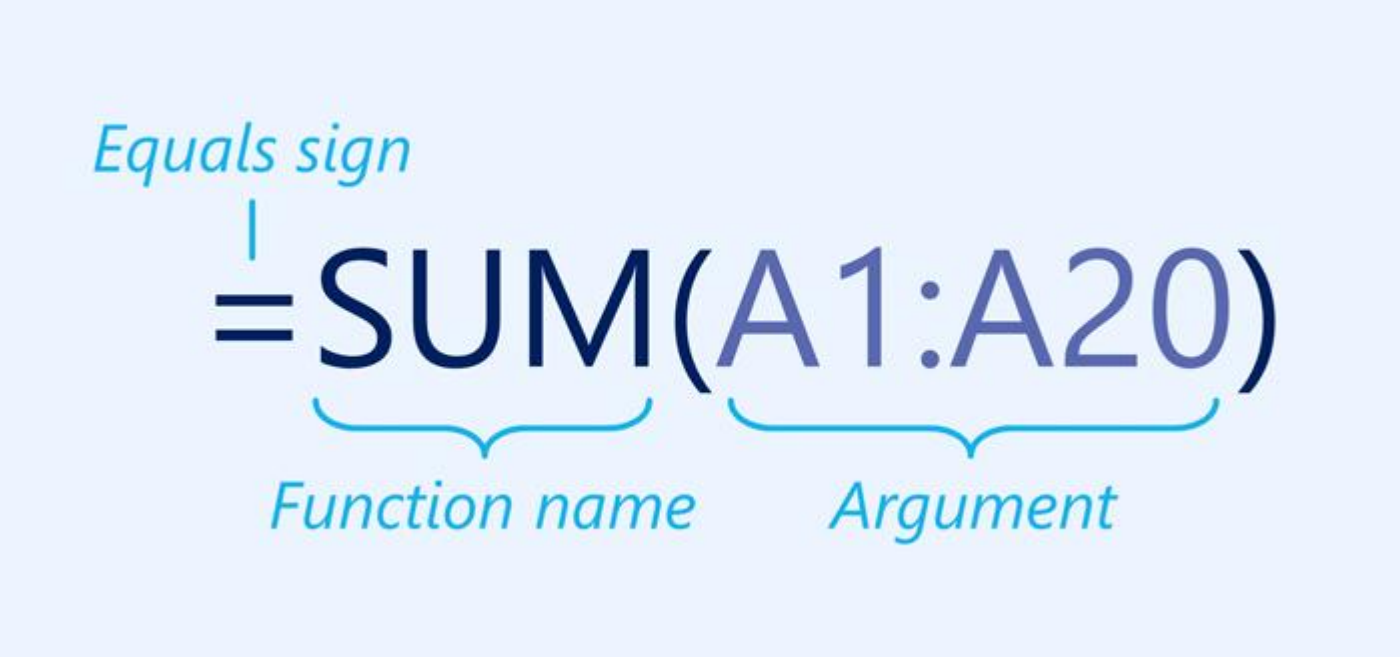
TECHPRO EDUCATION

FUNCTIONS

Google Sheets

FUNCTIONS



FUNCTIONS

Google Sheets'deki formüller genellikle "**case sensitive**" (büyük-küçük harf duyarlı) değildir, yani büyük harf ve küçük harf farklılıklarını dikkate almazlar. Yani, bir formül içinde kullanılan fonksiyonlar, hücre referansları ve metinler genellikle büyük veya küçük harf farkına bakmaksızın işlevlerini yerine getirir. Örneğin, "**SUM(A1:A5)**" ile "**sum(a1:a5)**" aynı sonucu verir.

