Top 10 Formulas

Financial Modeling in Excel



10 Excel functions you should know

=SUMIFS()

SUMIFS function adds all of its arguments that meet multiple criteria. For example, you would use SUMIFS in your financial model to sum up the sales of (1) a specific employee (2) for a specific product.

=SUMIFS

(sum range (e.g. sales), criteria range 1 (e.g. employee), criteria 1 (e.g. Tim), criteria range 2 (e.g. Product), criteria 2, (e.g. Chairs))

Employee	Product	Sales
Laura	Tables	\$3,441
Mike	Chairs	\$5,110
Tim	Pillows	\$5,643
Phoebe	Tables	\$4,921
Tim	Chairs	\$4,839
Phoebe	Chairs	\$3,768
Mike	Chairs	\$4,707
Laura	Beds	\$5,361
Tim	Chairs	\$3,304
Phoebe	Tables	\$4,744

Employee	Product	Sales		
Tim	=SUMIFS(F8:F17,	D8:D17,D21,	,E21)	
	SUMIFS(sum_range, o	riteria_range1, criteria1	, [criteria_range2, criteri	a2], [criteria_range3, criteria3],)
	Chairs	\$8,143		

Know your IFs, COUNTIFS, AVERAGEIFS and all other IFs too - after all, financial modeling is just a series of IFs that could happen in this world.

=IFERROR()

Use IFERROR function to format your financial models. The function checks for errors and returns the value specified by the user if found. The function checks for the following errors: #N/A, #VALUE!, #REF!, #DIV/0!, #NUM!, #NAME? or #NULL!.

=IFERROR(value, value_if_error)

Month	Total Wages Allocated	Employees	Wage
Jan	\$3,200	2	\$1,600
Feb	\$1,600	1	\$1,600
Mar (shop closed)	\$0	0	=IFERROR(D10/E10,0)
3	-		IFERROR(value , value_if_error
		No IFFERROR	#DIV/0!
		IFERROR	\$0

10 Excel functions you should know

=XIRR()

Internal rate of return metric is needed to find out the annual growth rate of an investment. The higher the IRR, the better the investment (keeping all other factors the same, of course). IRR is good for comparing different investment opportunities.

=XIRR(cash flow values, dates of cash flows)

	1	2	3	4	5
Date	7/12/2021	8/11/2021	9/10/2021	10/10/2021	11/9/2021
Cash Flow	-1000	-550	750	1000	1250

=XIRR(E6:16,E5:15)

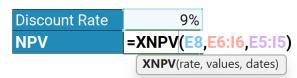
XIRR(values, dates, [guess])

=XNPV()

Finance is money and we all know that money today is worth more than tomorrow. Financial analysts oftentimes have to calculate the value of an investment/company/project in today's terms.

=XNPV(discount rate, cash flow values, dates of cash flow)

	1	2	3	4	5
Date	7/12/2021	8/11/2021	9/10/2021	10/10/2021	11/9/2021
Cash Flow	-1000	-550	750	1000	1250

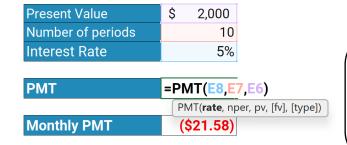


10 Excel functions you should know

=PMT()

PMT function calculates the payment for a loan based on constant payments and a constant interest rate. You have to know the present loan value, number of periods and the interest rate. PMT, PPMT and IPMT functions are needed to figure out annuity loan repayments (e.g. mortgage)

=PMT(interest rate, number of periods, present value)



=PMT()
calculates
periodic
payment for
a loan in total

=PPMT()
calculates
the payment
on the principal for a loan

=IPMT()
calculates the
interest
payment on
the loan

=SLOPE()

If you're into investment banking, at some point you'll have to calculate the Beta of a stock, which means volatility. By using the SLOPE function in Excel, you'll find it easily by using the returns of the stock and the comparative benchmark index.

