

## MICROSOFT EXCEL FORMULA INTRODUCING

**\*\* Use data validation or lists in Excel through these exercises.**

### DATASET

A	B	C	D
SATICI	DÖNEM	ÜRÜN	MİKTAR
EMRE	2018	ARMUT	2511
EMRE	2017	ARMUT	3063
MUSTAFA	2018	ELMA	2663
CAN	2018	ELMA	1847
CAN	2017	ELMA	1571
CAN	2017	PORTAKAL	3733
MUSTAFA	2017	ELMA	1719
EMRE	2017	PORTAKAL	3514
EMRE	2017	ELMA	3883
MUSTAFA	2017	ARMUT	1651
CAN	2018	ARMUT	3974
EMRE	2018	PORTAKAL	1796
CAN	2017	ARMUT	3296
CAN	2018	PORTAKAL	1940
MUSTAFA	2018	PORTAKAL	3535
EMRE	2018	ELMA	3992
MUSTAFA	2018	ARMUT	2223
MUSTAFA	2017	PORTAKAL	3381

**=SUMIFS(D:D,A:A,I3,C:C,I4,B:B,I5)**

Find the “Miktar” column for the chosen seller, period, and product.

### FIXED CELLS

	A	B	C	D	E
1	SATICI	SATICI	DÖNEM	ÜRÜN	MİKTAR
2	EMRE	EMRE	2018	ARMUT	2,511
3	EMRE	EMRE	2017	ARMUT	3,063
4	MUSTAFA	MUSTAFA	2018	ELMA	2,663
5	CAN	CAN	2018	ELMA	1,847
6	CAN	CAN	2017	ELMA	1,571
7	CAN	CAN	2017	PORTAKAL	3,733
8	MUSTAFA	MUSTAFA	2017	ELMA	1,719
9	EMRE	EMRE	2017	PORTAKAL	3,514
10	EMRE	EMRE	2017	ELMA	3,883
11	MUSTAFA	MUSTAFA	2017	ARMUT	1,651
12	CAN	CAN	2018	ARMUT	3,974
13	EMRE	EMRE	2018	PORTAKAL	1,796
14	CAN	CAN	2017	ARMUT	3,296
15	CAN	CAN	2018	PORTAKAL	1,940
16	MUSTAFA	MUSTAFA	2018	PORTAKAL	3,535
17	EMRE	EMRE	2018	ELMA	3,992
18	MUSTAFA	MUSTAFA	2018	ARMUT	2,223
19	MUSTAFA	MUSTAFA	2017	PORTAKAL	3,381

=SUMIFS(\$E:\$E,\$B:\$B,\$J4,\$D:\$D,K\$3,\$C:\$C,\$K\$2)

- Press F4 as much as you want to fix the cell and avoid miscalculation.
- 1) \$K\$4 = means complete locking of the designated location.
  - 2) \$K4 = It means fixing the column.
  - 3) K\$4= It means fixing the row.

### OFFSET

MONTHS	BERLIN	FRANKFURT	MUNCHEN	HANNOVER	HAMBURG
JANUARY	1,470	1,432	773	966	1,740
FEBRUARY	1,139	1,167	1,168	903	806
MARCH	1,023	1,109	1,045	1,604	1,240
APRIL	1,316	1,239	1,810	1,259	1,063
MAY	1,068	1,418	1,002	1,637	1,243
JUNE	1,107	1,044	2,007	1,891	1,512
JULY	1,254	1,295	1,771	1,665	757
AUGUST	955	1,258	1,700	1,245	1,102
SEPTEMBER	1,014	1,325	1,634	929	1,364
OCTOBER	1,096	1,458	1,404	1,449	1,028
NOVEMBER	1,279	1,219	1,611	1,712	1,680
DECEMBER	1,212	1,309	1,988	1,523	2,037

=OFFSET(A1,MATCH(J4,A2:A13,0),MATCH(J5,B1:F1,0),1,1)

