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[Excel Easy: #1 Excel tutorial on the net \(excel-easy.com\)](http://excel-easy.com)

We offer a tutorial on how to use Excel. Below you can find an overview of all chapters. Want to learn much more about Excel? You can find related examples and features on the right side of each chapter. We make Excel easy!

James - Vancouver, Canada - *"I began to actually understand what I was doing rather than just copying everything into my worksheet."* [\[Read More\]](#)

<https://www.w3schools.com/googlesheets/index.php> googlesheets oversight, meste virker nok også i Excel

You can use the Shift + F9 key (or Shift + Fn + F9) to refresh a sheet instantly



You can also use the F9 key, which will calculate the entire workbook instead of the active sheet.

Ctrl or Command.(mac) og klik flere celler udvælger cellerne samtidigt

Autoudfyld ved dobbeltklik i autoudfyld felt, fill-celle

=A1+B1							
	A	B	C	D	E	F	G
1	1	2					
2	2	4					
3	3	6					
4	4	8					
5	5	10					

fill button, dobbeltklik så
udfyldes resten ned til C5

ned til r5 i stedet for at skulle trække

Introduction

If you're an Excel beginner, this is the perfect place to start.

Microsoft Excel is one of the most used software applications of all time. Hundreds of millions of people around the world use Microsoft Excel. You can use Excel to enter all sorts of data and perform financial, mathematical or statistical calculations.

1 [Range](#): A range in Excel is a collection of two or more cells. This chapter gives an overview of some very important range operations.

2 [Formulas and Functions](#): A formula is an expression which calculates the value of a cell. Functions are predefined formulas and are already available in Excel.

Basics

This section explains the basics of Excel.

1 [Ribbon](#): Excel selects the ribbon's Home tab when you open it. Learn how to use the ribbon.

2 [Workbook](#): A workbook is another word for your Excel file. When you start Excel, click Blank workbook to create an Excel workbook from scratch.

3 [Worksheets](#): A worksheet is a collection of cells where you keep and manipulate the data. Each workbook can contain multiple worksheets.

4 [Format Cells](#): When we format cells in Excel, we change the appearance of a number without changing the number itself.

5 [Find & Select](#): Learn how to use Excel's Find, Replace and Go To Special feature.

6 [Templates](#): Instead of creating an Excel workbook from scratch, you can create a workbook based on a template. There are many free templates available, waiting to be used.

7 [Data Validation](#): Use data validation in Excel to make sure that users enter certain values into a cell.

8 [Keyboard Shortcuts](#): Keyboard shortcuts allow you to do things with your keyboard instead of your mouse to increase your speed.

9 [Print](#): This chapter teaches you how to print a worksheet and how to change some important print settings in Excel.

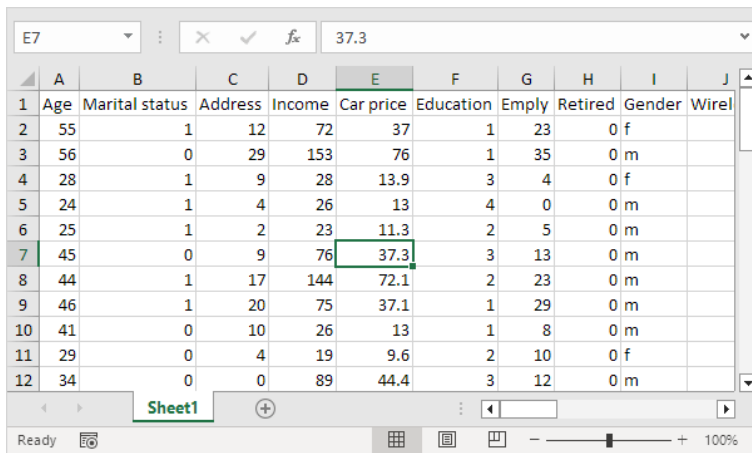
10 [Share](#): Learn how to share Excel data with Word documents and other files.

11 [Protect](#): Encrypt an Excel file with a password so that it requires a password to open it.

Split sheet into more Panes

You can even split your sheet into four panes. To achieve this, execute the following steps.

1. First, select a cell that is not in column A or row 1. Tryk så view/opdel[split] så fås cursor til hver opdeling

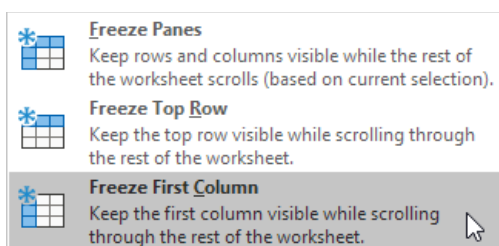
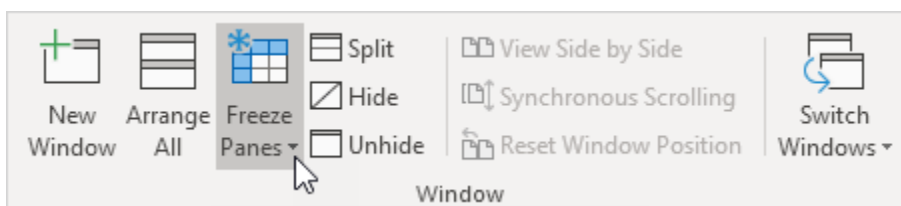


	A	B	C	D	E	F	G	H	I	J
1	Age	Marital status	Address	Income	Car price	Education	Empl	Retired	Gender	Wirel
2	55	1	12	72	37	1	23	0	f	
3	56	0	29	153	76	1	35	0	m	
4	28	1	9	28	13.9	3	4	0	f	
5	24	1	4	26	13	4	0	0	m	
6	25	1	2	23	11.3	2	5	0	m	
7	45	0	9	76	37.3	3	13	0	m	
8	44	1	17	144	72.1	2	23	0	m	
9	46	1	20	75	37.1	1	29	0	m	
10	41	0	10	26	13	1	8	0	m	
11	29	0	4	19	9.6	2	10	0	f	
12	34	0	0	89	44.4	3	12	0	m	

Freeze Top Row, under scrolling

To freeze the top row, execute the following steps.

1. On the View tab, in the Window group, click Freeze Panes.



vælg række, så freeze Panes

/Data/Dataværktøjer/konsolidate kan summere fra tabeller i flere ark

The screenshot displays three Excel workbooks. The top two, 'consolidate' and 'consolidate2', show source data for quarters 1-4. The bottom workbook, 'consolidated', shows the consolidated data with a 'Konsolider' (Consolidate) dialog box open. The dialog box is configured to sum data from the source workbooks.

consolidate - Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1		Quater 1	Quater 2	Quater 3	Quater 4												
2	kaffe	10	20	30	40												
3	te	100	200	300	400												

consolidate2 - Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1		Quater 1	Quater 2	Quater 3													
2	kaffe	10	20	30													
3	te	100	200	300													

consolidated - Excel

B2: Consolidate

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1			Quater 1		Quater 2	Quater 3	Quater 4										
2		Consolidate		10	20	30	40										
3		Consolidate2		10	20	30											
4		kaffe		20	40	60	40										
7		te		200	400	600	400										

Konsolider

Funktion: Sum

Reference: [consolidate.xlsx]Ark1!\$A\$1:\$E\$3

Alle referencer: [consolidate.xlsx]Ark1!\$A\$1:\$E\$3
[consolidate2.xlsx]Ark1!\$A\$1:\$D\$3

Benyt mærkater i:
☒ Øverste række
☒ Venstre kolonne
☒ Øpret kæder til kilde data

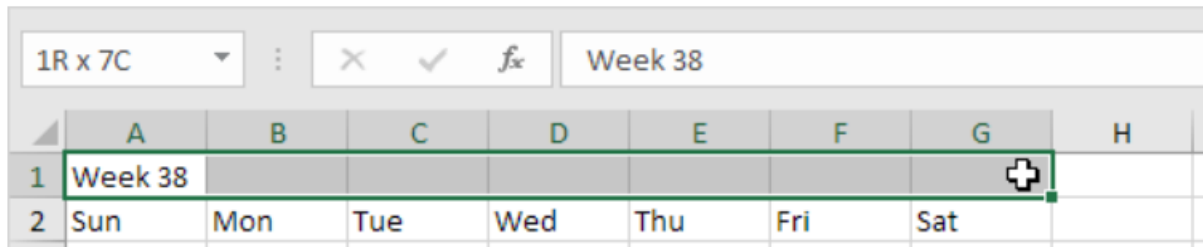
OK

Formattering

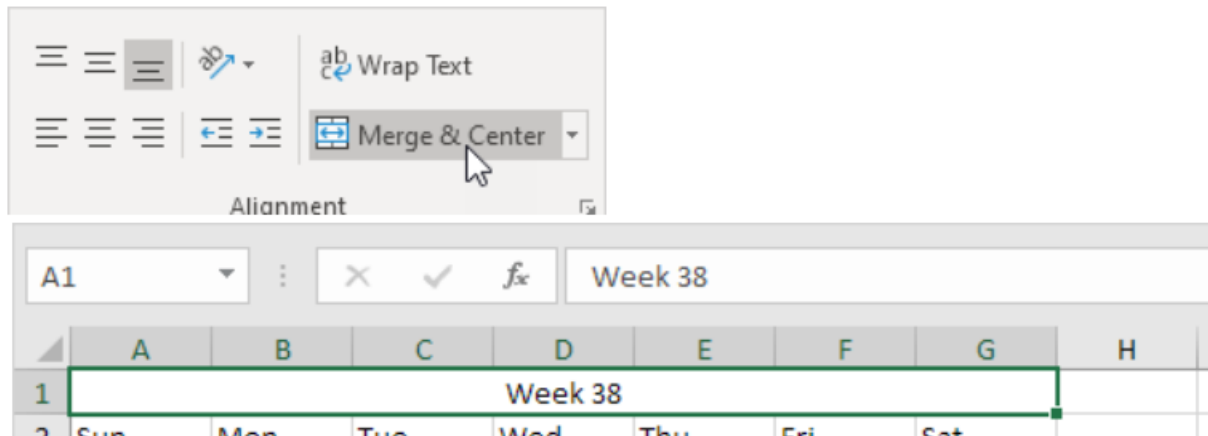
<https://www.excel-easy.com/examples/text-to-numbers.html>

