Lookup & Date Functions

01 August 2024 21:01

Lookup & Date Functions

- V Lookup [Vertical Table]
- H Lookup [Horizontal Table]

INDEX Function:

The INDEX function in Google Sheets returns the value of a cell in a specified row and column of a range. The syntax is as follows:

```
=INDEX(range, row_number, column_number)
```

- **range**: The range of cells from which to retrieve the value.
- **row_number**: The row number within the range.
- **column_number**: The column number within the range.

MATCH Function:

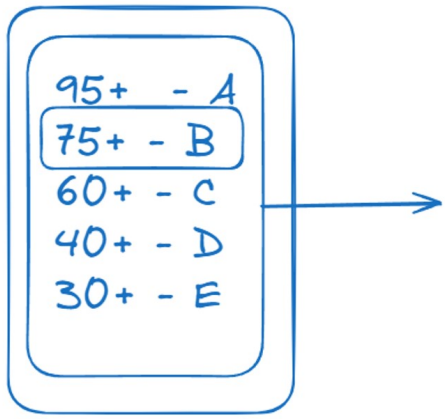
The MATCH function searches for a specified value in a range and returns the relative position of that item. The syntax is as follows:

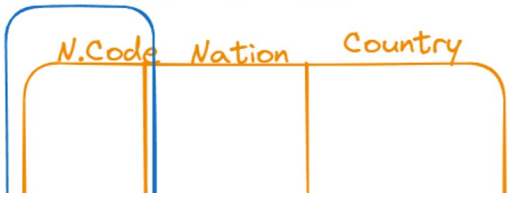
Plain Text Copy

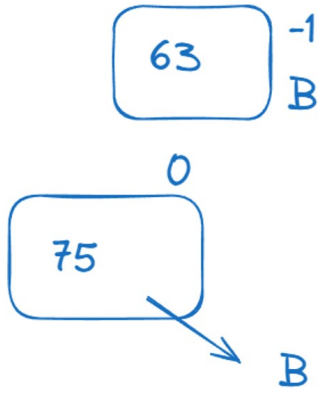
```
=MATCH(search_key, search_range, [search_type])
```

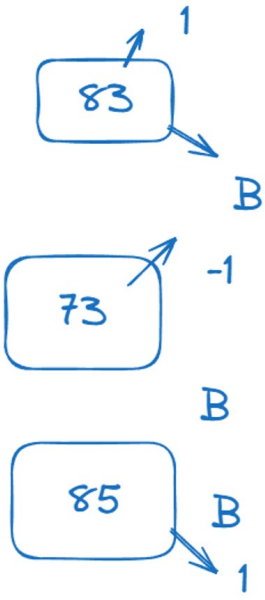
- **search_key**: The value to search for.
- **search_range**: The range of cells to search within.
- **search_type**: *(optional)* The type of match: 1 for less than, 0 for an exact match, -1 for greater than. If omitted, it defaults to 1.

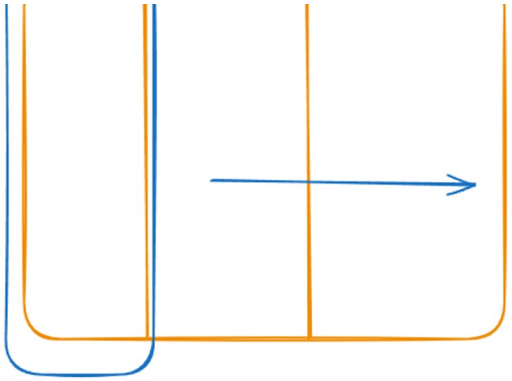
String Data Type.