Google Sheets

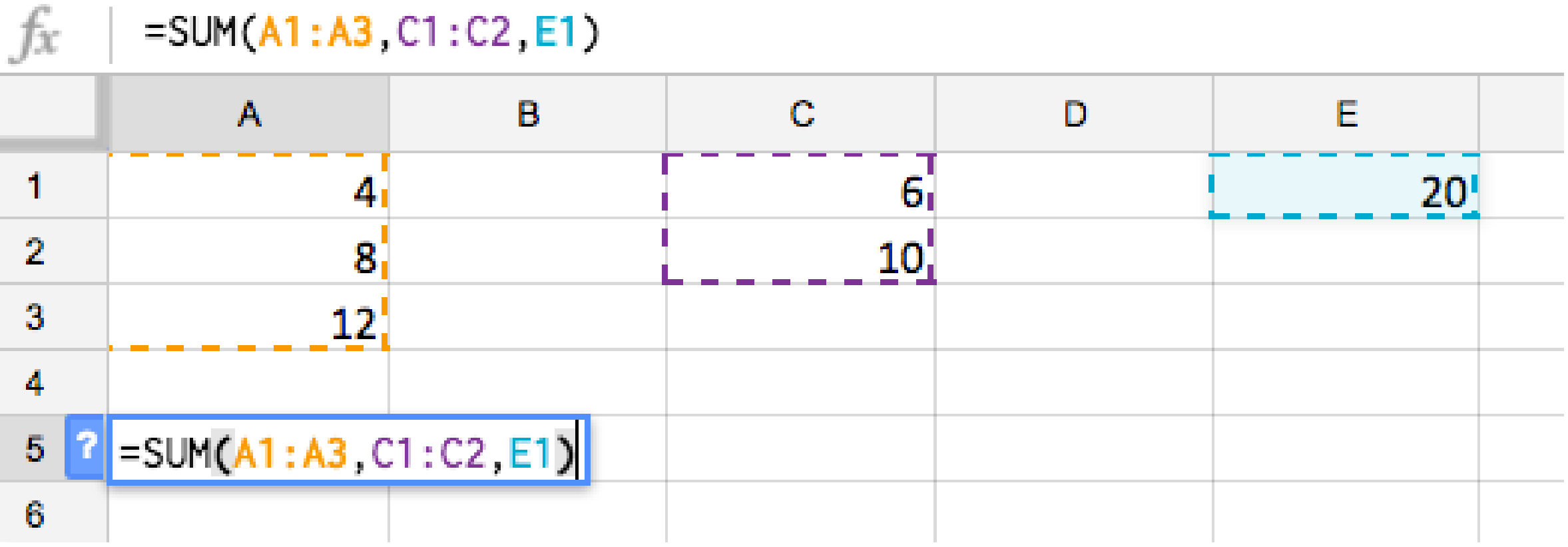
FUNCTIONS

=AVERAGE(B1:B9)

	A	B	C
1		1	
2		4	
3		5	
4		6	
5		8	
6		2	
7		3	
8		5	
9		6	
10		=AVERAGE(B1:B9)	
11			
12			

Google Sheets

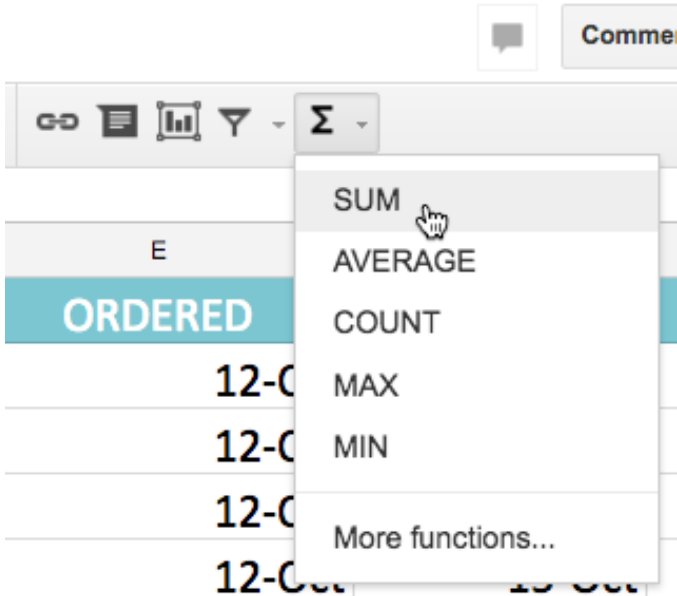
FUNCTIONS



CREATING A FUNCTION

=SUM(D3:D12)

	A	B	C	D
2	ITEM	QUANTITY	UNIT PRICE	LINE TOTAL
3	Tomatoes (case of 12)	3	$17.44	$52.32
4	Black Beans (case of 10)	5	$20.14	$100.70
5	All Purpose Flour (50 lb.)	5	$14.05	$70.25
6	Corn Meal/Maza (25 lb.)	5	$18.69	$93.45
7	Brown Rice (25 lb.)	5	$10.99	$54.95
8	Lime Juice (1 gallon)	5	$11.99	$59.95
9	Tomato Juice (case of 10)	3	$19.49	$58.47
10	Hot Sauce (1 gallon)	8	$7.35	$58.80
11	Salsa, Medium (1 gallon)	12	$8.47	$101.64
12	Olive Oil (2.5 gallon)	4	$28.69	$114.76
13			TOTAL	=SUM(D3:D12)
14				