Merge celler

2. Select the range A1:G1.

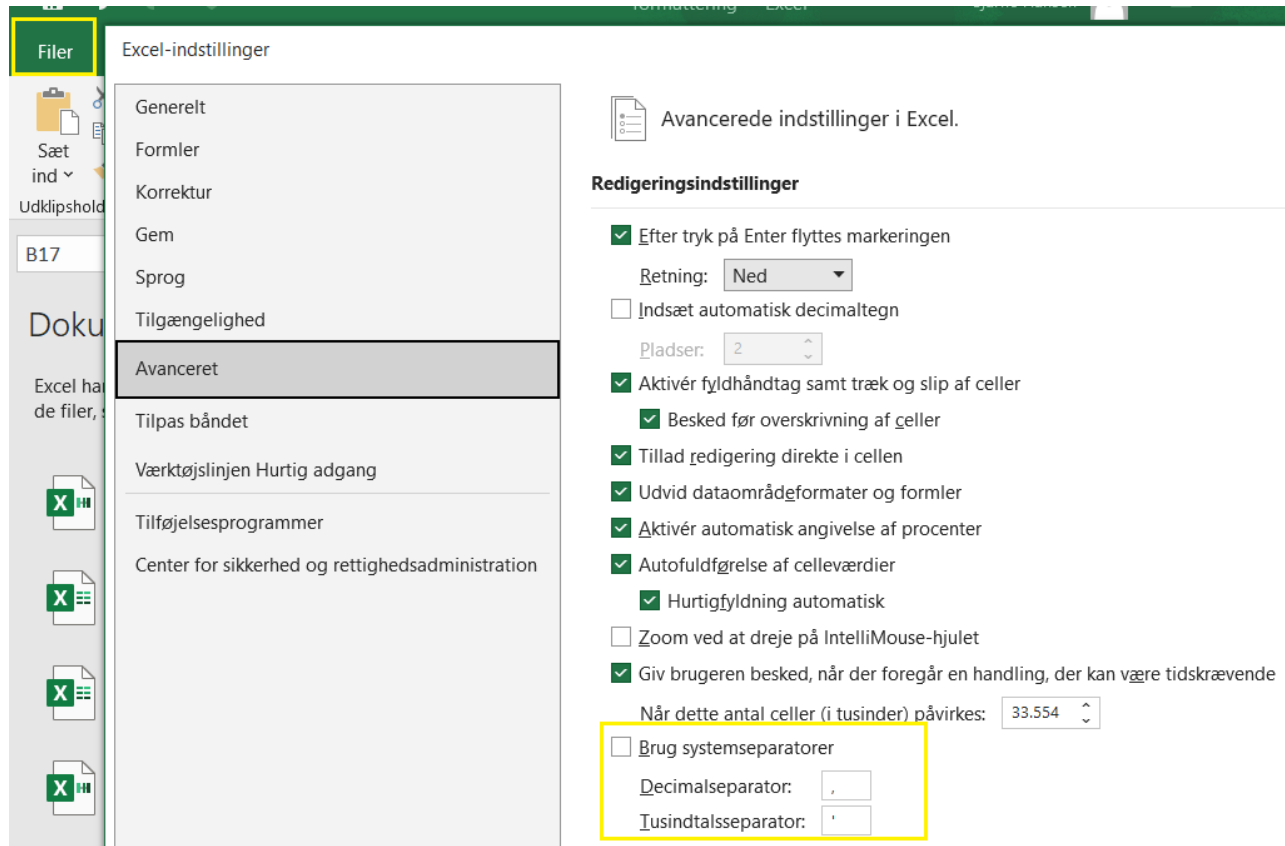


3. On the Home tab, in the Alignment group, click Merge & Center.

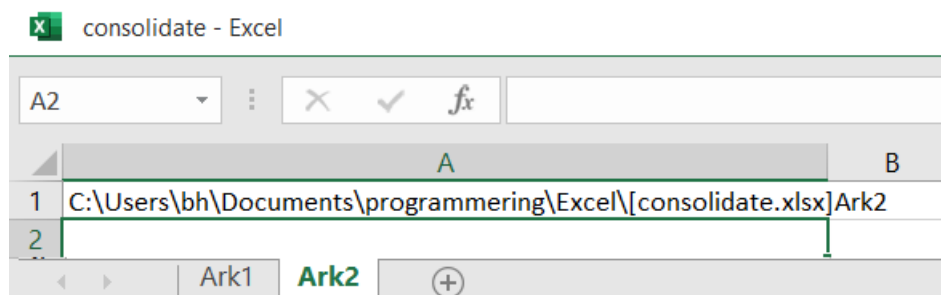


/felt celler

decimaltegn og 1000-talsadskillere indstillinger



=CELLE("filnavn") viser fulde filnavn/sheet-navn udskrevet i aktuelle celle,



Find, <ctrl> i dansk, kan også finde felter med formler

An asterisk (*) matches a series of zero or more characters. For example, F*rrari will find Ferrari, Forrari, Farrari, Foorrari and Faaaaaarrari.

A single question mark (?) matches exactly one (any) character.

Use a* to find all cells that start with the letter a.

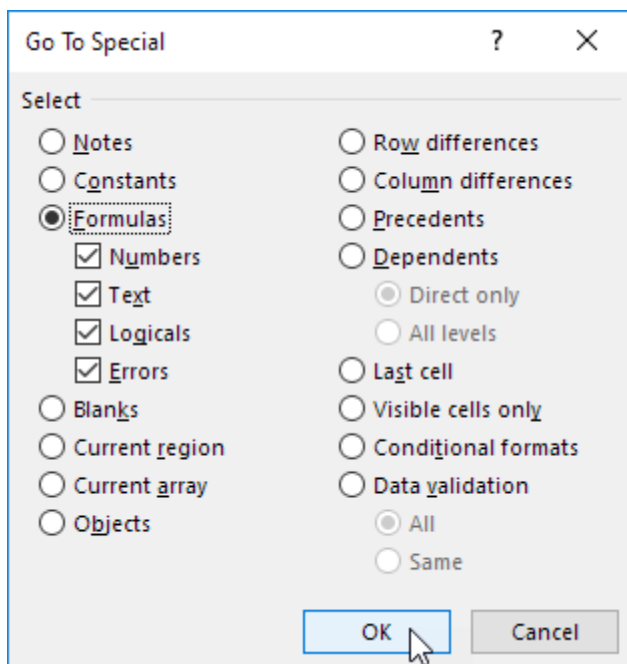
Use *cd to find all cells that end with the text "cd".

To find question marks or asterisks, precede the question mark or asterisk with a tilde (~). For example, use *~? to find all cells that end with a question mark.

Use *bc* to find all cells that contain "bc".

<https://www.excel-easy.com/basics/find-select.html>

Find special > Select Formulas and click OK.



Note: you can search for cells with formulas that return Numbers, Text, Logicals (TRUE and FALSE)

Find tomme celler

=TÆLV(A37:D37) antal celler med værdier

*** Functions, vigtige

Lopslag/Vlookup : lodret opslag gennem tabel/dataområde - kolonne

Vopslag: vandret opslag gennem tabelrække

<https://www.excel-easy.com/examples/vlookup.html>

opslagsfeltet skal være i 1.kolonne for tabellen, dataområdet

VLOOKUP function matches the first instance.

case-insensitive search

Eksempel på brug af Lopslag i Excel

Med nedenstående liste ønskes det at finde en e-mail ud fra et lønnummer. Den røde pil, der peger nedad, viser søgekolonnen. Pilen, der peger til højre, viser rækken, som indeholder det søgte lønnummer. Den grønne pil, der peger opad, er returkolonnen, hvor højre-pilen viser værdien (e-mail), som formlen LOPSLAG skal returnere:

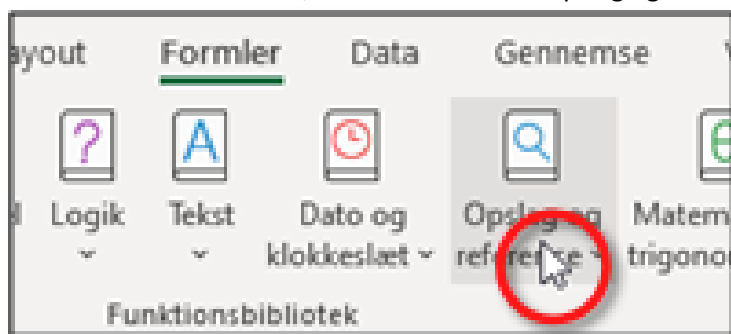
	A	B	C	D	E	F	G	H
1								
2		Lønnummer:	458626					
3								
4		E-mail:						
5								
6								
7		Lønnummer	Navn	Mobil	E-mail	Adresse	Post	By
8		373845	Victor Clausen	35 410 620	vcl@officekursus.dk	Hirsemarken 3	4600	Køge
9		546821	Mai Bach	35 400 237	mba@officekursus.dk	Jernaldervej	5000	Odense C
10		129856	Egon Fischer	35 407 128	efis@officekursus.dk	Spobjergvej 4	6700	Esbjerg
11		775846	Ingelise Brandt	35 403 511	ibra@officekursus.dk	Drejøvengen 22	8210	Århus V
12		458626	Fie Christensen	35 407 502	fchr@officekursus.dk	Ankjær 82	4220	Korsør
13		685496	Anna Christiansen	35 403 376	ach@officekursus.dk	Hirsevangen 29	9200	Aalborg SV
14		651458	Iben Jeppesen	35 402 664	ijep@officekursus.dk	Lykkeshøj 107	9400	Nørresundby
15		815364	Kaj Christoffersen	35 406 260	kchr@officekursus.dk	Stengårdsvej 4	5200	Odense V

i C4 skriv

Tekst guide: Sådan Laver du Lopslag i Excel, skrives i modtagerfeltet C4

1. Markér cellen (C4), hvor du ønsker at have resultatet stående.

2. Indsæt formelen LOPSLAG, f.eks. med ikonet »Opslag og reference« under fanen Formler:



3. Udfyld den viste dialog boks med funktionsargumenter til LOPSLAG, som beskrevet herunder:

Funktionsargumenter

LOPSLAG

Opslagsværdi	C2	↑	= 458626
Tabelmatrix	B8:H15	↑	= (373845\TV
Kolonneindeks_nr	4	↑	= 4
Intervalopslag		↑	= logisk

- a. **Opslagsværdi.** Er det, du søger efter.
I vores eksempel er det celle C2, hvor du kan skrive lønnummer.
- b. **Tabelmatrix.** Det er hele listen med alle kolonnerne – mindst fra og med opslagskolonnen – til og med resultatkolonnen.
I vores eksempel er det området B8:H15.
- c. **Kolonneindeks_nr.** Her angiver du kolonnennummeret fra tabelmatrixen, som du ønsker at returnere værdien fra. Start med at tælle fra opslagskolonnen og hen til resultatkolonnen.
I vores eksempel er det fra den første kolonne (Lønnummer) og hen til den kolonne, du ønsker at returnere værdien fra, E-mail, som er nummer 4.
- d. **Intervalopslag.** Her vælger du, om det skal være et præcist opslag, eller om du ønsker den nærmeste værdi.
I vores eksempel skal vi bruge et præcist opslag, da vi ønsker mailadressen, der er tilknyttet det lønnummer, vi taster ind.

FALSE for eksakt match ellers it will return the largest value smaller than søge-værdi.

I vores eksempel vil det give følgende formel, i C4

G3							: ...		=VLOOKUP(G2&"*",B3:D9,3,FALSE)	
	A	B	C	D	E	F	G			
1										
2		First Name	Last Name	Salary		First Name	Jess			
3		John	Lewis	\$97,566		Salary	\$58,339			
4	✓	Jessica	Walker	\$58,339						
5		Mia	Reed	\$125,180						
6		Richard	Lopez	\$91,632						

Multiple Criteria, opslag i to kolonner i tabelområde

Do you want to look up a value based on multiple criteria? Use INDEX and MATCH in Excel to

G4				X		✓		fx		{=INDEX(D3:D9,MATCH(G2&G3,B3:B9&C3:C9))}	
	A	B	C	D	E	F	G	H			
1											
2		First Name	Last Name	Salary		First Name	James				
3		James	Smith	\$64,901		Last Name	Clark				
4		James	Anderson	\$70,855		Salary	\$188,657				
5		James	Clark	\$188,657							
6		John	Lewis	\$97,566							
7		John	Walker	\$58,339							
8		Mark	Reed	\$125,180							
9		Richard	Lopez	\$91,632							

#N/A error for not found

If the VLOOKUP function cannot find a match, it returns a #N/A error.

H3									
	A	B	C	D	E	F	G	H	I
1									
2		ID	First Name	Last Name	Salary		ID	28	
3		72	Emily	Smith	\$64,901		Salary	Not Found	
4		66	James	Anderson	\$70,855				
5		14	Mia	Clark	\$188.657				

Multiple Lookup Tables

When using the VLOOKUP function in Excel, you can have multiple lookup tables. You can use the IF function to check whether a condition is met, and return one lookup table if TRUE and another lookup table if FALSE. i den aktuelle lookuptabel søges så i 1.kolonne

1. Create two named ranges: Table1 and Table2.

med True returns højeste værdi<=

E4												
	A	B	C	D	E	F	G	H	I	J	K	L
1												
2												
3		Last Name	Market	Sales	Bonus							
4		Smith	UK	\$5,171	\$600							
5		Anderson	UK	\$1,381	\$0							
6		Clark	USA	\$6,272	\$1,000							
7		Lewis	UK	\$9,168	\$900							
8		Walker	USA	\$10,366	\$1,500							
9		Reed	UK	\$7,375	\$700							
10		Lopez	USA	\$4,183	\$100							

INDEX and MATCH

<https://www.excel-easy.com/examples/index-match.html>

Brug funktionen Match/SAMMENLIGN til at søge efter et angivet element i et celle**område** og derefter returnere den relative position for det pågældende element i området. Hvis området A1:A3 f.eks. indeholder værdierne 5, 25 og 38, returnerer formlen

=SAMMENLIGN(25;A1:A3;0) uden match returns 0/false vist

tallet 2, fordi 25 er det andet element i området.

Instead of using VLOOKUP, use [INDEX and MATCH](#). To perform advanced lookups, you'll need INDEX and MATCH. Maybe this is one step too far for you at this stage, but it shows you one of the many other powerful formulas Excel has to offer. Der søges efter H2 værdi i B, der returneres position, som bruges i opslag i E, sikkert

H3				✕		✓		fx		=INDEX(E3:E9,MATCH(H2,B3:B9,0))	
	A	B	C	D	E	F	G	H	I	J	
1											
2		ID	First Name	Last Name	Salary		ID	53			
3		72	Emily	Smith	\$64,901		Salary	\$58,339			
4		66	James	Anderson	\$70,855						
5		14	Mia	Clark	\$188,657						
6		30	John	Lewis	\$97,566						
7		53	Jessica	Walker	\$58,339						
8		56	Mark	Reed	\$125,180						
9		79	Richard	Lopez	\$91,632						
10											

Table Magic, Lookup mere elegant med defintion af tables

Tables can make VLOOKUP formulas a lot easier. In the example below, a single VLOOKUP function automatically looks up all country codes.

Code feltet I C fyldes med Vlookup, der slås oå i loopup-Table2 med ord fra Country-kolonnen

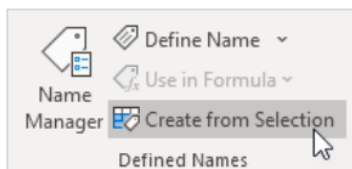
Two-column Lookup, eller lookup i to tabeller

Do you want to look up a value based on multiple criteria? Use INDEX and MATCH in Excel to perform a [two-column lookup](#).