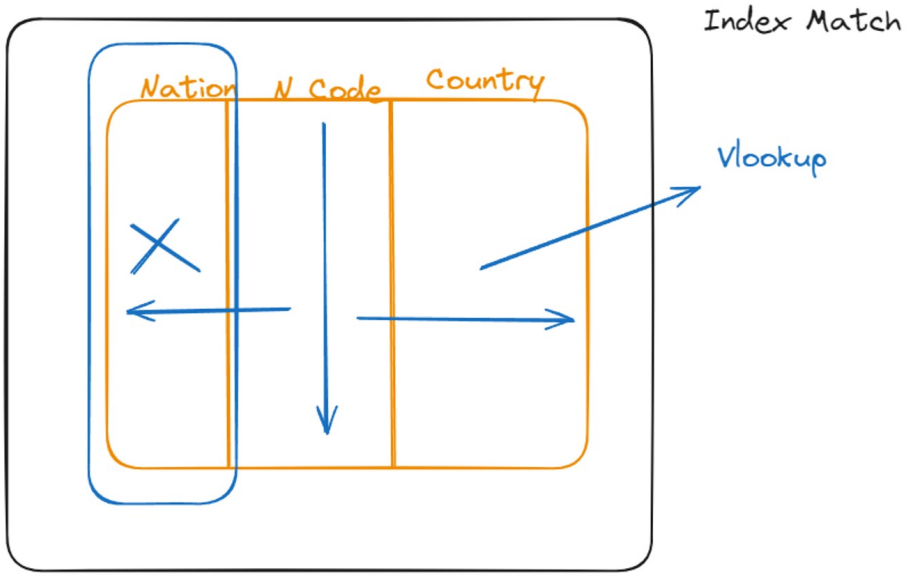




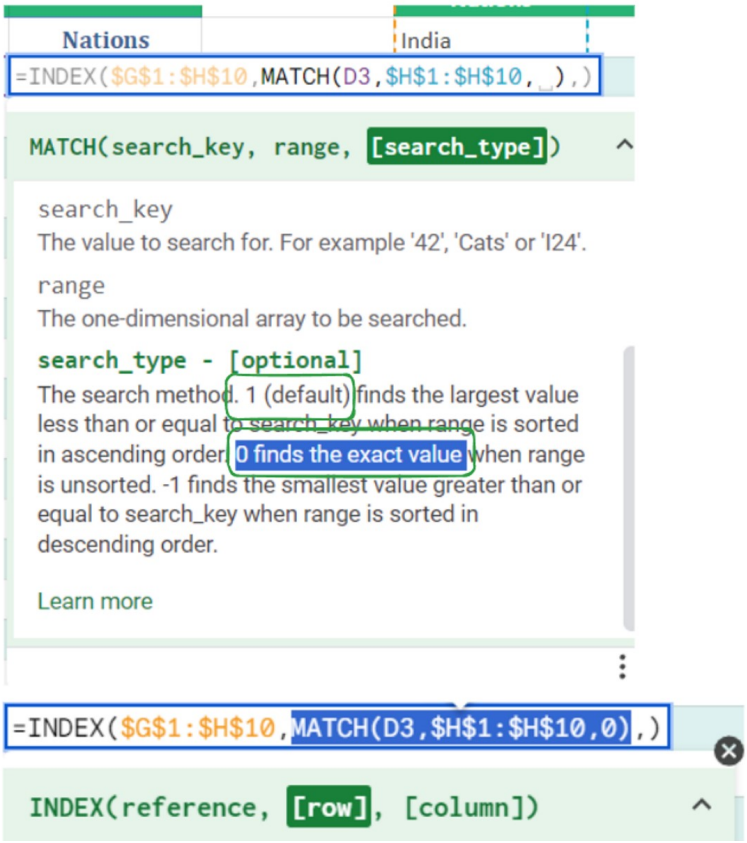








Index - Match / X Lookup : [Useful in all direction].



INDEX(reference, [row], [column])

ABOUT

Returns the content of a cell specified by row and column offset.

`reference`

The array of cells to be offset into.

`row - [optional]`

The number of offset rows.

`column - [optional]`

The number of offset columns.

Learn more

vertical Table - Column fixed
Horizontal Table - Row Fixed

E3 | =INDEX($G$1:$H$10,MATCH(D3,$H$1:$H$10,0),1)

	A	B	C	D	E	F	G	H
1	Test Cricket - Top 100 Batsman (Nov - 2010)						Nations	N.Code
2	ID	Ratings	Name	N.Code	Nations		India	IND
3	1	891	S.R. Tendulkar	IND	India		Sri Lanka	SL
4	2	874	K.C. Sangakkara	SL	Sri Lanka		West Indies	WI
5	3	819	V. Sehwag	IND	India		South Africa	SA
6	4	807	S. Chanderpaul	WI	West Indies		New Zealand	NZ
7	5	807	D.P.M.D. Jayaward	SL	Sri Lanka		Australia	AUS
8	5	791	J.H. Kallis	SA	South Africa		England	ENG
9	7	787	G.C. Smith	SA	South Africa		Pakistan	PAK
10	8	767	V.V.S. Laxman	IND	India		Bangladesh	BAN
11	9	766	R.L. Taylor	NZ	New Zealand			
12	10	762	A.B. de Villiers	SA	South Africa			
13	11	748	T.T. Samaraweera	SL	Sri Lanka			
14	12	745	H.M. Amla	SA	South Africa			
15	13	738	M.J. Clarke	AUS	Australia			
16	14	735	S.M. Katich	AUS	Australia			
17	15	733	I.J.L. Trott	ENG	England			

```
=INDEX(range, row_number, column_number)
```

```
=MATCH(search_key, search_range, [search_type])
```

- **search_key**: The value to search for.
- **search_range**: The range of cells to search within.
- **search_type**: *(optional)* The type of match: 1 for less than, 0 for an exact match, -1 for greater than. If omitted, it defaults to 1.

fx =INDEX($H$3:$P$4,2,MATCH(B3,$H$3:$P$3,0))

	E	F	G	H	I	J	K	L	M
	Amount	Commission	Commission						

=INDEX($H$3:$P$4,2,MATCH(B3,$H$3:$P$3,0))

Amount	Commission	Commission
3112	3%	3%
3850	4%	4%
2313	4%	4%
1565	7%	7%
5740	10%	10%
5840	12%	12%
1884	10%	10%
548	11%	11%
969	3%	3%
3560	4%	4%