=SLOPE

(% of equity change range, % range of change of index)

J	K	L	M	N	0	Р	Q
ВЕТА	=SLOPE(7:L52;Q7:	:Q52				
		nown_ys; kn	own_xs)				
STOCI	(IND	EX	
Date	Close	Change			Date	Close	Change
11.10.2021	\$ 294.23				11.10.2021	\$14,445.00	
12.10.2021	\$ 292.88	-0.4609			12.10.2021	\$14,525.00	0.55077
13.10.2021	\$ 296.31	1.1576			13.10.2021	\$14,800.00	1.85810
14.10.2021	\$ 302.75	2.1272			14.10.2021	\$14,935.00	0.90391
15.10.2021	\$ 304.21	0.4799			15.10.2021	\$14,910.00	-0.1676
18.10.2021	\$ 307.29	1.0023			18.10.2021	\$15,015.00	0.69930
19.10.2021	\$ 308.23	0.305			19.10.2021	\$15,145.00	0.85836
20.10.2021	\$ 307.41	-0.2667			20.10.2021	\$15,190.00	0.29624
21.10.2021	\$ 310.76	1.078			21.10.2021	\$15,285.00	0.62152
22.10.2021	\$ 309.16	-0.5175			22.10.2021	\$15,445.00	1.03593
25.10.2021	\$ 308.13	-0.3343			25.10.2021	\$15,465.00	0.12932
26.10.2021	\$ 310.11	0.6385			26.10.2021	\$15,475.00	0.0646
27.10.2021	\$ 323.17	4.0412			27.10.2021	\$15,490.00	0.09683
28.10.2021	\$ 324.35	0.3638			28.10.2021	\$15,580.00	0.57766
29.10.2021	\$ 331.62	2.1923			29.10.2021	\$15,605.00	0.16020
01.11.2021	\$ 329.37	-0.6831			01.11.2021	\$15,715.00	0.69996

10 Excel functions you should know

=XLOOKUP

Lookup functions are a must to know for any modeler. They are used to quickly and easily find data in a table, for example, to find the amount sold by an employee, ID number, and thousands of other things.

=XLOOKUP(what do you want to look up, where can it be found,

what do you want to return)

Employee	Sold
Laura	\$5,000
Mike	\$4,000
Tim	\$2,900
Phoebe	\$5,120

Laura =XLOOKUP(C14,C9:C12,D9:D12)

XLOOKUP(lookup_value, lookup_array, return_array,

=INDEX() & MATCH()

Sometimes, XLOOKUP won't do the job, as it can only compare one array with another one. Index and Match function combination can look up values in the whole table - it's 2 Dimensional.

=INDEX (what you want to return,

=MATCH
(what are you looking
for, where can it be found)

Select:	Player	Stage	Points	_		
INDEX(\$B\$7:\$G\$10,MA	TCH(\$B\$3	\$B\$7:\$B\$	10,0),MA	ГСН(<mark>\$С\$3</mark> ,	\$B\$7:\$G\$
	MA	TCH(lookup_	value, looku	p_array , [ma	tch_type])	
	Diarmuid Early	Stage 3	830			
				•		
	Player	Stage 1	Stage 2	Stage 3	Stage 4	Total
	Player Laurence Lau	Stage 1 1000	Stage 2 957	Stage 3 1000	Stage 4 959	Total 3916
		1000				

10 Excel functions you should know

=EOMONTH()

EOMONTH function finds the last day of the month after you add a specific number of months to a date. It's useful for calculating maturity dates or due dates that fall on the last day of the month. It also aids in setting up your financial model.

=EOMONTH

(start_date, months you want to add/substract)

=EDATE() will aid in adding months to a specified start date



=SEQUENCE

The SEQUENCE function allows you to generate a list of sequential numbers in an array. SEQUENCE function works great if you need to generate a list of 10,000 numbers in a column.

=SEQUENCE (number of rows you want to generate, number of columns you want to generate, starting point, step)

=SEQUENC	=SEQUENCE(5,5) 3			5
SEQUENC	SEQUENCE (rows, [columns], [start], [step])			
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25