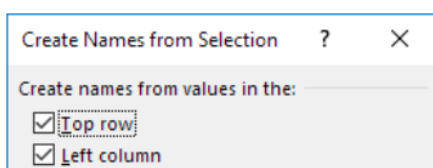
G4 {=INDEX(D3:D9,MATCH(G2&G3,B3:B9&C3:C9,0))}									
	A	B	C	D	E	F	G	H	I
1									
2		First Name	Last Name	Salary		First Name	James		
3		James	Smith	\$64,901		Last Name	Clark		
4		James	Anderson	\$70,855		Salary	\$188,657		
5		James	Clark	\$188,657					
6		John	Lewis	\$97,566					
7		John	Walker	\$58,339					
8		Mark	Reed	\$125,180					
9		Richard	Lopez	\$91,632					
10									

		Chocolate	Strawberry	Vanilla
1				
2	Jan	544	639	189
3	Feb	217	719	679
4	Mar	810	178	810
5	Apr	567	926	929
6	May	745	230	364
7	Jun	298	820	947
8	Jul	457	522	832
9	Aug	495	500	239
10	Sep	871	391	529
11	Oct	585	225	791
12	Nov	478	262	540
13	Dec	741	883	809
14				

6. On the Formulas tab, in the Defined Names group, click Creat



7. Check Top row and Left column and click OK.



. Use the intersect, fællesmængde, operator (space) to return the intersection of two named ranges.

G5				fx		=Feb Chocolate		
	A	B	C	D	E	F	G	H
1		Chocolate	Strawberry	Vanilla				
2	Jan	544	639	189				
3	Feb	217	719	679				
4	Mar	810	178	810				
5	Apr	567	926	929		Sales	217	
6	May	745	230	364				
7	Jun	298	820	947				
8	Jul	457	522	832				
9	Aug	495	500	239				
10	Sep	871	391	529				
11	Oct	585	225	791				
12	Nov	478	262	540				
13	Dec	741	883	809				
14								

the [INDIRECT](#) functions convert the text strings ("Feb" in cell G2 and "Chocolate" in cell G3) into valid named ranges.

G5				fx		=INDIRECT(G2) INDIRECT(G3)	
	A	B	C	D	E	F	G
1		Chocolate	Strawberry	Vanilla			
2	Jan	544	639	189		Month	Feb
3	Feb	217	719	679		Flavour	Chocolate
4	Mar	810	178	810			
5	Apr	567	926	929		Sales	217
6	May	745	230	364			

INDEX function with the AGGREGATE gives multiple results

This method will use the **INDEX** function with the **AGGREGATE** function to return multiple match values in Excel. It will locate the associated Apps for the selected Division and compile the results into a new list. We will also integrate an IF test to visually suppress any errors that may show up when the returned items do not fully populate the results list area.

	A	B	C	D	E	F	G
1	FIND multiple matches						
2							
3							
4	Division	Apps	Revenue				Apps for Division Game
5	Utility	Accord	17,760				
6	Productivity	Blend	17,990				
7	Game	Fightrr	11,649				
8	Game	Hackrr	18,701				

Countifs To count rows based on one or multiple criteria

To count rows based on multiple criteria (for example, green and greater than 9), use the following COUNTIFS function.

B7

⋮

✕ ✓ *fx*

=COUNTIFS(A1:A5,"green",B1:B5,">9")

	A	B	C	D	E	F	G	H	I
1	red	10							
2	green	1							
3	red	7							
4	green	20							
5	red	3							
6									
7		1							
8									

Sumifs : sum cells based on multiple criteria

=SUMIFS(C1:C5,A1:A5,"circle",B1:B5,"red")									
	A	B	C	D	E	F	G	H	I
1	circle	red	10						
2	triangle	green	1						
3	circle	red	7						
4	circle	green	20						
5	triangle	red	3						
6									
7			17						
8									

anderledes end danske udgave:

søger efter E25 i blåt område, talværdier i sum fra C-kolonnen					
22	sum.hvis				
23	Name	Type 1	Total		
24	Bulbasaur	Grass	318	Type	Total S
25	Ivysaur	Grass	405	Grass	24:C32
26	Venusaur	Grass	525	Fire	
27	Charmander	Fire	309	Water	
28	Charmeleon	Fire	405		
29	Charizard	Fire	534		
30	Squirtle	Water	314		
31	Wartortle	Water	405		
32	Blastoise	Water	530		

Discover how functions in Excel help you save time. If you are new to functions in Excel, we recommend you to read our introduction to [Formulas and Functions](#) first.

2 **Logical**: Learn how to use Excel's logical functions, such as IF, AND, OR and NOT.

3 [Cell References](#): Cell references in Excel are very important. Understand the difference between relative, absolute and mixed reference, and you are on your way to success.

4 [Date & Time](#): To enter a date in Excel, use the "/" or "-" characters. To enter a time, use the ":" (colon). You can also enter a date and a time in one cell.

5 [Text](#): Excel has many functions to offer when it comes to manipulating text strings.

6 [Lookup & Reference](#): Learn all about Excel's lookup & reference functions, such as VLOOKUP, HLOOKUP, MATCH, INDEX and CHOOSE.

7 [Financial](#): This chapter illustrates Excel's most popular financial functions.

8 [Statistical](#): An overview of some very useful statistical functions in Excel.

9 [Round](#): This chapter illustrates three functions to round numbers in Excel. ROUND, ROUNDUP and ROUNDDOWN.

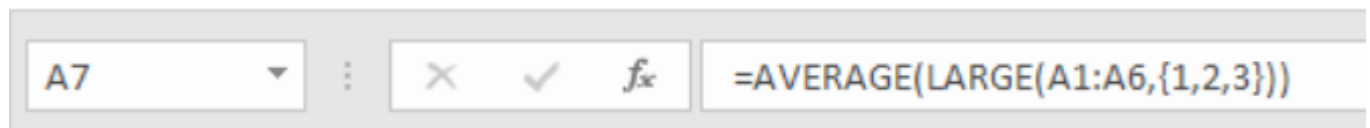
10 [Formula Errors](#): This chapter teaches you how to deal with some common formula errors in Excel.

11 [Array Formulas](#): This chapter helps you understand array formulas in Excel. Single cell array formulas perform multiple calculations in one cell.

statistik

The AVERAGE function ignores logical values

The formula below calculates the average of the top 3 numbers. TRUE or FALSE), empty cells and cells that contain text.



To calculate the average of cells that meet one criteria, use the [AVERAGEIF function](#) in Excel.

to calculate a [weighted average](#) in Excel, use SUMPRODUCT and SUM.

B6		✕ ✓ f_x		=SUMPRODUCT(B2:B4,C2:C4)/SUM(C2:C4)			
	A	B	C	D	E	F	G
1		Score	Weight				
2	Quiz	20	1				
3	Test	40	2				
4	Final Exam	90	3				
5							
6	Weighted Average	61.67					
7							

Moving average

▼ Trendline Options

☐ Exponential

☐ Linear

☐ Logarithmic

☐ Polynomial Order 2

☐ Power

☒ Moving Average Period 3 **1**

Trendline Name

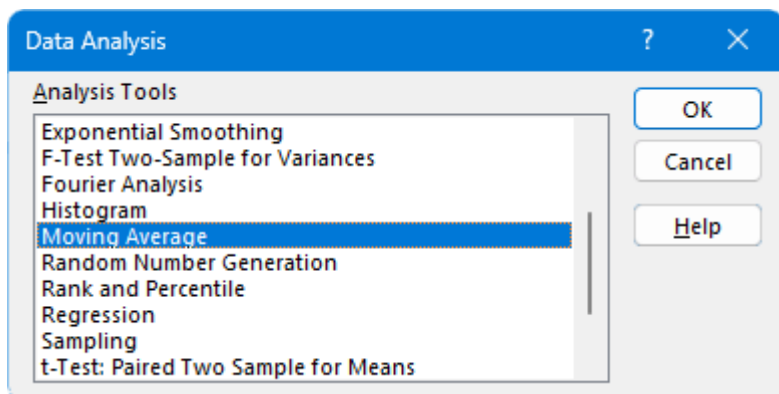
☐ Automatic

☒ Custom 3 per. MA **2**

Forecast

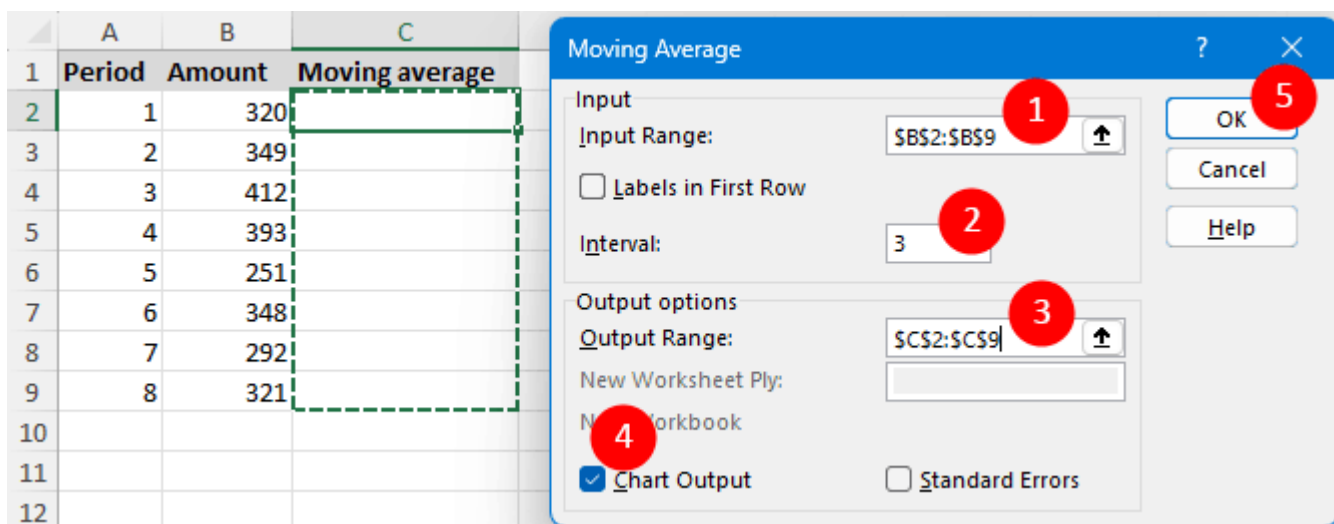
Forward 0.0 periods

1. I *Dataanalyse* dialog, vælg **Glidende gennemsnit** og klik **OK**.



2. I *Glidende gennemsnit* dialogboks, der vises, venligst:

1. **Input Range:** Vælg dataområdet for de glidende gennemsnit. Vælg f.eks. område B2: B9.
2. **Interval:** Indtast antallet af datapunkter for hvert glidende gennemsnit. I vores tilfælde går vi ind 3 ind i det.
3. **Output Range:** Vælg, hvor du vil have de glidende gennemsnitsresultater vist, såsom rækkevidde C2: C9.
4. **Kortoutput:** Marker denne mulighed, hvis du ønsker en grafisk visning.
5. Klik **OK**.



Plads, Rank arrangerer tal i rækkeflg

A2																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1	0	7	8	6	5	9	8	7	4	8	0	3	5	6	8	
2	1	9	11	7	5	15	11	9	4	11	1	3	5	7	11	

når man trækker hen t.h. i

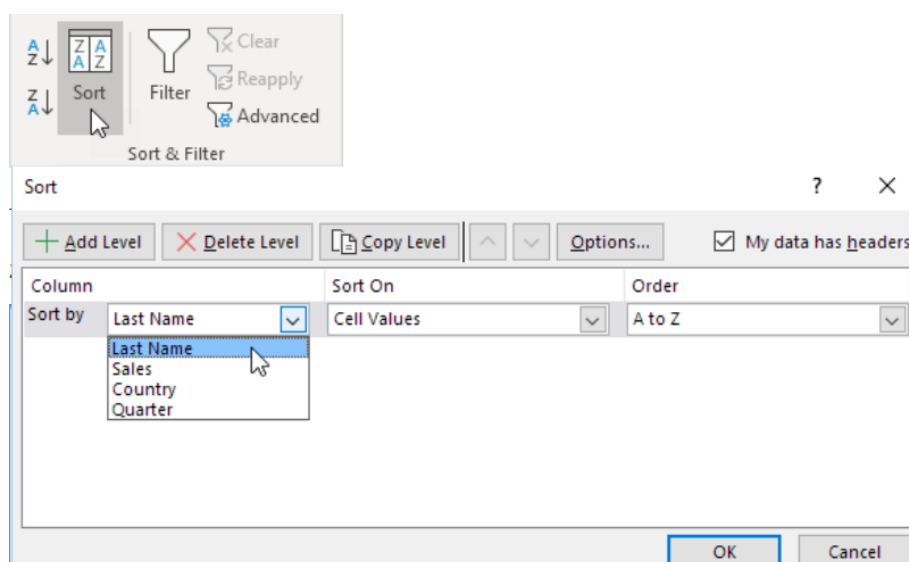
A2

0 er lavest ->1, forekomst 1, så næste 3 har rang 3

**** Data Analysis

This section illustrates the powerful features Excel has to offer to analyze data.