Google Sheets

BASIC FUNCTIONS

SUM

AVERAGE

PRODUCT

QUOTIENT

COUNT

COUNTA

MIN

MAX

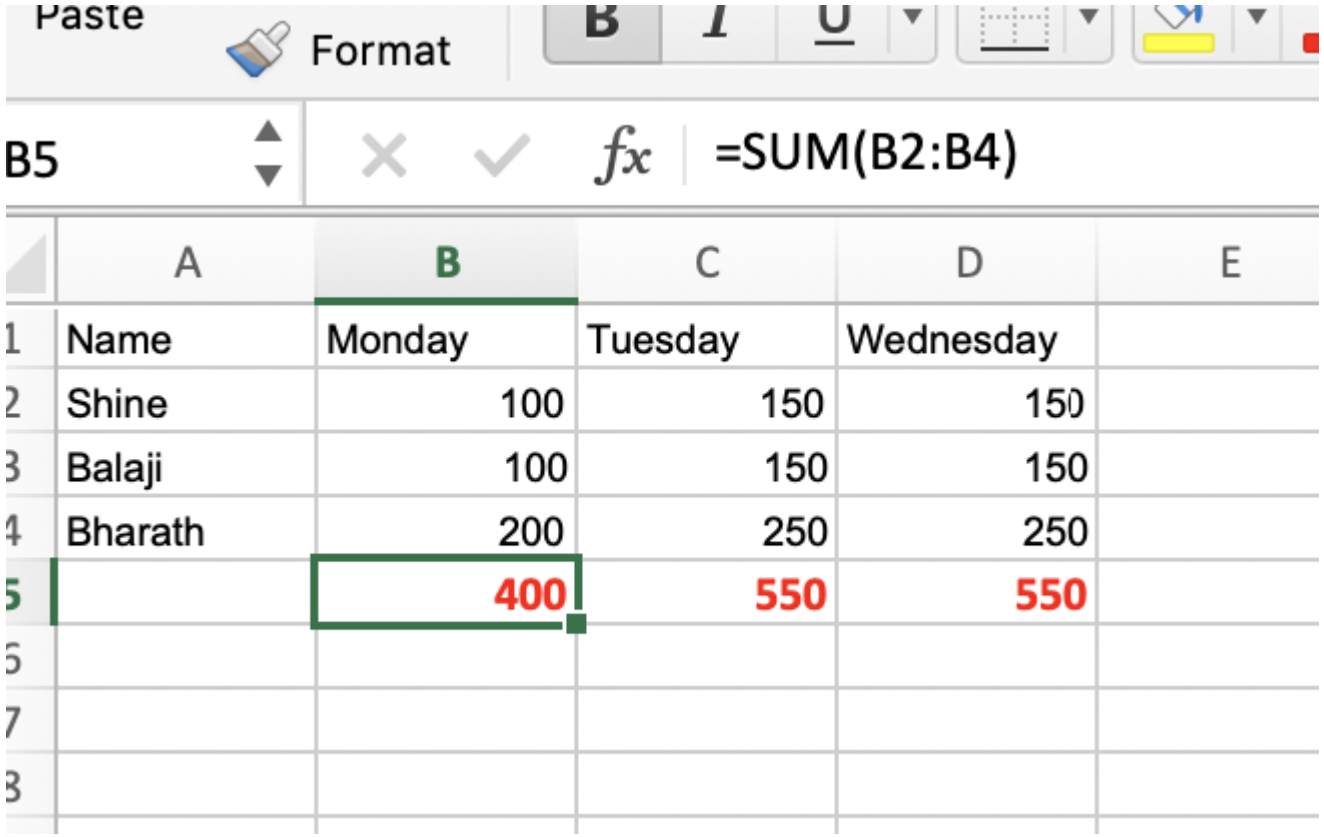
UNIQUE

İşlem (Operation)	İngilizce Formül (English Formula)	Türkçe Formül (Turkish Formula)
Çarpma (Product)	`=PRODUCT(A1, B1)`	`=ÇARPIM(A1, B1)`
Çıkarma (Minus)	`=A1 - B1`	`=EKSİ(A1 - B1)`
Bölme (Divide)	`=A1 / B1`	`=BÖLÜ(A1, B1)`
Toplama (Sum)	`=SUM(A1:B10)`	`=TOPLA(A1:B10)`