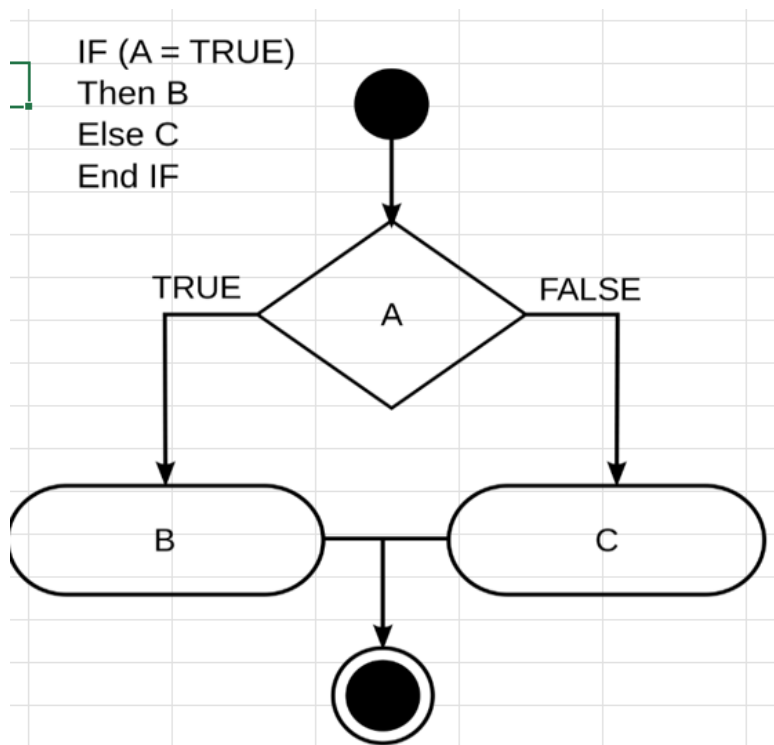
- It is used to find the desired data in tables like matrix.

## VLOOKUP with MATCH

A	B	C	D	E
	MATH	PHYSIC	CHEMY	BIOLOGY
Jenny Hapman	52	49	56	42
Graham Grady	39	16	67	47
Alex Funning	11	39	69	63
Julie El	55	42	65	78
David Craus	81	98	14	86
Simon Dan	17	32	72	70
Peter Do	10	12	66	86
Graham Eva	26	72	59	10
Jim Farron	88	47	89	54
Krank Field	27	97	37	17
Andrew Gwy	29	62	48	58
Mark Hen	91	99	79	66
Pat Gla	18	84	26	73
George How	32	66	41	42
Gra Jones	41	23	87	71
Mike Ka	52	72	35	26
Justin Mad	81	24	78	16
Anna Tu	86	76	18	12
Chi Onw	95	98	92	55
Raul May	16	56	72	51
Connor Mcman	67	37	67	26

=VLOOKUP(H3,A:E,MATCH(I2,A1:E1,0),FALSE)

## IF



= IF(B5>100,"BÜYÜK","KÜÇÜK")

## IF and SUMIFS with Conditional Case

A	B	C	D	E	F	G	H	I	J
SELLERS	PRODUCTS	NET SALE AMOUNT	TARGET SALE AMOUNT	FINAL SALE AMOUNT					
Jenny Hhaphman	MERCEDES	\$ 841,828	\$ 942,847.36	(101,019.36)					
Graham Grady	MERCEDES	\$ 452,292	\$ 429,677.40	22,614.60					
Alex Funning	MERCEDES	\$ 706,778	\$ 841,065.82	(134,287.82)					
Julie El	MERCEDES	\$ 863,404	\$ 725,259.36	138,144.64					
David Craus	MERCEDES	\$ 550,669	\$ 286,347.88	264,321.12					
Simon Dan	MERCEDES	\$ 404,305	\$ 436,649.40	(32,344.40)					
Peter Do	MERCEDES	\$ 449,815	\$ 211,413.05	238,401.95					
Graham Eva	MERCEDES	\$ 507,487	\$ 182,695.32	324,791.68					
Jim Farron	MERCEDES	\$ 285,129	\$ 210,995.46	74,133.54					
Krank Field	MERCEDES	\$ 932,763	\$ 1,119,315.60	(186,552.60)					
Andrew Gwy	MERCEDES	\$ 460,305	\$ 276,183.00	184,122.00					
Mark Hen	MERCEDES	\$ 216,707	\$ 138,692.48	78,014.52					