Sort: You can sort your Excel data on one column or multiple columns. You can sort in ascending or descending order.



Klik dataark, tryk så

2 **Filter**: Filter your Excel data if you only want to display records that meet certain criteria.

3 **Conditional Formatting**: Conditional formatting in Excel enables you to highlight cells with a certain color, depending on the cell's value.

4 **Charts**: A simple Excel chart can say more than a sheet full of numbers. As you'll see, creating charts is very easy.

5 **Pivot Tables**: Pivot tables are one of Excel's most powerful features. A pivot table allows you to extract the significance from a large, detailed data set.

6 **Tables**: Master Excel tables and analyze your data quickly and easily.

7 **What-If Analysis**: What-If Analysis in Excel allows you to try out different values (scenarios) for formulas.

8 **Solver**: Excel includes a tool called solver that uses techniques from the operations research to find optimal solutions for all kind of decision problems.

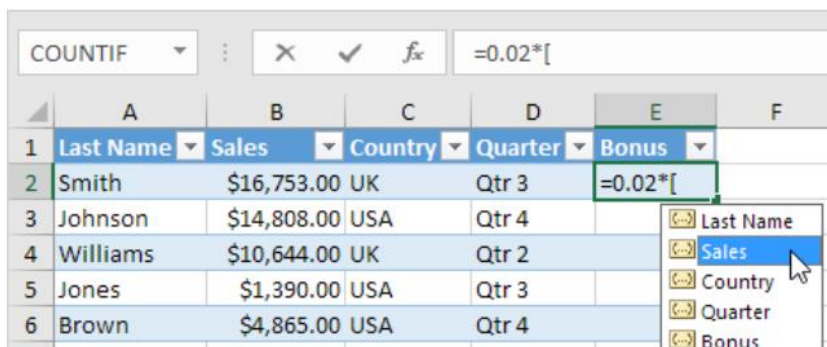
9 **Analysis ToolPak**: The Analysis ToolPak is a great Excel add-in program that provides data analysis tools for financial, statistical and engineering data analysis.

*** Tables

Marker dataområde tryk indsæt tabel

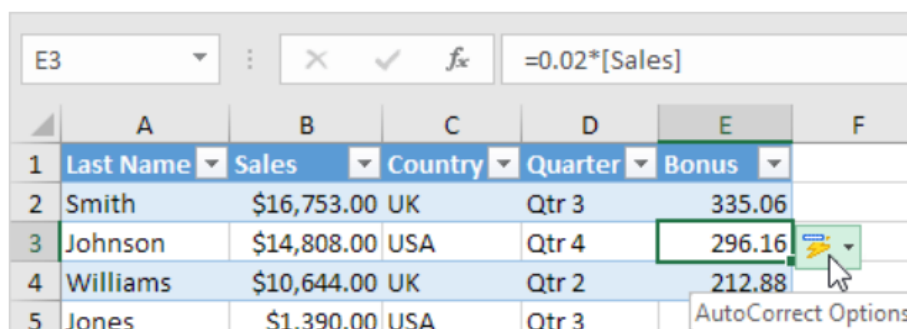
[structured-references.xlsx](#)

3. A list of structured references (the columns) appears. Select Sales from the list.



	A	B	C	D	E	F
1	Last Name	Sales	Country	Quarter	Bonus	
2	Smith	\$16,753.00	UK	Qtr 3	=0.02*[	
3	Johnson	\$14,808.00	USA	Qtr 4		
4	Williams	\$10,644.00	UK	Qtr 2		
5	Jones	\$1,390.00	USA	Qtr 3		
6	Brown	\$4,865.00	USA	Qtr 4		

Result: Excel automatically copies the formula down the column for you.



	A	B	C	D	E	F
1	Last Name	Sales	Country	Quarter	Bonus	
2	Smith	\$16,753.00	UK	Qtr 3	335.06	
3	Johnson	\$14,808.00	USA	Qtr 4	296.16	
4	Williams	\$10,644.00	UK	Qtr 2	212.88	
5	Jones	\$1,390.00	USA	Qtr 3		

5. First, select a cell inside the table. Next, on the Table Design tab, længst t.h. i øverste ribbon, in the Properties group, we can see that Table1 is the name of this table.

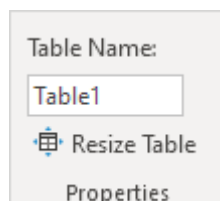


Table Name:
Table1
Resize Table
Properties

6. Select cell E18 and enter the formula shown below.

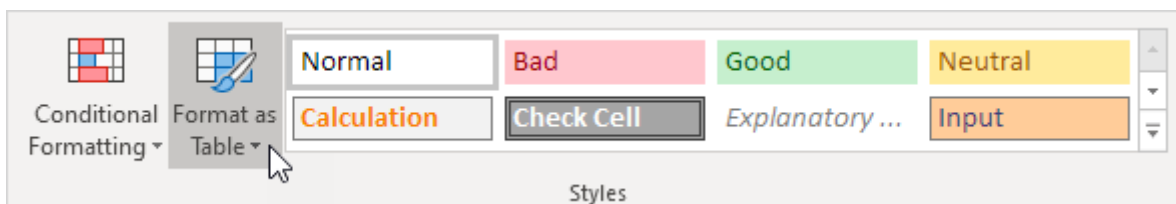


Quickly format a range of cells by choosing a table style. You can also create your own table style. Quickly format a cell by choosing a [cell style](#).

1. Click any single cell inside the data set.

	A	B	C	D	E
1	Last Name	Sales	Country	Quarter	
2	Smith	\$16,753.00	UK	Qtr 3	
3	Johnson	\$14,808.00	USA	Qtr 4	
4	Williams	\$10,644.00	UK	Qtr 2	
5	Jones	\$1,390.00	USA	Qtr 3	
6	Brown	\$4,865.00	USA	Qtr 4	
7	Williams	\$12,438.00	UK	Qtr 1	
8	Johnson	\$9,339.00	UK	Qtr 2	
9	Smith	\$18,919.00	USA	Qtr 3	
10	Jones	\$9,213.00	USA	Qtr 4	
11	Jones	\$7,433.00	UK	Qtr 1	
12	Brown	\$3,255.00	USA	Qtr 2	
13	Williams	\$14,867.00	USA	Qtr 3	
14	Williams	\$19,302.00	UK	Qtr 4	
15	Smith	\$9,698.00	USA	Qtr 1	
16					

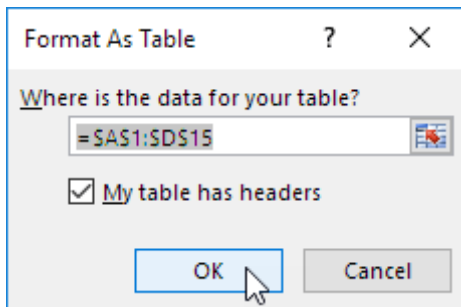
2. On the Home tab, in the Styles group, click Format as Table.



3. Choose a table style.

Note: click New Table Style to create your own table style or right click a table style and click Duplicate to create a new table style that is similar to an existing one. Modifying a custom table style affects all tables in a workbook that use that table style. This can save a lot of time.

4. Excel automatically selects the data for you. Check 'My table has headers' and click on OK.

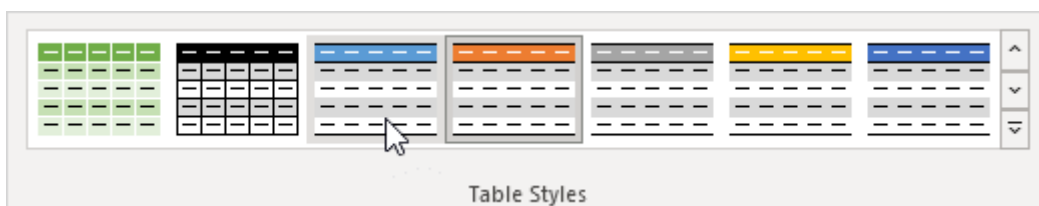


This is another way to [create a table](#). See the result below.

	A	B	C	D	E
1	Last Name ▼	Sales ▼	Country ▼	Quarter ▼	
2	Smith	\$16,753.00	UK	Qtr 3	
3	Johnson	\$14,808.00	USA	Qtr 4	
4	Williams	\$10,644.00	UK	Qtr 2	
5	Jones	\$1,390.00	USA	Qtr 3	
6	Brown	\$4,865.00	USA	Qtr 4	
7	Williams	\$12,438.00	UK	Qtr 1	
8	Johnson	\$9,339.00	UK	Qtr 2	
9	Smith	\$18,919.00	USA	Qtr 3	
10	Jones	\$9,213.00	USA	Qtr 4	
11	Jones	\$7,433.00	UK	Qtr 1	
12	Brown	\$3,255.00	USA	Qtr 2	
13	Williams	\$14,867.00	USA	Qtr 3	
14	Williams	\$19,302.00	UK	Qtr 4	
15	Smith	\$9,698.00	USA	Qtr 1	
16					

You can change a table style at any time.

5. First, select a cell inside the table. Next, on the Table Design tab, in the Table Styles group, click a table style (hover over a style to see a live preview).



Result: a different visual style.

	A	B	C	D	E
1	Last Name ▼	Sales ▼	Country ▼	Quarter ▼	
2	Smith	\$16,753.00	UK	Qtr 3	
3	Johnson	\$14,808.00	USA	Qtr 4	
4	Williams	\$10,644.00	UK	Qtr 2	
5	Jones	\$1,390.00	USA	Qtr 3	
6	Brown	\$4,865.00	USA	Qtr 4	
7	Williams	\$12,438.00	UK	Qtr 1	
8	Johnson	\$9,339.00	UK	Qtr 2	
9	Smith	\$18,919.00	USA	Qtr 3	
10	Jones	\$9,213.00	USA	Qtr 4	
11	Jones	\$7,433.00	UK	Qtr 1	
12	Brown	\$3,255.00	USA	Qtr 2	
13	Williams	\$14,867.00	USA	Qtr 3	
14	Williams	\$19,302.00	UK	Qtr 4	
15	Smith	\$9,698.00	USA	Qtr 1	
16					

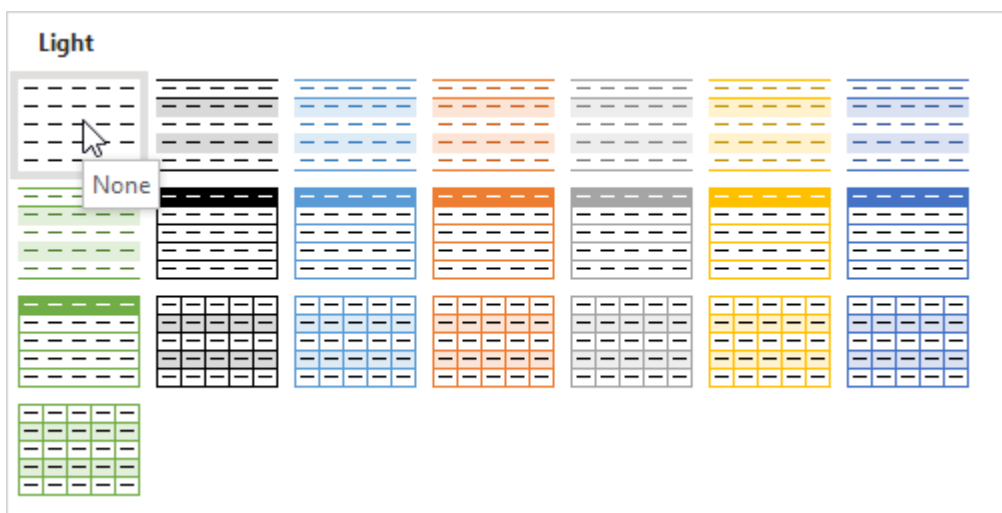
To convert this table back to a normal range of cells (with table formatting), execute the following steps.

6. First, select a cell inside the table. Next, on the Table Design tab, in the Tools group, click Convert to Range.

To convert this table back to a normal range of cells (without table formatting), execute the following steps.

7. Press Ctrl + Z to undo the previous step.

8. First, select a cell inside the table. Next, on the Table Design tab, in the Table Styles group, click the first style (None).



Merge Tables

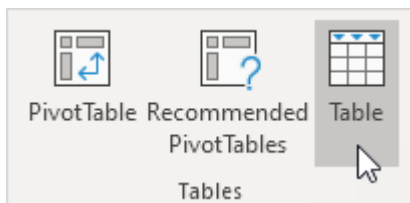
You can use tables and the [VLOOKUP function](#) in Excel to quickly merge two tables. This trick will bring your Excel game to a new level.