Google Sheets

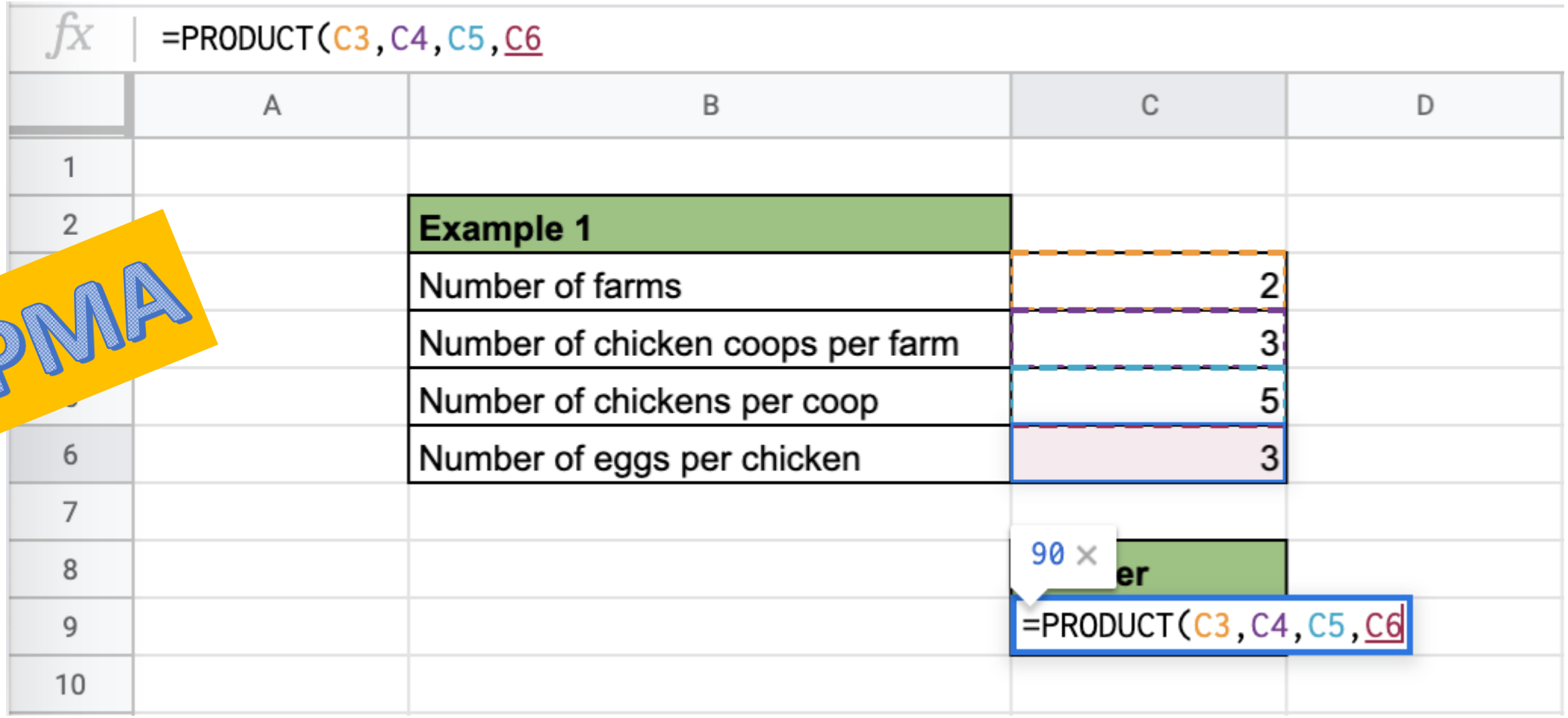
SUM

TOPLAMA



PRODUCT

ÇARPMA



Google Sheets

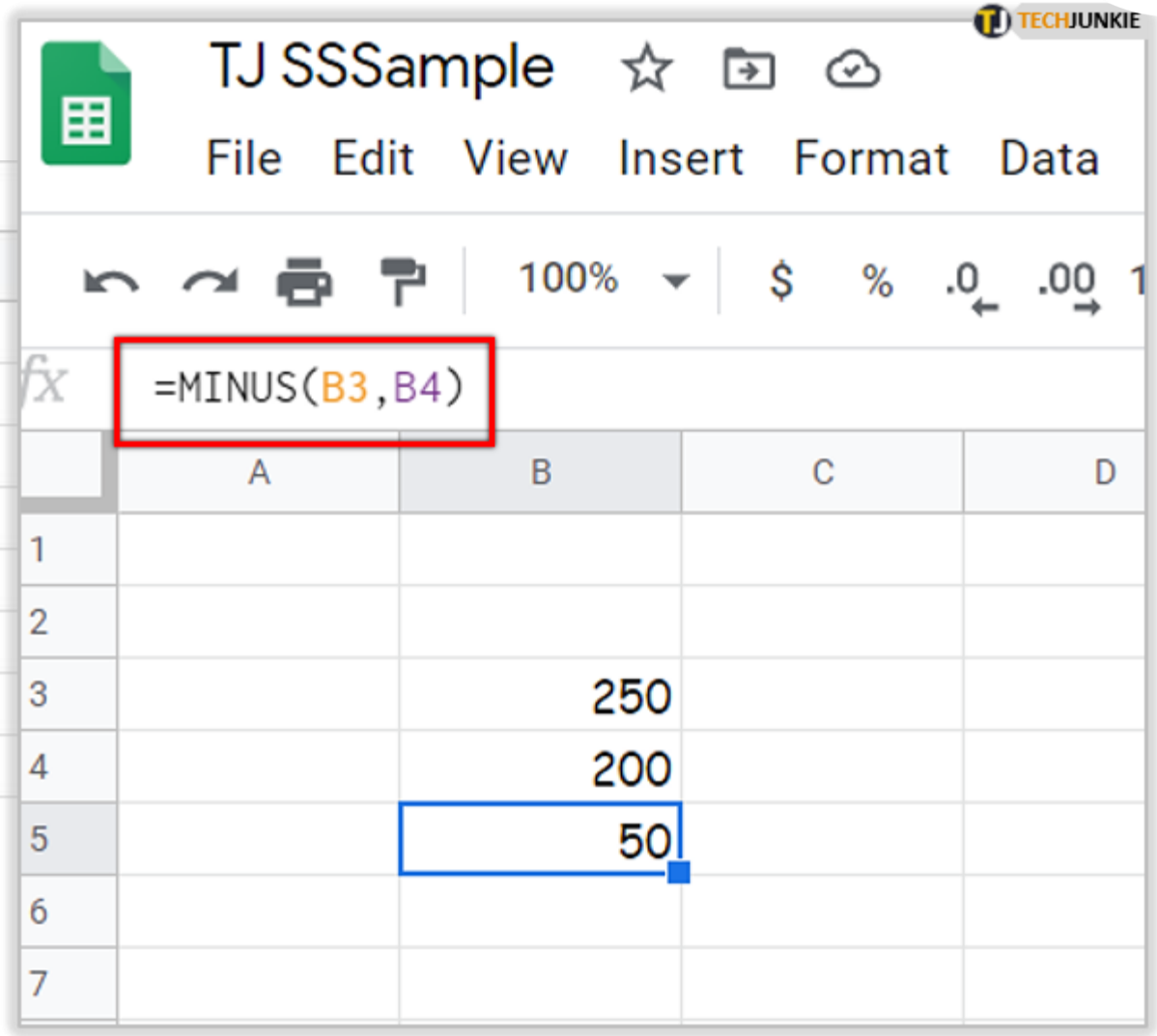
MINUS

=A2-B2 ← formula bar

	A	B	C
1	Income	Expenditure	Balance
2	7390.2	325	7065.2
3	78925.5	1313	
4	98436	3525	
5	2492	1345	
6	2462	213	
7			
8			

