Excel Formulas To 10x Your Productivity:

— Clint Murphy (@IAmClintMurphy) [June 23, 2022](#)