Our goal is to create one table that consists of a list of cities, countries, and country codes.

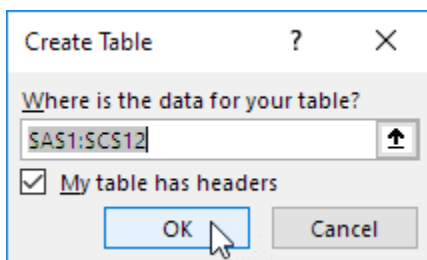
	A	B	C	D	E	F	G
1	City	Country	Code		Country	Code	
2	New York	United States			United States	US	
3	London	United Kingdom			United Kingdom	UK	
4	Toronto	Canada			Canada	CA	
5	Dallas	United States			France	FR	
6	Houston	United States			Germany	DE	
7	Paris	France					
8	Berlin	Germany					
9	Los Angeles	United States					
10	Montreal	Canada					
11	Birmingham	United Kingdom					
12	Hamburg	Germany					
13							

First, insert two tables.

1. Select a cell in the first range.
2. On the Insert tab, in the Tables group, click Table.



3. Excel automatically selects the data for you. Click OK.



4. Repeat these steps for the second range.

Result so far:

	A	B	C	D	E	F	G
1	City	Country	Code		Country	Code	
2	New York	United States			United States	US	
3	London	United Kingdom			United Kingdom	UK	
4	Toronto	Canada			Canada	CA	
5	Dallas	United States			France	FR	
6	Houston	United States			Germany	DE	
7	Paris	France					
8	Berlin	Germany					
9	Los Angeles	United States					
10	Montreal	Canada					
11	Birmingham	United Kingdom					
12	Hamburg	Germany					
13							

Now comes the most important part.

5. Select cell C2 and enter =VLOOKUP(

6. Enter the first argument by selecting cell B2. Excel replaces this cell reference with [@Country] because we're working with tables here. This is called a [structured reference](#).

7. Enter the second argument by selecting the range E2:F6. Excel replaces this range reference with Table2.

COUNTIF X ✓ fx =VLOOKUP([@Country],Table2							
	A	B	C	D	E	F	G
1	City	Country	Code		Country	Code	
2	New York	United States	y],Table2		United States	US	
3	London	United Kingdom			United Kingdom	UK	
4	Toronto	Canada			Canada	CA	
5	Dallas	United States			France	FR	
6	Houston	United States			Germany	DE	
7	Paris	France					
8	Berlin	Germany					
9	Los Angeles	United States					
10	Montreal	Canada					
11	Birmingham	United Kingdom					
12	Hamburg	Germany					
13							

8. Use 2 for the third argument because the codes are in the second column of the red table.

9. Use FALSE for the fourth argument to find an exact match.

COUNTIF		X ✓ fx		=VLOOKUP([@Country],Table2,2,FALSE)			
	A	B	C	D	E	F	G
1	City	Country	Code		Country	Code	
2	New York	United States	2,FALSE		United States	US	
3	London	United Kingdom			United Kingdom	UK	
4	Toronto	Canada			Canada	CA	
5	Dallas	United States			France	FR	
6	Houston	United States			Germany	DE	
7	Paris	France					
8	Berlin	Germany					
9	Los Angeles	United States					
10	Montreal	Canada					
11	Birmingham	United Kingdom					
12	Hamburg	Germany					
13							

10. Press Enter.

C2		X ✓ fx		=VLOOKUP([@Country],Table2,2,FALSE)			
	A	B	C	D	E	F	G
1	City	Country	Code		Country	Code	
2	New York	United States	US		United States	US	
3	London	United Kingdom	UK		United Kingdom	UK	
4	Toronto	Canada	CA		Canada	CA	
5	Dallas	United States	US		France	FR	
6	Houston	United States	US		Germany	DE	
7	Paris	France	FR				
8	Berlin	Germany	DE				
9	Los Angeles	United States	US				
10	Montreal	Canada	CA				
11	Birmingham	United Kingdom	UK				
12	Hamburg	Germany	DE				
13							

Note: Excel automatically copied the VLOOKUP function to the other cells. That saves time.

11. Enter a new city and country. Excel automatically looks up the corresponding country code for you. Wow!

B13							United States
	A	B	C	D	E	F	G
1	City	Country	Code		Country	Code	
2	New York	United States	US		United States	US	
3	London	United Kingdom	UK		United Kingdom	UK	
4	Toronto	Canada	CA		Canada	CA	
5	Dallas	United States	US		France	FR	
6	Houston	United States	US		Germany	DE	
7	Paris	France	FR				
8	Berlin	Germany	DE				
9	Los Angeles	United States	US				
10	Montreal	Canada	CA				
11	Birmingham	United Kingdom	UK				
12	Hamburg	Germany	DE				
13	Chicago	United States	US				
14							

Conclusion: tables can make VLOOKUP formulas a lot easier. Try it yourself. Download the [Excel file](#) and enter a new city and country.

Når der oprettes diagram, oprettes der automatisk en pivottabel,

som senere kan tilrettes

Quick Data-Analysis

Use the Quick Analysis tool in Excel to quickly analyze your data. Quickly calculate totals, quickly insert tables, quickly apply conditional formatting and more. **quick-analysis.xlsx** fil

Totals

Instead of displaying a total row at the end of an [Excel table](#), use the Quick Analysis tool to quickly calculate totals.

1. Select a range of cells and click the Quick Analysis button.

1. Select a range of cells and click the Quick Analysis button.

Note: visit our page about [Tables](#) to learn more about this topic.

3. Download the Excel file (right side of this page) and open the second sheet.

4. Click any single cell inside the data set.

	A	B	C	D	E	F	G	H
1	Order ID	Product	Category	Amount	Date	Country		
2	1	Carrots	Vegetables	\$4,270	1/6/2016	United States		
3	2	Broccoli	Vegetables	\$8,239	1/7/2016	United Kingdom		
4	3	Banana	Fruit	\$617	1/8/2016	United States		
5	4	Banana	Fruit	\$8,384	1/10/2016	Canada		
6	5	Beans	Vegetables	\$2,626	1/10/2016	Germany		
7	6	Orange	Fruit	\$3,610	1/11/2016	United States		
8	7	Broccoli	Vegetables	\$9,062	1/11/2016	Australia		
9	8	Banana	Fruit	\$6,906	1/16/2016	New Zealand		
10	9	Apple	Fruit	\$2,417	1/16/2016	France		
11	10	Apple	Fruit	\$7,431	1/16/2016	Canada		

Press CTRL + q. selects the entire data set and opens the Quick Analysis tool.

6. To quickly insert a pivot table, click Tables and click one of the pivot table examples.

Vegetables	\$9,104	12/4/2016	France
Fruit	\$6,078	12/5/2016	United States
Vegetables	\$3,27		
Fruit	\$13		
Fruit	\$8,37		
Fruit	\$2,38		
Fruit	\$8,70		
Fruit	\$5,02		
Fruit	\$1,76		
Fruit	\$4,76		
Vegetables	\$1,54		
Fruit	\$2,78		
Fruit	\$2,45	12/20/2016	Canada
Fruit	\$4,51		
Fruit	\$8,75		
Vegetables	\$9,12		
Fruit	\$1,77		
Vegetables	\$68		
Fruit	\$95		
Vegetables	\$2,61		
Vegetables	\$33		

Row Labels Sum of Amount

Australia	131713
Canada	94745
France	141056
Germany	155168
New Zealand	66782
United Kingdom	173137
United States	267133
Grand Total	1029734

Formatting Charts Totals **Tables** Sparklines

Table PivotTable **PivotTable** PivotTable PivotTable More

Tables help you sort, filter, and summarize data.

forskellige pivotmuligheder kan hurtigt vælges, gemmes i nyt ark, men man kan cut & paste til anden sheet

Note: pivot tables are one of Excel's most powerful features. Visit our page about [Pivot Tables](#) to learn more about this topic.

Running, opsummerende, sum

H	I	J	K	L	M	N
Month	Bears	Dolphins	Whales	runSUM	Sum	
Jan	8	150	80	238	238	
Feb	54	77	54	=SUM(\$I\$2:K3)	=SUM(\$I\$2:K3)	
Mar	93	32	100	648	225	
Apr	116	11	76	851	203	
May	137	6	93	1087	236	
Jun	184	1	72	1344	257	
Løbende t	592	869	1344		1344	
			=SUM(\$I\$2:K7)			
		=SUM(\$I\$2:J7)				
Running sum			løbende rækkesummer giver ikke mening her			

Formatting

Data bars, color scales and icon sets in Excel make it very easy to visualize values in a range of cells.

1. Select a range of cells and click the Quick Analysis button.

	A	B	C	D	E
1	Month	Bears	Dolphins	Whales	
2	Jan	8	150	80	
3	Feb	54	77	54	
4	Mar	93	32	100	
5	Apr	116	11	76	
6	May	137	6	93	
7	Jun	184	1	72	
8					
9					

2. To quickly add data bars, click Data Bars.

	A	B	C	D	E	F	G	H	I
1	Month	Bears	Dolphins	Whales					
2	Jan	8	150	80					
3	Feb	54	77	54					
4	Mar	93	32	100					
5	Apr	116	11	76					
6	May	137	6	93					
7	Jun	184	1	72					
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									

Formatting | Charts | Totals | Tables | Sparklines

Data Bars | Color... | Icon Set | Greater... | Top 10% | Clear...

Conditional Formatting uses rules to highlight interesting data.

Ser ud til at største tal, 184, svarer til fuld længde

Note: a longer bar represents a higher value. Visit our page about [Data Bars](#) to learn more about this topic.

To quickly add a color scale, click Color Scale.

mørkeRød(0%)-svagrød(25%)-farveløs(50%)-svaggrøn(75%)-mørkegrøn(100%) 1 pct af max-værdien, 184

	A	B	C	D	E	F	G	H	I
1	Month	Bears	Dolphins	Whales					
2	Jan	8	150	80					
3	Feb	54	77	54					
4	Mar	93	32	100					
5	Apr	116	11	76					
6	May	137	6	93					
7	Jun	184	1	72					
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									

Formatting | Charts | Totals | Tables | Sparklines

Data Bars Color... Icon Set Greater... Top 10% Clear...

Conditional Formatting uses rules to highlight interesting data.

Note: the shade of the color represents the value in the cell. Visit our page about [Color Scales](#) to learn more about this topic.

4. To quickly add an icon set, click Icon Set.

	A	B	C	D	E	F	G	H	I
1	Month	Bears	Dolphins	Whales					
2	Jan	↓	↑	→					
3	Feb	↓	→	↓					
4	Mar	→	↓	→					
5	Apr	→	↓	→					
6	May	↑	↓	→					
7	Jun	↑	↓	→					
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									

Formatting | Charts | Totals | Tables | Sparklines

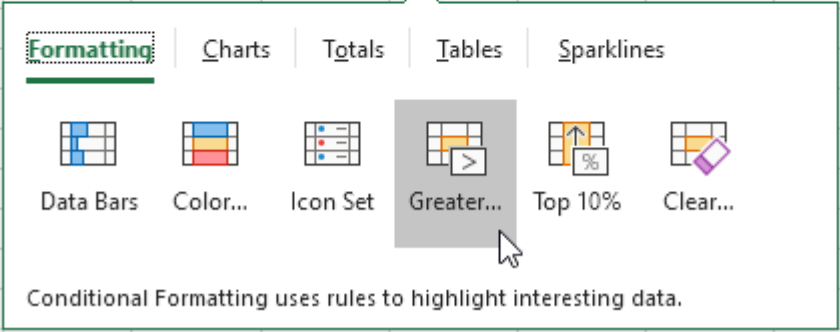
Data Bars Color... Icon Set Greater... Top 10% Clear...

Conditional Formatting uses rules to highlight interesting data.

Note: each icon represents a range of values. Visit our page about [Icon Sets](#) to learn more about this topic.

5. To quickly highlight cells that are greater than a value, click Greater Than.

	A	B	C	D	E	F	G	H	I
1	Month	Bears	Dolphins	Whales					
2	Jan	8	150	80					
3	Feb	54	77	54					
4	Mar	93	32	100					
5	Apr	116	11	76					
6	May	137	6	93					
7	Jun	184	1	72					
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									



The image shows the 'Conditional Formatting' task pane in Excel. The 'Greater Than' option is selected under the 'Formatting' tab. The dialog box shows the value '100' entered in the input field, and the format 'Light Red Fill with Dark Red Text' is selected from the dropdown menu. The 'OK' button is highlighted.

6. Enter the value 100 and select a formatting style.

Greater Than
?
X

Format cells that are GREATER THAN:

100
↑
with
Light Red Fill with Dark Red Text
▼

OK
Cancel

7. Click OK.

Result: Excel highlights the cells that are greater than 100.

