Basic Functions

FINANCIAL EDGE

COUNT Function

The **COUNT Function** counts the
number of **cells containing numbers**

Hard Codes

Cell References

Cell Ranges

Not included

Cells with texting cells with **zeros in errors**

$$COUNT(value1, [value2], ...)$$

Typically include a number of cells

MIN Function

MIN functions returns the **smallest number provided**

Hard Coded Number	Cell Reference	Cell Range

Lower of a **number of values**

MIN(number1, [number2], ...)

Debt = 1000

Cash available = 200

MIN function would return 200, indicating 200 of debt can be repaid with the cash available

MAX Function

MAX(number1, [number2], ...)

Hard Coded Numbers
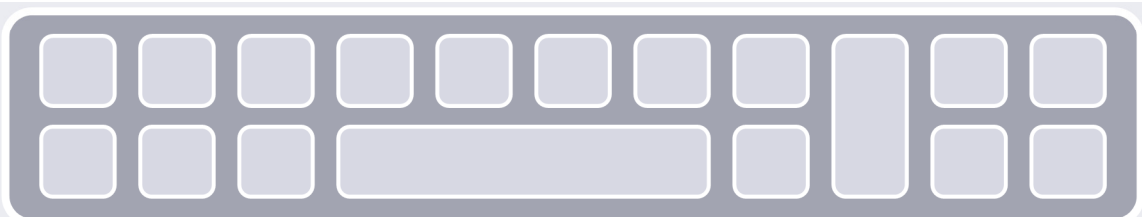
Named Cells

Links to Cells

Ignores Empty Cells and Zeros

Highest sales figure for the year

Providing a **lower limit**

AVERAGE Function

AVERAGE(number1, [number2], ...)

Hard Coded Numbers

Names

Ranges

Cell References

If text is **provided**

Creates error ✖ Average ignores **empty cells**

IF Function

IF

(Something is true, then do something,
otherwise do something else)

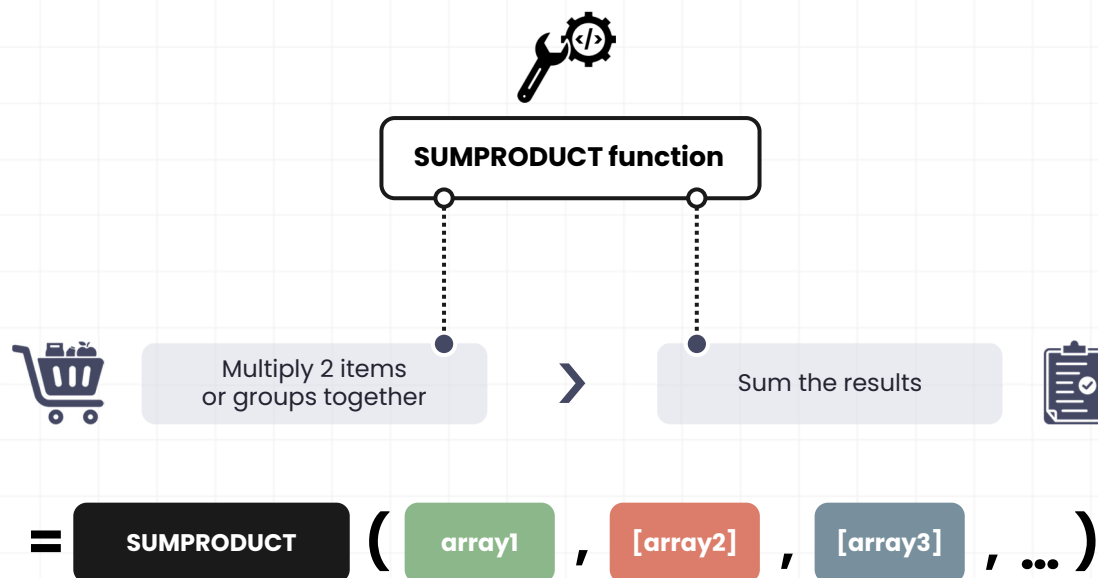| Description	Operator	Excel Formula
Equals	=	A1 = A2
Greater than	>	A1 > A2
Greater than or equal to	>=	A1 >= A2
Less than	<	A1 < A2
Less than or equal to	<=	A1 <= A2
Does not equal	<>	A1 <> A2

SUMPRODUCT Function

SUMPRODUCT function

Multiply 2 items or groups together › Sum the results

= SUMPRODUCT (array1 , [array2] , [array3] , ...)

SUMPRODUCT function

Removes an **intermediate step**

	A	B	C	D	E	F	G
4	**Workout 1**						
5	Calculate total sales.						
6	Calculate it first using the intermediate step.						
7	Then calculate it directly from the inputs using SUMPRODUCT, avoiding the intermediate step.						
8							
9			Units sold	Price per unit	Total sales		
10			15.0	10.0	150.0	=C10*D10	
11			39.0	11.0	429.0	=C11*D11	
12			47.0	9.0	423.0	=C12*D12	
13			25.0	10.0	250.0	=C13*D13	
14			6.0	9.0	54.0	=C14*D14	
15			5.0	11.0	55.0	=C15*D15	
16			38.0	10.0	380.0	=C16*D16	
17	Total				1,741.0	=SUM(E10:E16)	
18							
19	Total using SUMPRODUCT				1,741.0	=SUMPRODUCT(C10:C16,D10:D16)	

FINANCIAL**EDGE**

SUMPRODUCT with Add, Subtract and Divide

Using Other Operators

Instead of multiplying and then summing, SUMPRODUCT can replace the commas with **arithmetic operators *, /, +, -** and then **sum the results as normal**

	A	B	C	D	E	F	G	H
101	Workout 7							
102	Calculate profit.							
103	Calculate it first using the intermediate column "profit".							
104	Then calculate it directly from the inputs using SUMPRODUCT, avoiding the intermediate step.							
105								
106			Sales	Costs	Profit			
107			3,000.0	2,000.0	1,000.0	=C107-D107		
108			6,000.0	4,500.0	1,500.0	=C108-D108		
109			4,500.0	3,600.0	900.0	=C109-D109		
110	Total profit				3,400.0	=SUM(E107:E109)		
111								
112	Total profit using SUMPRODUCT				3,400.0	=SUMPRODUCT(C107:C109-D107:D109)		

Using Conditions

SUMPRODUCT can apply conditions to select a subset of data before **calculating the normal multiplication** and **sum**

This can also be done with the:

SUMIF function	SUMIFS function