result

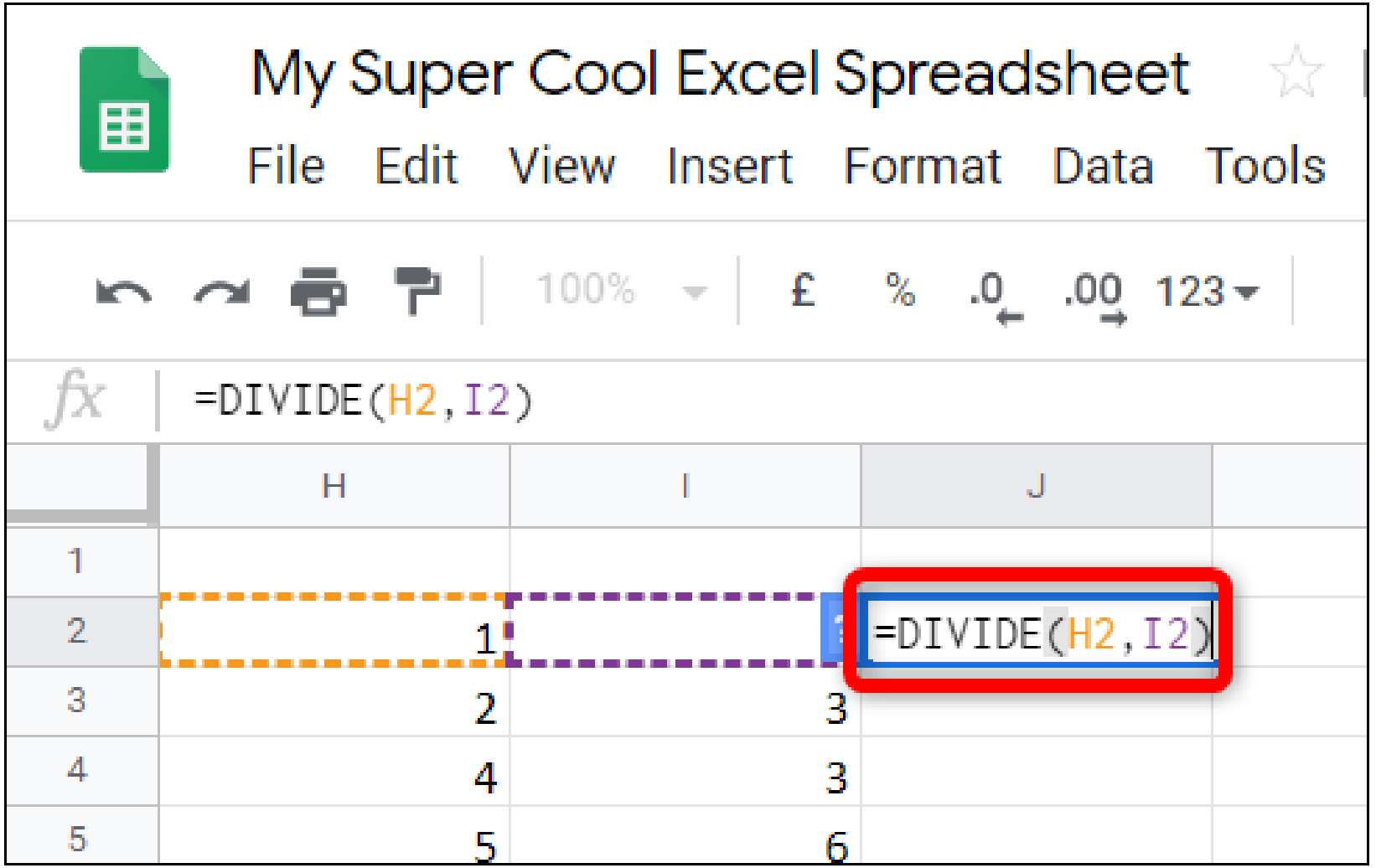
ÇIKARMA



Google Sheets

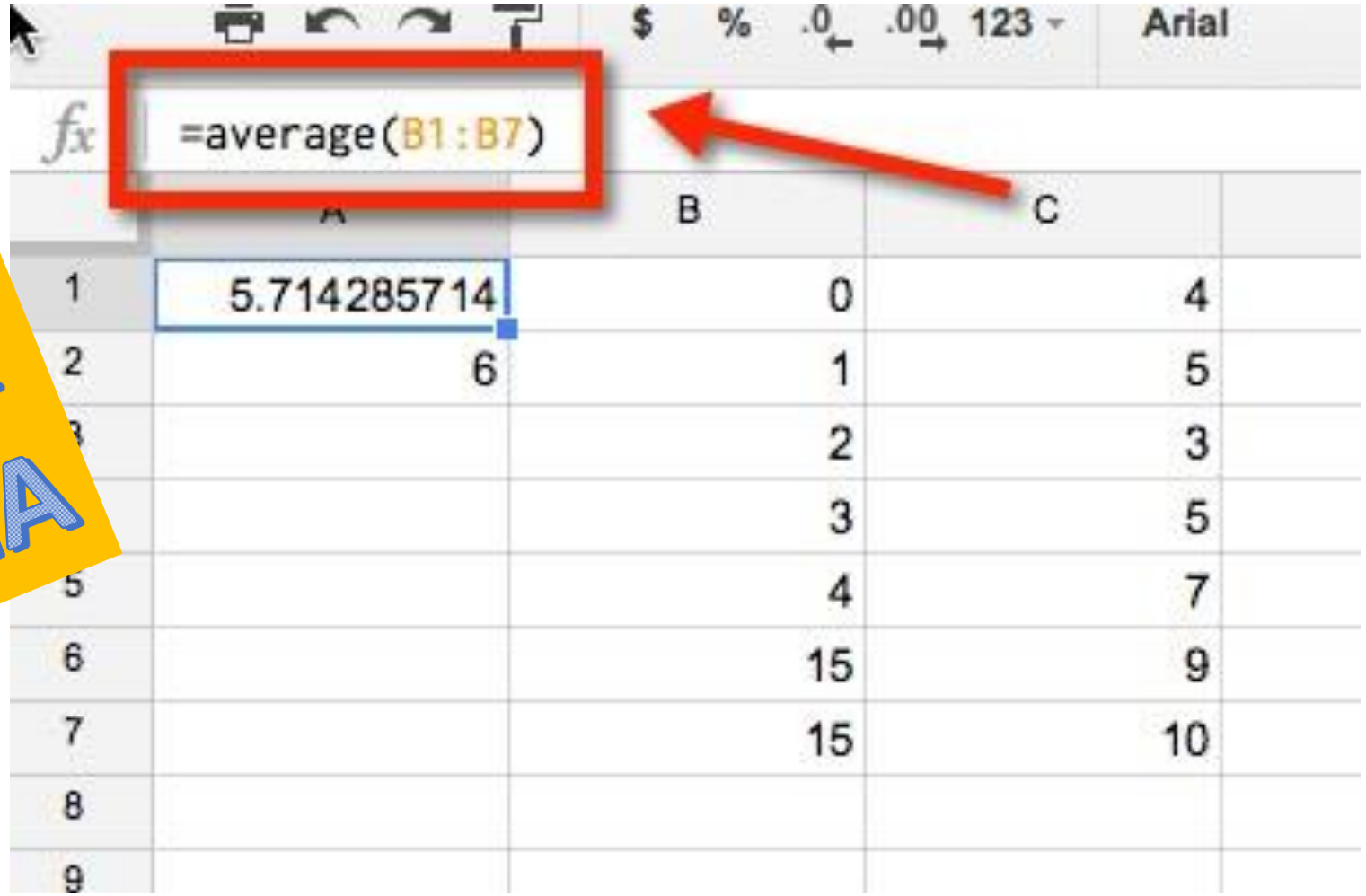
DIVIDE

BÖLME



Google Sheets

AVERAGE



ARİTMATİK ORTALAMA

COUNT

COUNT

Returns the number of numeric values in a dataset.

SAYISAL DEĞERLER

COUNT

General Usage | COUNTA

value
Google
7
1/31/2012
$100.00

Result	Formula
3	=COUNT(A2:A6)

Google Sheets

COUNTA

COUNTA

Returns the number of values in a dataset.

BOŞ OLMAYAN HER ŞEY

	A	B
fx	=COUNTA(A2:A11)	COUNTA FUNCTION
1	**Customer Name**	TOTAL ORDERED AMOUNT
2	Richie Dyer	$4,324.00
3	Craig Zamora	$865.00
4		
5		
6	Jennie Mayer	$978.00
7		