	A	B	C	D	E	F	G	H	I
1	Month	Bears	Dolphins	Whales					
2	Jan	8	150	80					
3	Feb	54	77	54					
4	Mar	93	32	100					
5	Apr	116	11	76					
6	May	137	6	93					
7	Jun	184	1	72					
8									

Note: visit our page about [Conditional Formatting](#) to learn much more about this topic.

Charts

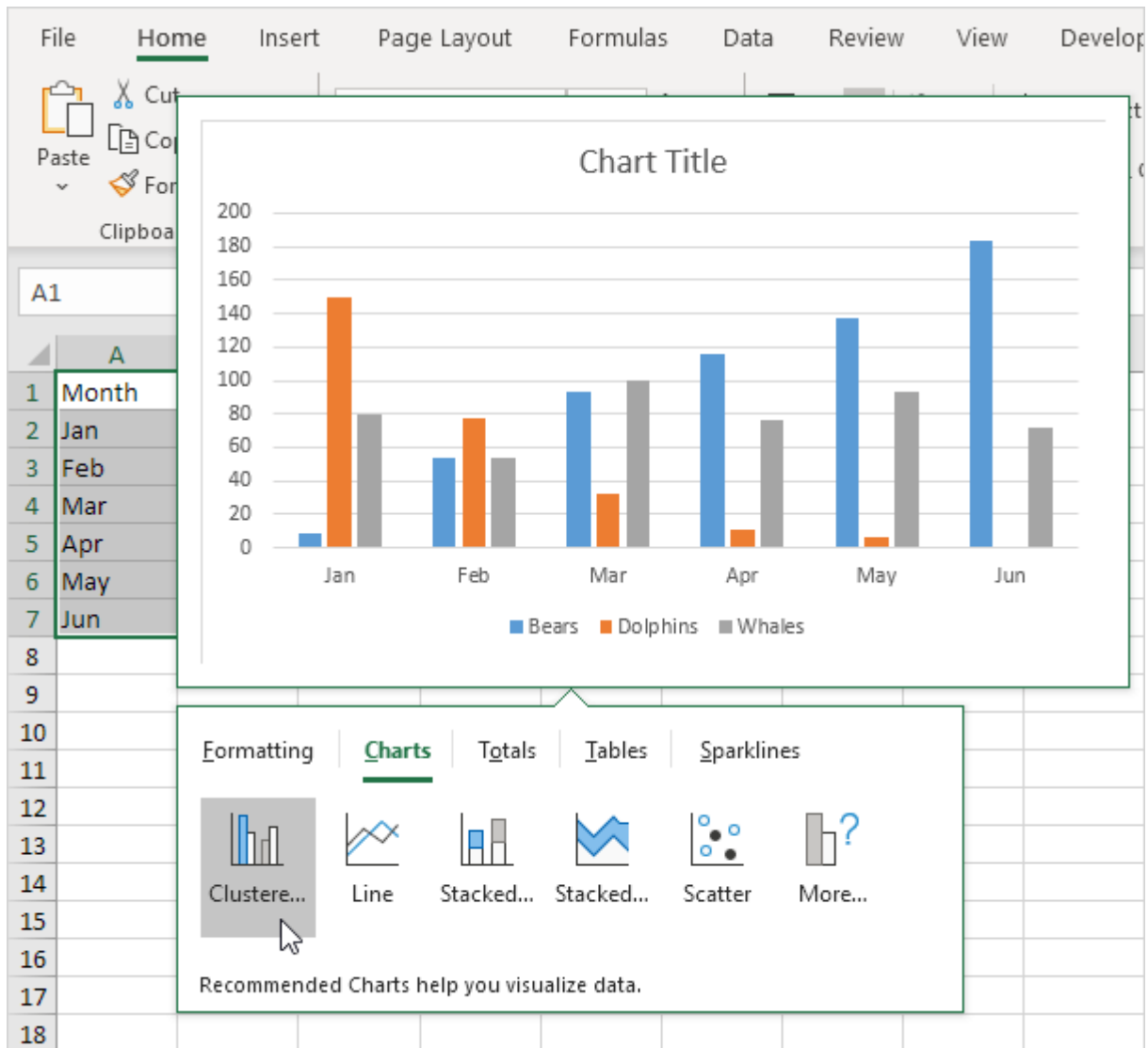
You can use the Quick Analysis tool to quickly create a chart. The Recommended Charts feature analyzes your data and suggests useful charts.

1. Select a range of cells and click the Quick Analysis button.

	A	B	C	D	E
1	Month	Bears	Dolphins	Whales	
2	Jan	8	150	80	
3	Feb	54	77	54	
4	Mar	93	32	100	
5	Apr	116	11	76	
6	May	137	6	93	
7	Jun	184	1	72	
8					
9					



2. For example, click Charts and click Clustered Column to create a clustered column chart.



Note: click More to view more recommended charts. Visit our chapter about [Charts](#) to learn more about this topic.

Sparklines

Sparklines are graphs that fit in one cell, great for displaying trends.

1. Download the Excel file (right side of this page) and open the third sheet.
2. Select the range A1:F4 and click the Quick Analysis button.

	A	B	C	D	E	F	G	H
1	Name	Jan	Feb	Mar	Apr	May		
2	Oliver	\$4,097	\$3,514	\$2,168	\$1,837	\$1,186		
3	Jack	\$2,721	\$5,820	\$6,766	\$9,855	\$8,738		
4	Bob	\$886	\$4,326	\$2,526	\$756	\$5,851		
5								
6								

3. For example, click Sparklines and click Line to insert sparklines, Minidiagrammer

Rediger data v
Kurve
Søjle
Gevinst/ tab
Højeste punkt
Laveste punkt
Negative punkter
Første punkt
Sidste punkt
Mærker
Vis

Minidiagram
Type
G2

	A	B	C	D	E	F	G
1	Name	Jan	Feb	Mar	Apr	May	
2	Oliver	\$4'097	\$3'514	\$2'168	\$1'837	\$1'186	
3	Jack	\$2'721	\$5'820	\$6'766	\$9'855	\$8'738	
4	Bob	\$886	\$4'326	\$2'526	\$0	\$5'851	
5							
6							
7							
8							
9							

Indstillinger for vandret akse

- ✓ Generel aksetype
- Datoaksetype...
- Vis akse
- Afbild data fra højre mod venstre

Indstillinger for minimumværdi på lodret akse

- Automatisk for hvert minidiagram
- Samme for alle minidiagrammer
- ✓ Brugerdefineret værdi... 0

Indstillinger for maksimumværdi på lodret akse

- ✓ Automatisk for hvert minidiagram
- Samme for alle minidiagrammer
- Brugerdefineret værdi...

Note: visit our page about [Sparklines](#) to learn how to customize sparklines.

[7/7 Completed! Learn much more about tables >](#)

Analysere tendenser i data vha. minidiagrammer

[https://support.microsoft.com/da-dk/office/analysere-tendenser-i-data-vha-minidiagrammer-be6579cf-a8e3-471a-a459-](https://support.microsoft.com/da-dk/office/analysere-tendenser-i-data-vha-minidiagrammer-be6579cf-a8e3-471a-a459-873614413ce1?ns=excel&version=16&syslcid=1030&uilcid=1030&appver=zx160&helpid=182806&ui=da-dk&rs=da-dk&ad=dk)

[873614413ce1?ns=excel&version=16&syslcid=1030&uilcid=1030&appver=zx160&helpid=182806&ui=da-dk&rs=da-dk&ad=dk](https://support.microsoft.com/da-dk/office/analysere-tendenser-i-data-vha-minidiagrammer-be6579cf-a8e3-471a-a459-873614413ce1?ns=excel&version=16&syslcid=1030&uilcid=1030&appver=zx160&helpid=182806&ui=da-dk&rs=da-dk&ad=dk)

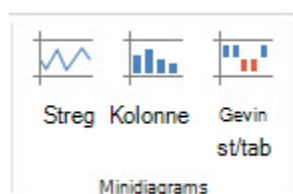
Excel til Microsoft 365 Excel 2024 Excel 2021 Excel 2019 Excel 2016

Minidiagrammer er små diagrammer inde i enkelte regnearksceller, der kan bruges til visuelt at repræsentere og vise en tendens i dine data. Minidiagrammer kan henlede opmærksomheden på vigtige elementer, f.eks. sæsonbestemte ændringer eller økonomiske cyklusser, og fremhæve værdierne for

maksimum og minimum med en anden farve. Det kan være nyttigt at vise tendenser i dine regnearksdata, især når du deler dine data med andre personer.

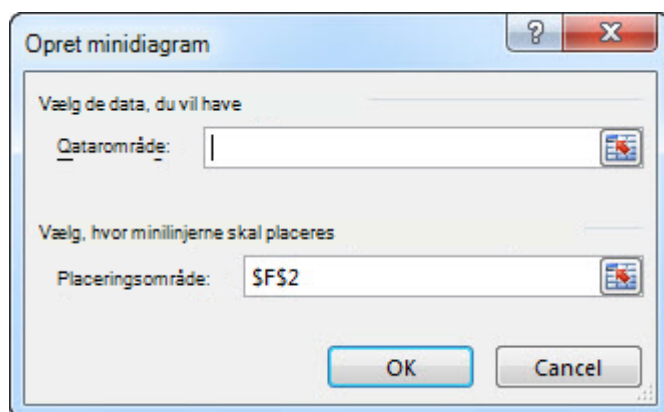
	A	B	C	D	E	F
1	1-Jan-11	31-Mar-11	30-Jun-11	30-Sep-11	31-Dec-11	YTD performance
2	67.28	84.03	65.11	55.25	40.11	
3						
4						
5	31-Dec-07	31-Dec-08	31-Dec-09	31-Dec-10	31-Dec-11	5-year win/loss
6	3%	9%	29%	10%	-48%	

1. Markér en tom celle tæt ved de data, du vil vise i et minidiagram.
2. Klik på **Linje**, **Kolonne** eller **Gevinst/tab** i gruppen **Minidiagrammer** under fanen **Indsæt**.



3. Angiv det celleområde, som indeholder de data, du vil vise i minidiagrammet, i feltet **Dataområde**.

Hvis dine data f.eks. er i celle A, B, C og D i række 2, skal du skrive **A2:D2**.



Hvis du hellere vil markere celleområdet i regnearket, skal du klikke på  for at skjule dialogboksen midlertidigt, markere cellerne i regnearket og derefter klikke på  for at få vist hele dialogboksen.

4. Klik på **OK**.

Minidiagramværktøjer vises på båndet. Brug fanen **Typografi** til at tilpasse dine minidiagrammer.

Tip!

- Fordi et minidiagram er integreret i en celle, bruges minidiagrammet som baggrund for den tekst, du skriver i cellen, som vist i følgende eksempel:

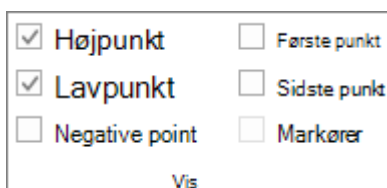


- Hvis du markerer én celle, kan du altid kopiere et minidiagram til andre celler i en kolonne eller række senere ved at trække eller bruge **Fyld nedad** (Ctrl+D).

Tilpasse dine minidiagrammer

Når du har oprettet minidiagrammer, kan du når som helst ændre deres type, typografi og format.

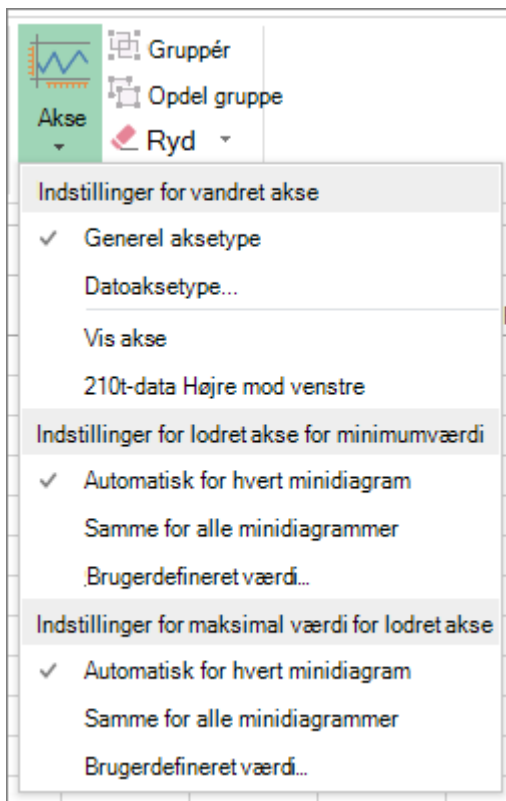
1. Markér de minidiagrammer, du vil tilpasse, for at vise **Minidiagramværktøjer** på båndet.
2. Vælg de ønskede indstillinger under fanen **Typografi**. Du kan:
 - Vise mærker for at fremhæve enkelte værdier i kurveminidiagrammer.