=IF(J3="NET SALE AMOUNT",SUMIFS(C:C,A:A,I4),IF(J3="TARGET SALE AMOUNT",SUMIFS(D:D,A:A,I4),SUMIFS(E:E,A:A,I4)))

## COUNTIFS

COUNTRY	POPULATION
ALMANYA	80,636,124
AVUSTURYA	8,592,400
BELARUS (Beyaz Rusya)	9,458,535
BELÇİKA	11,443,830
BULGARİSTAN	7,045,259
ÇEK CUMHURİYETİ	10,555,130
FRANSA	64,938,716
HOLLANDA	17,032,845
İNGİLTERE	65,511,098
İSPANYA	46,070,146
İSVEÇ	9,920,624
İSVİÇRE	8,454,083
İTALYA	59,797,978
MACARİSTAN	9,787,905
POLONYA	38,563,573
PORTEKİZ	10.264.797

=COUNTIFS(B:B,">50000000",B:B,"<70000000")

**\*\* Finds the countries' populations between 50M AND 70.**

## SUMIFS

	A	B	C	D	E	F	G	H	I	J	K	L
1	SATICI	DÖNEM	ÜRÜN	MİKTAR								
2	EMRE	2018	ARMUT	2511								
3	EMRE	2017	ARMUT	3063				SATICI	EMRE		SATICI	EMRE
4	MUSTAFA	2018	ELMA	2663				ÜRÜN	ELMA		ÜRÜN	ARMUT
5	CAN	2018	ELMA	1847				DÖNEM	2017		DÖNEM	2018
6	CAN	2017	ELMA	1571								
7	CAN	2017	PORTAKAL	3733				3883			2511	
8	MUSTAFA	2017	ELMA	1719								
9	EMRE	2017	PORTAKAL	3514								

=SUMIFS(D:D,A:A,I3,C:C,I4,B:B,I5)

## INDEX -MATCH

	A	B	C	D	E	F	G	H	I	J	K	L
1	Döviz Kodu	Birim	Döviz Cinsi	Döviz Alış	Döviz Satış	Efektif Alış	Efektif Satış					
2	Currency Code	Unit	Currency	Forex Buying	Forex Selling	Banknote Buying	Banknote Selling					
3	USD	1	ABD DOLARI	6.0752	6.0862	6.071	6.0953			KWD	KUVEYT DİNARI	
4	AUD	1	AVUSTRALYA DOLARI	4.3813	4.4099	4.3611	4.4363					
5	DKK	1	DANİMARKA KRONU	0.95221	0.95689	0.95154	0.95909					
6	EUR	1	EURO	7.113	7.1258	7.108	7.1365					
7	GBP	1	İNGİLİZ STERLİNİ	7.9631	8.0046	7.9576	8.0167					
8	CHF	1	İSVİÇRE FRANCI	6.2509	6.291	6.2415	6.3005					
9	SEK	1	İSVEÇ KRONU	0.68516	0.69226	0.68468	0.69385					
10	CAD	1	KANADA DOLARI	4.6463	4.6673	4.6291	4.685					
11	KWD	1	KUVEYT DİNARI	19.9486	20.2096	19.6493	20.5127					
12	NOK	1	NORVEÇ KRONU	0.74587	0.75088	0.74534	0.75261					
13	SAR	1	SUUDİ ARABİSTAN RİYALİ	1.62	1.6229	1.6078	1.635					
14	JPY	100	JAPON YENİ	5.3761	5.4117	5.3562	5.4322					

=@IF(LEN(J3)=3,INDEX(C3:C14,MATCH(J3,A3:A14,0),0),INDEX(A3:A14,MATCH(J3,C3:C14,0),0))

# XLOOKUP

	A	B	C	D	E	F
1	State/District	Postal Code				
2	Alabama	AL			Montana	MT
3	Alaska	AK				
4	Arizona	AZ			WV	
5	Arkansas	AR				
6	California	CA				
7	Colorado	CO				
8	Connecticut	CT			West Virginia	
9	Delaware	DE				

=XLOOKUP(E4,B:B,A:A,"",0)

XLOOKUP(lookup\_value, lookup\_array, return\_array, [if\_not\_found], [match\_mode], [search\_mode])

=XLOOKUP(E4,B:B,A:A,"",0)