8	Ziba Barber	$4,324.00
9		
10	Sahib Mckinney	$320.00
11	Juliet Rodrigues	$7,634.00
12		
13		no. of cells that are not
14	6	blank

Google Sheets

MIN

MIN

Returns the minimum value in a numeric dataset.

MIN : General Usage

number	
3	
5	
-1	
4	
2	

Result	Formula
-1	=MIN(A2:A6)

Google Sheets

MAX

MAX

Returns the maximum value in a numeric dataset.

MAX : General Usage

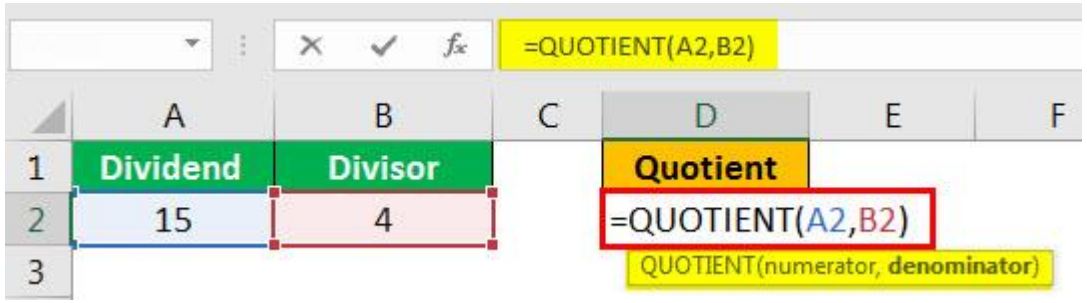
number	
3	
5	
-1	
4	
2	

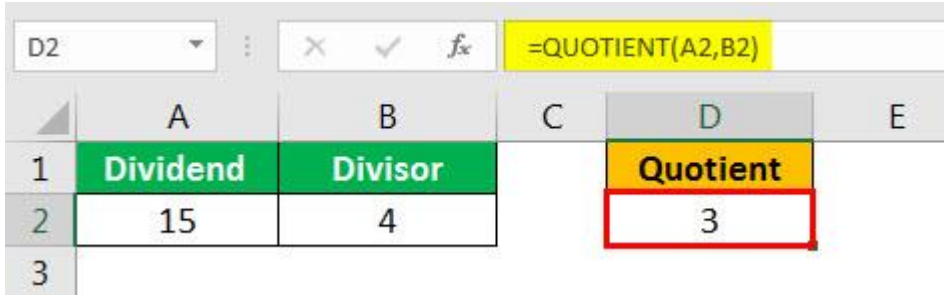
Result	Formula
5	=MAX(A2:A6)

Google Sheets

QUOTIENT

The QUOTIENT function returns the integer portion of division without the remainder. ...