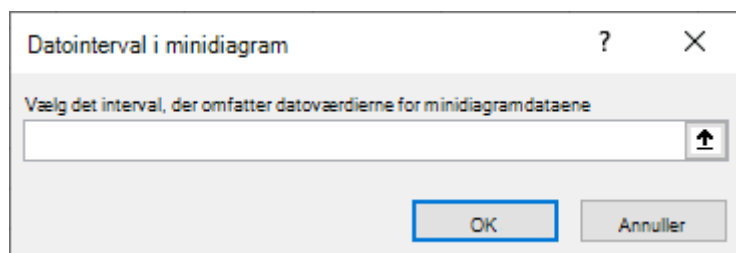
- Ændre typografien eller formateringen af minidiagrammer.



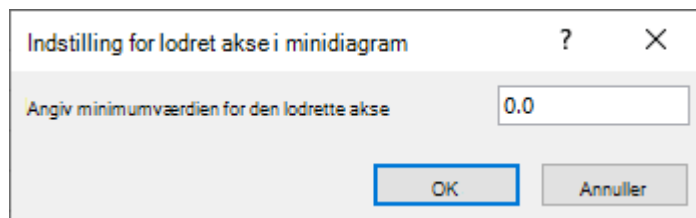
- Vise og ændre akseindstillingerne.



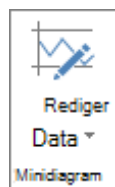
Hvis du klikker på indstillingen **Datoaksetype** på denne rulleliste, åbnes dialogboksen **Datointerval for minidiagram** i Excel. Herfra kan du vælge det område i projektmappen, der indeholder de ønskede datoværdier for dataene i minidiagrammet.



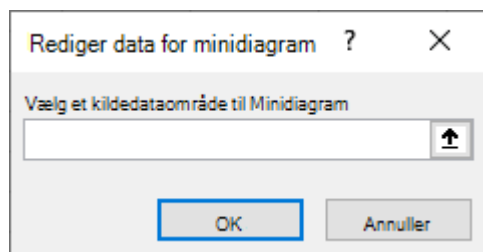
Hvis du klikker på indstillingerne **for Brugerdefineret værdi** på denne rulleliste, åbnes dialogboksen **Indstilling af lodret minidiagramakse** i Excel. Herfra kan du angive enten minimum- eller maksimumværdien (afhængigt af hvilken indstilling du har valgt) for den lodrette akse for dine minidiagramdata. Som standard bestemmer Excel, hvordan minidiagramdataene skal vises, så med disse indstillinger kan du styre minimum- og maksimumværdierne.



- Ændre den måde, dataene vises på.



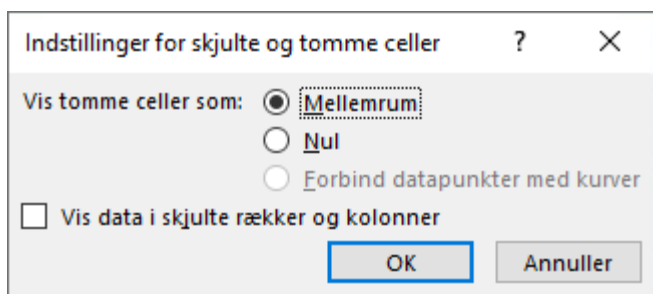
Hvis du klikker på indstillingen **Rediger data i et enkelt minidiagram** på denne rulleliste, åbnes dialogboksen **Rediger data i minidiagrammet** i Excel. Herfra kan du vælge det område i projektmappen, der indeholder de data, du vil bruge til dataene i minidiagrammet. Brug denne indstilling, hvis du kun vil ændre ét minidiagram.



Hvis du klikker på indstillingen **Skjult & Tomme celler** på denne rulleliste, åbnes dialogboksen **Indstillinger for skjulte og tomme celler** i Excel. Brug denne indstilling til at ændre, hvordan Excel behandler skjulte værdier og null-værdier for minidiagramdataene.

Du kan vælge at få vist tomme celler som **mellemrum**, **nul** eller **Forbind datapunkter med streg**.

Vælg indstillingen **Vis data i skjulte rækker og kolonner** for at få Excel til at medtage data i skjulte rækker og kolonner i dataene i minidiagrammet. Fjern markeringen i denne indstilling for at få Excel til at ignorere data i skjulte rækker og kolonner.



Har du brug for mere hjælp?

Kan også lave beskrivende, deskriptiv statistisk af kolonnerne

***** Pivot Tables: muliggør sortering efter flere kriterier**

Data format tips and tricks

- Use **clean**, tabular data for best results.
- Organize your data in columns, not rows.
- Make sure all columns have headers, with a single row of unique, non-blank labels for each column.

Avoid double rows of headers or merged cells.

	A	B	C	D	E	F
1	Year	Category	Product	Sales	Rating	
2	2017	Components	Chains	\$20,000	75%	
3	2015	Clothing	Socks	\$ 3,700	22%	
4	2017	Clothing	Bib-Shorts	\$ 4,000	22%	
5	2015	Clothing	Shorts	\$13,300	56%	
6	2017	Clothing	Tights	\$36,000	100%	
7	2015	Components	Handlebars	\$ 2,300	35%	
8	2016	Clothing	Socks	\$ 2,300	28%	
9	2016	Components	Brakes	\$ 3,400	36%	
10	2016	Bikes	Mountain Bikes	\$ 6,300	40%	
11	2017	Components	Brakes	\$ 5,400	38%	
12	2016	Accessories	Helmets	\$17,000	90%	
13	2016	Accessories	Lights	\$21,600	90%	
14	2016	Accessories	Locks	\$29,800	90%	

[Insert a Pivot Table](#) | [Drag fields](#) | [Sort](#) | [Filter](#) | [Change Summary Calculation](#) | [Two-dimensional Pivot Table](#)

Pivot tables are one of Excel's most powerful features. A pivot table allows you to extract the significance from a large, detailed data set.

Our data set consists of 213 records and 6 fields. Order ID, Product, Category, Amount, Date and Country.

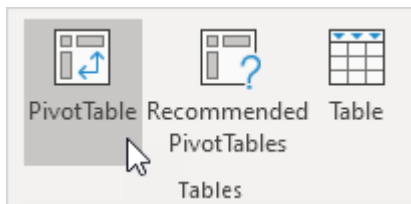
Pivot-tables filen

	A	B	C	D	E	F	G	H
1	Order ID	Product	Category	Amount	Date	Country		
2	1	Carrots	Vegetables	\$4,270	1/6/2016	United States		
3	2	Broccoli	Vegetables	\$8,239	1/7/2016	United Kingdom		
4	3	Banana	Fruit	\$617	1/8/2016	United States		
5	4	Banana	Fruit	\$8,384	1/10/2016	Canada		
6	5	Beans	Vegetables	\$2,626	1/10/2016	Germany		
7	6	Orange	Fruit	\$3,610	1/11/2016	United States		
8	7	Broccoli	Vegetables	\$9,062	1/11/2016	Australia		
9	8	Banana	Fruit	\$6,906	1/16/2016	New Zealand		
10	9	Apple	Fruit	\$2,417	1/16/2016	France		
11	10	Apple	Fruit	\$7,421	1/16/2016	Canada		

Insert a Pivot Table

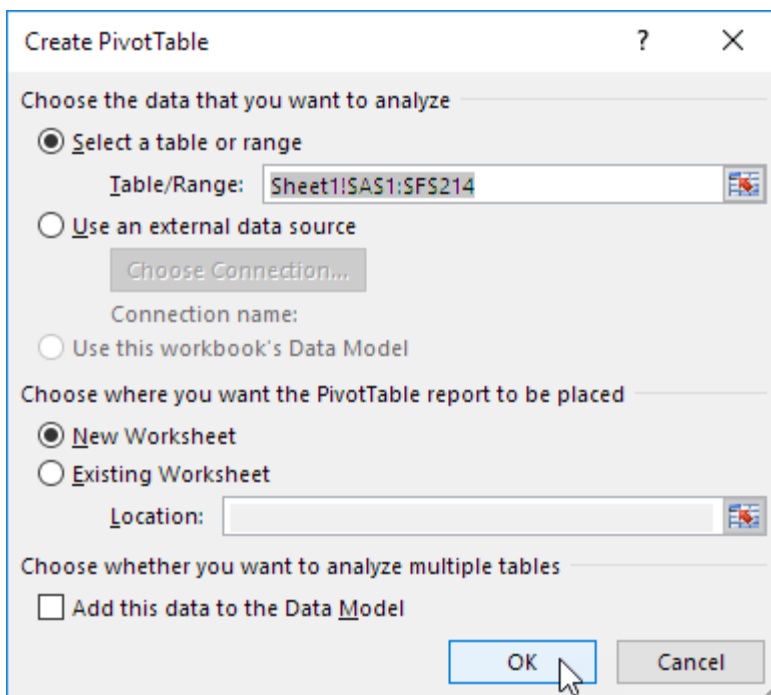
To insert a pivot table, execute the following steps.

1. Click any single cell inside the data set. **Marker hele tabellen med header**
2. On the Insert tab, in the Tables group, click PivotTable.



The following dialog box appears. Excel automatically selects the data for you. The default location for a new pivot table is New Worksheet.

3. Click OK.



Drag fields

The PivotTable Fields pane appears. To get the total amount exported of each product, drag the following fields to the different areas.

1. Product field to the Rows area.
2. Amount field to the Values area.
3. Country field to the Filters area.

PivotTable Fields

Choose fields to add to report:

☐ Order ID
☒ **Product**
☐ Category
☒ **Amount**
☐ Date
☒ **Country**

Drag fields between areas below:

Filters

Country

Rows

Product

Columns

Values

Sum of Amou...

☐ Defer Layout Update

Update

Below you can find the pivot table. Bananas are our main export product. That's how easy pivot tables can be!

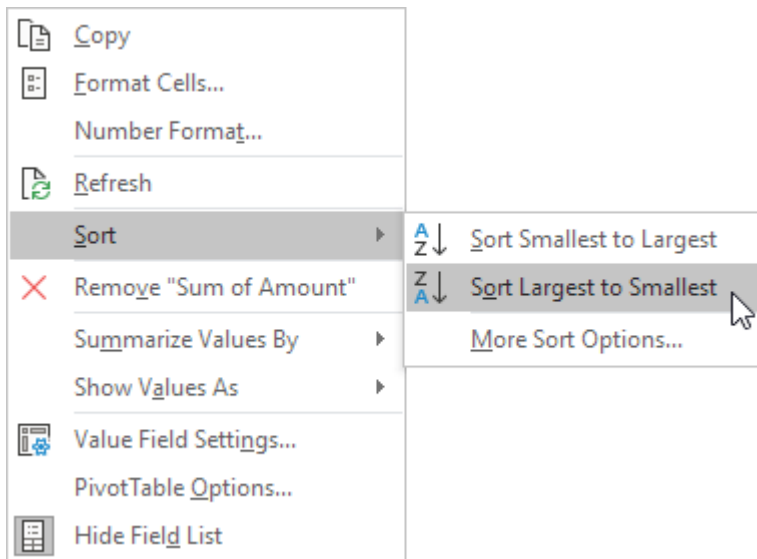
	A	B	C
1	Country	(All)	
2			
3	Row Labels	Sum of Amount	
4	Apple	191257	
5	Banana	340295	
6	Beans	57281	
7	Broccoli	142439	
8	Carrots	136945	
9	Mango	57079	
10	Orange	104438	
11	Grand Total	1029734	
12			

Sort

To get Banana at the top of the list, sort the pivot table.

1. venstre-Click any cell inside the Sum of Amount column.

2. Right click and click on Sort, Sort Largest to Smallest.



Result.

	A	B	C
1	Country	(All) ▼	
2			
3	Row Labels ▼	Sum of Amount	
4	Banana	340295	
5	Apple	191257	
6	Broccoli	142439	
7	Carrots	136945	
8	Orange	104438	
9	Beans	57281	
10	Mango	57079	
11	Grand Total	1029734	
12			

Filter

Because we added the Country field to the Filters area, we can filter this pivot table by Country. For example, which products do we export the most to France?

1. Click the filter drop-down and select France.

Result. Apples are our main export product to France.

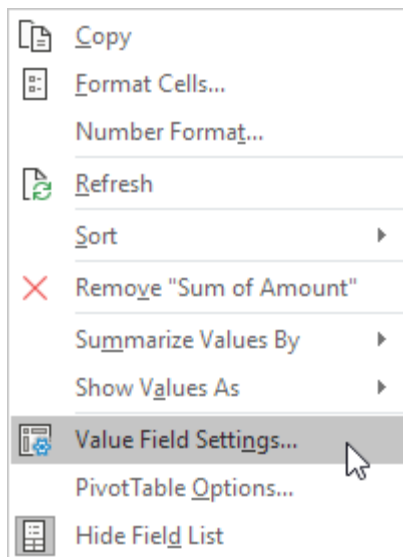
	A	B	C
1	Country	France	
2			
3	Row Labels	Sum of Amount	
4	Apple	80193	
5	Banana	36094	
6	Carrots	9104	
7	Mango	7388	
8	Broccoli	5341	
9	Orange	2256	
10	Beans	680	
11	Grand Total	141056	
12			

Note: you can use the standard filter (triangle next to Row Labels) to only show the amounts of specific products.