Builder	Doug	Dave	Brian	Larry	Rob
Commission	3%	4%	7%	10%	12%

H-Lookup with Index Match - Row is fixed & columns are changing.

```
=INDEX(range, row_number, column_number)
```

Builder	Builder
Doug	Doug
Dave	Dave
Dave	Dave
Brian	Brian
Larry	Larry
Rob	Rob
Morgan	Larry
Jones	Jones
Doug	Doug
Dave	Dave
Dave	Dave
Brian	Brian
Larry	Larry
Rob	Rob
Doug	Doug
Dave	Dave

Builder	Doug	Dave	Brian	Larry	Rob
Commission	3%	4%	7%	10%	12%

Doug	Dave	Brian	Larry	Rob	Morgan	Jones	Gill
3%	4%	7%	10%	12%	10%	11%	4%

- Date Function()

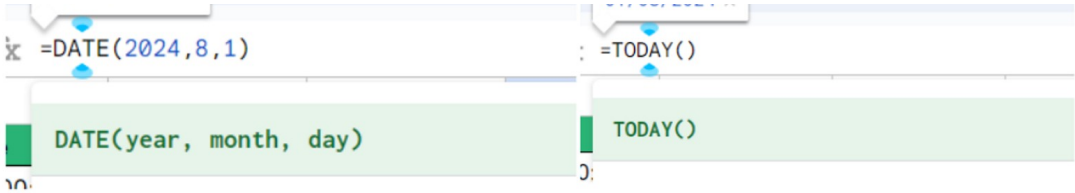
Date	Item	Sales	DATE	TODAY	YEAR	MONTH	DAY	DATEDIFF	EOMONTH	EDATE
10/05/2023 00:00:00	A	10500								
11/05/2023 00:00:00	B	23000								
12/05/2023 00:00:00	C	39032								
13/05/2023 00:00:00	D	12600								
14/05/2023 00:00:00	E	45011								

01/08/2024

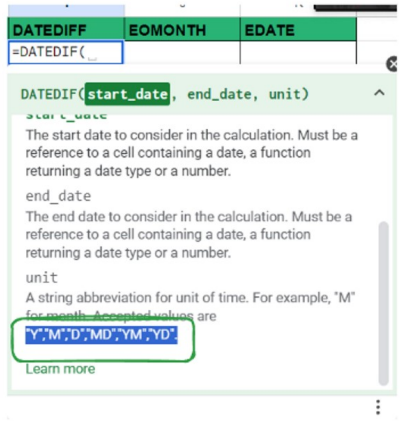
=DATE(2024,8,1)

01/08/2024

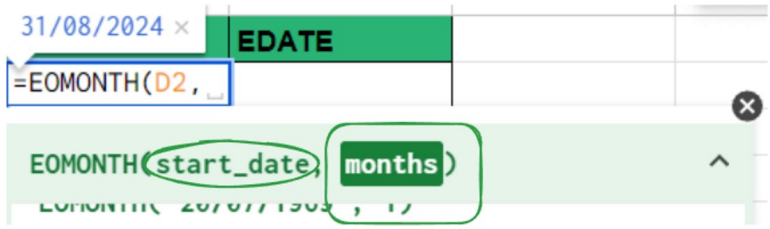
=TODAY()



A	B	C	D	E	F	G	H
Date	**Item**	**Sales**	**DATE**	**TODAY**	**YEAR**	**MONTH**	**DAY**
10/05/2023 00:00:00	A	10500	=DATE(2024,8,1	=TODAY()	=YEAR(A2)	=MONTH(D2)	=DAY(A2)
11/05/2023 00:00:00	B	23000					=DAY(A3)
12/05/2023 00:00:00	C	39032					=DAY(A4)
13/05/2023 00:00:00	D	12600					=DAY(A5)
14/05/2023 00:00:00	E	45011					=DAY(A6)



= EO MONTH - End of Month - 1/Jan/2024 - 31st Jan 2024



+ve value , -ve values.

"08 - August" - -2 → June - 30th June

30/06/2024

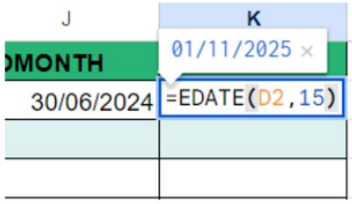
=EOMONTH(30/06/2024,2) + 2 Month : August [End of Month]

=EOMONTH(30/06/2024,2) + 2 Month : August [End of Month]

=EOMONTH(30/06/2024,12) + 12 Month - 1 year - 30th June 2025

=EOMONTH(30/06/2024,-2) -2 Month - 2 months back - April [End on Month]

=EOMONTH(30/06/2024,0) - No Change , just return the EOM.



1. **EDATE Function:**
   - Add or subtract months from a date. In cell K2, you can use the formula: This will give you the date two months after the date in A2.

```
=EDATE(A2, 2)
=EDATE(A2, -2)
```