Google Sheets

UNIQUE

=UNIQUE(A2:A15)

	A	B	C	D	E	F
1	**Name**	**Age**	**Result #1**	**Formula Used**		
2	David	21	David	=Unique(A2:A15)		
3	Eric	23	Eric			
4	Brett	19	Brett			
5	Francis	22	Francis			
6	Angela	25	Angela			
7	Caroline	27	Caroline			
8	Charlie	20	Charlie			
9	Alfred	23	Alfred			
10	David	21	Dennis			
11	Dennis	21	Bob			
12	Bob	24	Evan			
13	Caroline	28				
14	Evan	26				
15	Eric	25				
16						
17						
18						
19						

UNIQUE (Multiple Columns)

=unique(A2:B15)

	A	B	C	D	E	F
1	**Name**	**Age**	**Result #2**		**Formula Used**	
2	David	21	David	21	=Unique(A2:B15)	
3	Eric	23	Eric	23		
4	Brett	19	Brett	19		
5	Francis	22	Francis	22		
6	Angela	25	Angela	25		
7	Caroline	27	Caroline	27		
8	Charlie	20	Charlie	20		
9	Alfred	23	Alfred	23		
10	David	21	Dennis	21		
11	Dennis	21	Bob	24		
12	Bob	24	Caroline	28		
13	Caroline	28	Evan	26		
14	Evan	26	Eric	25		
15	Eric	25				
16						
17						
18						
19						

TECHPRO EDUCATION

IF CONDITIONS

Logical Operators in Excel

Operator Symbol	Operator Name	Description
=	Equal to	Compares One Value to Other Value
>	Greater Than	Tests whether the value is greater than certain value or not
<	Less Than	Tests whether the value is less than certain value or not
>=	Greater Than or Equal To	Tests whether the value is greater than or equal to certain value or not
<=	Less Than or Equal To	Tests whether the value is less than or equal to certain value or not
<>	Not Equal To	Tests whether particular value is not equal to certain value

IF CONDITIONS

TECHPRO EDUCATION

Operatör	Açıklama	Python Kullanımı	Google Sheets Kullanımı
Eşittir	İki değer birbirine eşit mi?	`==`	`=`
Eşit Değildir	İki değer birbirine eşit değil mi?	`!=`	`<>`
Büyüktür	Sol taraf, sağ taraftan büyük mü?	`>`	`>`
Küçüktür	Sol taraf, sağ taraftan küçük mü?	`<`	`<`
Büyük veya Eşit	Sol taraf, sağ tarafa eşit veya büyük mü?	`>=`	`>=`
Küçük veya Eşit	Sol taraf, sağ tarafa eşit veya küçük mü?	`<=`	`<=`

IF CONDITIONS

TECHPRO EDUCATION

IF Functions

=IF(logical_expression, true_value, false_value)

A spreadsheet calculates the value of an IF function by first evaluating the logical expression.

If the expression is TRUE, then the first value in the function is used.

If the expression is FALSE, then the second value in the function is used.

= IF (Cell C2 >= Cell D2, "Yes it is", "No it isn't")

i.e.

When C2 is 9 and D2 is 7, the result = "Yes it is"

When C2 is 3 and D2 is 5, the result = "No it isn't"

IF Function

=IF(logical_expression, value_if_true, value_if_false)

IF CONDITIONS

TECHPRO EDUCATION

```
=IF(A1 > 10, B1, C1)
```

```
if a > 10:
    print(b)
else:
    print(c)
```

IF CONDITIONS

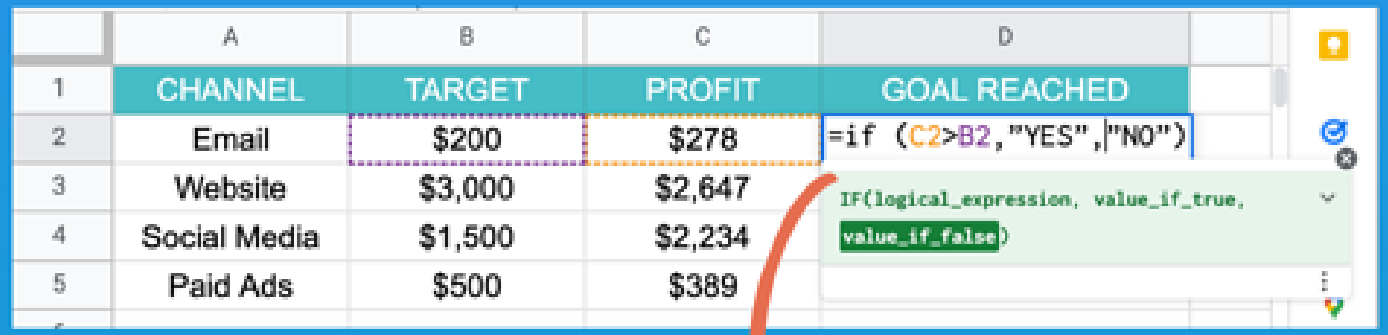
TECHPRO EDUCATION

How to enter the IF function:

	Logical expression	Value IF TRUE	Value IF FALSE
=IF	(A2>0,	1,	0)

IF CONDITIONS

TECHPRO EDUCATION




```
=if(C2>B2,"YES”,”NO”)
```

Condition with value
C2 is higher than B2

If return TRUE,
change return value as "YES"

If return FALSE,
change return value as "NO"

IFS CONDITIONS

TECHPRO EDUCATION

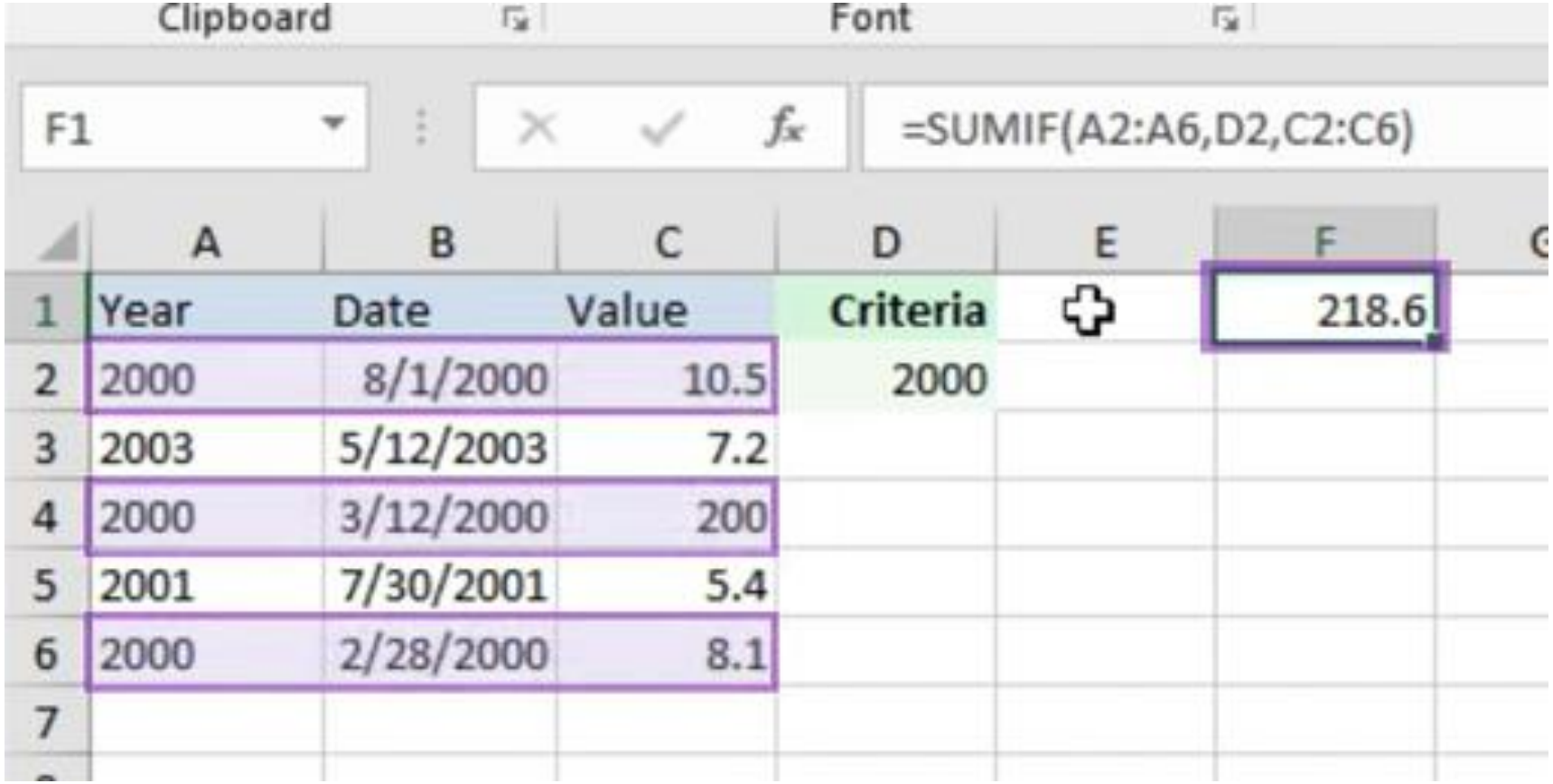
C2 | fx | =IFS(B2<50,"Fail",B2<80,"Pass",B2>=80,"Pass with distinction")

	A	B	C
1	**Student**	**Result**	**Grade**
2	Bob	70	Pass
3	Jenny	90	Pass with distinction
4	Malik	86	Pass with distinction
5	Sue	49	Fail
6			

IFS CONDITIONS

TECHPRO EDUCATION

SUMIF



IFS CONDITIONS

TECHPRO EDUCATION

AVERAGEIF

B9 | =AVERAGEIF(A1:A7,"Apple",B1:B7)

	A	B	C	D	E	F	G	H	I
1	Banana	70							
2	Strawberry	1							
3	Apple	4							
4	Pear	60							
5	Kiwi	20							
6	Raspberry	5							
7	Apple	8							
8									
9		6							
10									

IFS CONDITIONS

TECHPRO EDUCATION

COUNTIF

G3

=COUNTIF($B$2:$B$11,"<>Joe")

	A	B	C	F	G
1	Product	Sales Rep	Quantity		
2	Product A	Joe	9		
3	Product B	Jane	9		
4	Product C	Martha	10		
5	Product D	Joe	4		
6	Product E	Jane	11		
7	Product F	Joe	3		
8	Product G	Charlie	4		
9	Product H	Bob	7		
10	Product I	Tom	9		
11	Product J	Bob	5		

Result
7

CONDITIONS (AND,OR)

TECHPRO EDUCATION

	A	B	C	D	E
1	A	B	C	D	
2	2	15	100	ADIDAS	KÜÇÜK
3	5	9	200	NIKE	
4	10	11	300	NEW BALANCE	
5	12	16	400	TURBO	
6	15	18	500	XT	
7	20	15	100	ADIDAS	BÜYÜK
8					
9					
10					
11					
12					
13					
14					
15					
16	Seçildi				
17					
18					

```
=IF(AND(A2>10, D2="ADIDAS"), "BÜYÜK", "KÜÇÜK")
```

```
=IF(AND(A7>10, D7="ADIDAS"), "BÜYÜK", "KÜÇÜK")
```

```
=IF(OR(D2="ADIDAS",D2="NIKE"),"Seçildi","Seçilmedi")
```