Change Summary Calculation

By default, Excel summarizes your data by either summing or counting the items. To change the type of calculation that you want to use, execute the following steps.

1. Click any cell inside the Sum of Amount column.
2. Right click and click on Value Field Settings.



3. Choose the type of calculation you want to use. For example, click **Count**.

Værdifeltindstilling -> antal, så tælles antal ordre hvori produktet indgår,

sum=sum af værdierne for ordre

Value Field Settings

Source Name: Amount

Custom Name: Count of Amount

Summarize Values By Show Values As

Summarize value field by

Choose the type of calculation that you want to use to summarize data from the selected field

Sum
Count
Average
Max
Min
Product

Number Format OK Cancel

4. Click OK.

Result. 16 out of the 28 orders to France were 'Apple' orders.

	A	B	C
1	Country	France	
2			
3	Row Labels	Count of Amount	
4	Apple	16	
5	Banana	7	
6	Carrots	1	
7	Mango	1	
8	Orange	1	
9	Beans	1	
10	Broccoli	1	
11	Grand Total	28	
12			

For France har vi disse ordre med Banana, 7 styks

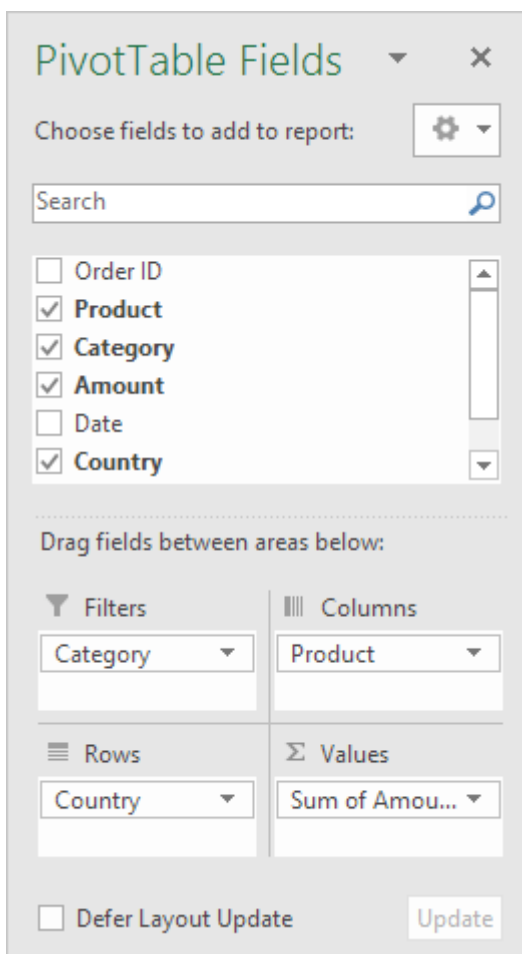
51	Banana	Fruit	\$4.781	29-03-2016	France
66	Banana	Fruit	\$2.427	30-04-2016	France
85	Banana	Fruit	\$9.543	16-05-2016	France
114	Banana	Fruit	\$107	25-06-2016	France
118	Banana	Fruit	\$5.002	02-07-2016	France
135	Banana	Fruit	\$7.144	01-08-2016	France
157	Banana	Fruit	\$7.090	11-09-2016	France
			\$36.094		

Two-dimensional Pivot Table

If you drag a field to the Rows area and Columns area, you can create a two-dimensional pivot table.

First, [insert a pivot table](#). Next, to get the total amount exported to each country, of each product, drag the following fields to the different areas.

1. Country field to the Rows area.
2. Product field to the Columns area.
3. Amount field to the Values area.
4. Category field to the Filters area.

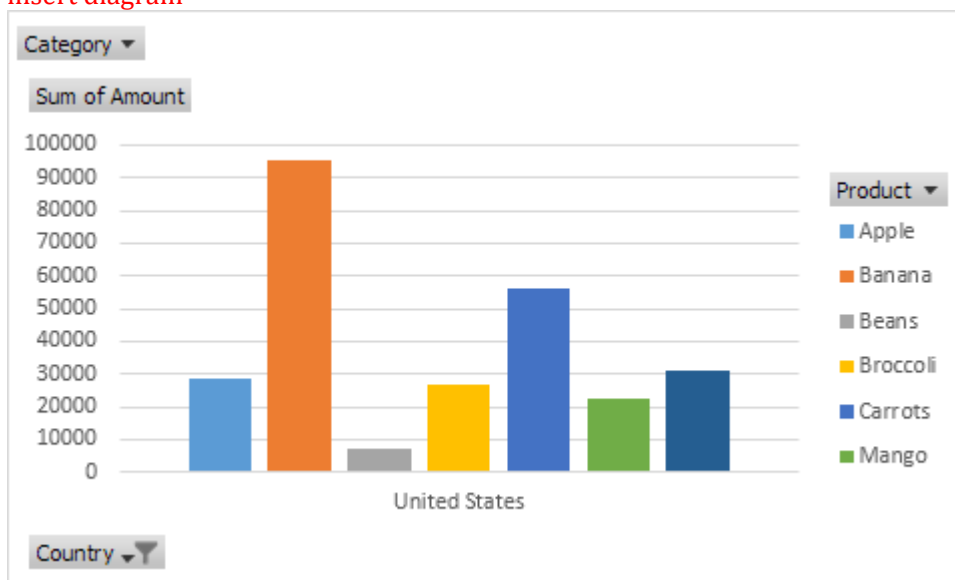


Below you can find the two-dimensional pivot table.

	A	B	C	D	E	F	G	H	I	J
1	Category	(All)								
2										
3	Sum of Amount	Column								
4	Row Labels	Apple	Banana	Beans	Broccoli	Carrots	Mango	Orange	Grand Total	
5	Australia	20634	52721	14433	17953	8106	9186	8680	131713	
6	Canada	24867	33775		12407		3767	19929	94745	
7	France	80193	36094	680	5341	9104	7388	2256	141056	
8	Germany	9082	39686	29905	37197	21636	8775	8887	155168	
9	New Zealand	10332	40050		4390			12010	66782	
10	United Kingdom	17534	42908	5100	38436	41815	5600	21744	173137	
11	United States	28615	95061	7163	26715	56284	22363	30932	267133	
12	Grand Total	191257	340295	57281	142439	136945	57079	104438	1029734	
13										

To easily compare these numbers, create a [pivot chart](#) and apply a filter. Maybe this is one step too far for you at this stage, but it shows you one of the many other powerful pivot table features Excel has to offer.

Marker hele tabelområdet, fra Sum af amount og ned til sum-rækken, så tilføjes category automatisk til, så insert diagram



Betinget formatering af celler

Rediger formateringsregel

Vælg en regeltype:

- Formatér alle celler på basis af deres værdier
- Formatér kun celler, der indeholder
- Formatér kun de højest eller lavest rangerede værdier
- Formatér kun værdier, der er over eller under gennemsnittet
- Formatér kun entydige eller dupliserede værdier
- Brug en formel til at bestemme, hvilke celler der skal formateres

Rediger regelbeskrivelsen:

Formatér alle celler på basis af deres værdier:

Formattypografi: Ikonsæt

Ikontype: ☐ Vis kun ikon

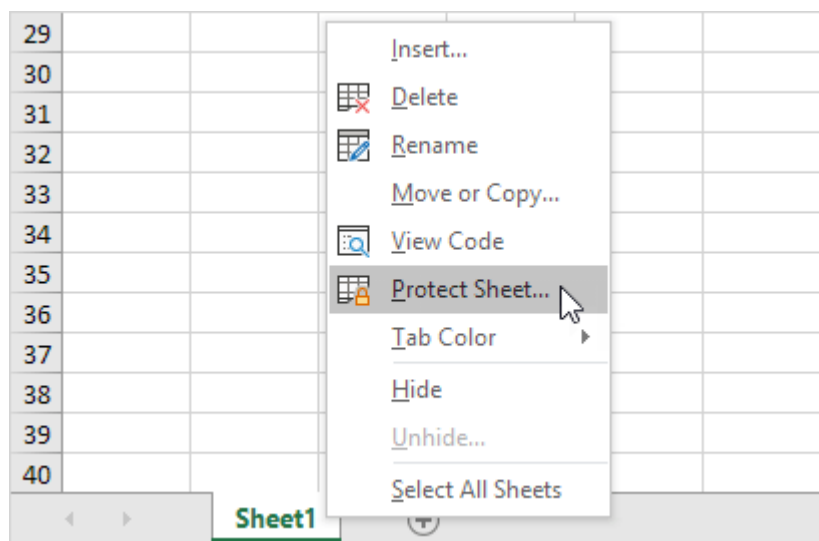
Vis hvert ikon efter disse regler:

Ikon	Værdi	Type
	når værdi er ≥ 42	Tal
	når < 42 og ≥ 36	Tal
	når < 36	Tal

** Protect Sheet

When you share an Excel file with other users, you may want to protect a worksheet to help prevent it from being changed.

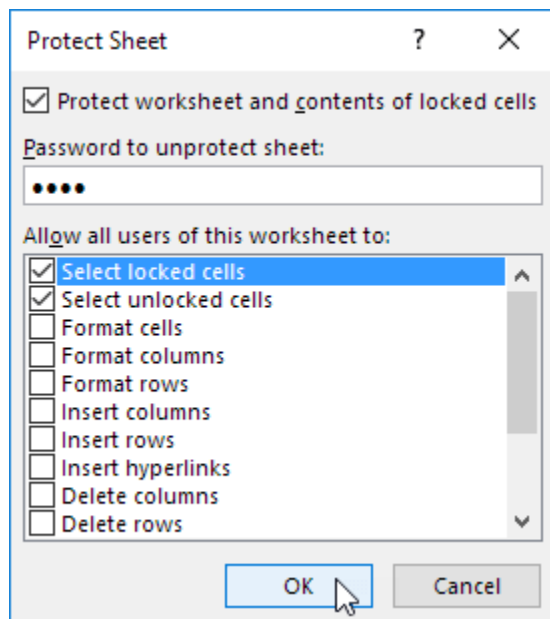
1. Right click a worksheet tab.
2. Click Protect Sheet.



3. Enter a password.

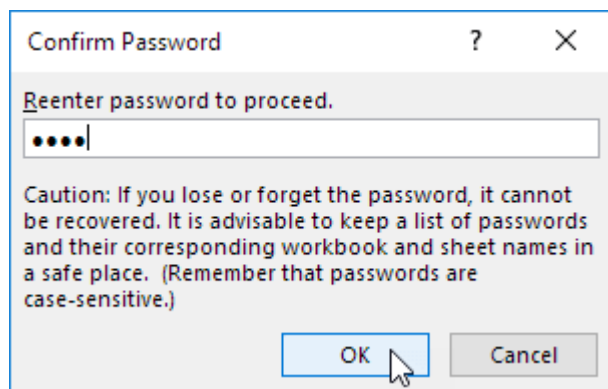
4. Check the actions you allow the users of your worksheet to perform.

5. Click OK.



Note: if you don't check any action, users can only view the Excel file!

6. Confirm the password and click OK.



Your worksheet is protected now. To unprotect a worksheet, right click on the worksheet tab and click Unprotect Sheet. The password for the downloadable Excel file is "easy".

13 [Standard Deviation](#): This page explains how to calculate the standard deviation based on the entire population using the STDEV.P function in Excel and how to estimate the standard deviation based on a sample using the STDEV.S function in Excel.

14 [Count Unique Values](#): This example shows you how to create an array formula that counts unique values.

15 [Gantt Chart](#): Excel does not offer Gantt as chart type, but it's easy to create a Gantt chart by customizing the stacked bar chart type.

*16 [Countif](#): The powerful COUNTIF function in Excel counts cells based on one criteria.

This page contains many easy to follow COUNTIF examples.

The following COUNTIF function gives the exact same result.

A7									
	A	B	C	D	E	F	G	H	I
1	10		10						
2	1								
3	7								
4	20								
5	3								
6									
7	2								
8									

Explanation: the & operator joins the 'greater than or equal to' symbol and the value in cell C1.

The COUNTIF functions below count the number of cells that are equal to 3 or 7.

A7									
	A	B	C	D	E	F	G	H	I
1	10								
2	1								
3	7								
4	20								
5	3								
6									
7	2								
8									

17 [Budget](#): This example shows you how to create a budget in Excel.

18 [Line Chart](#): Line charts are used to display trends over time. Use a line chart if you have text labels, dates or a few numeric labels on the horizontal axis.

*19 Transpose: Use the 'Paste Special Transpose' option to switch rows to columns or columns to row

s in Excel. You can also use the TRANSPOSE function.

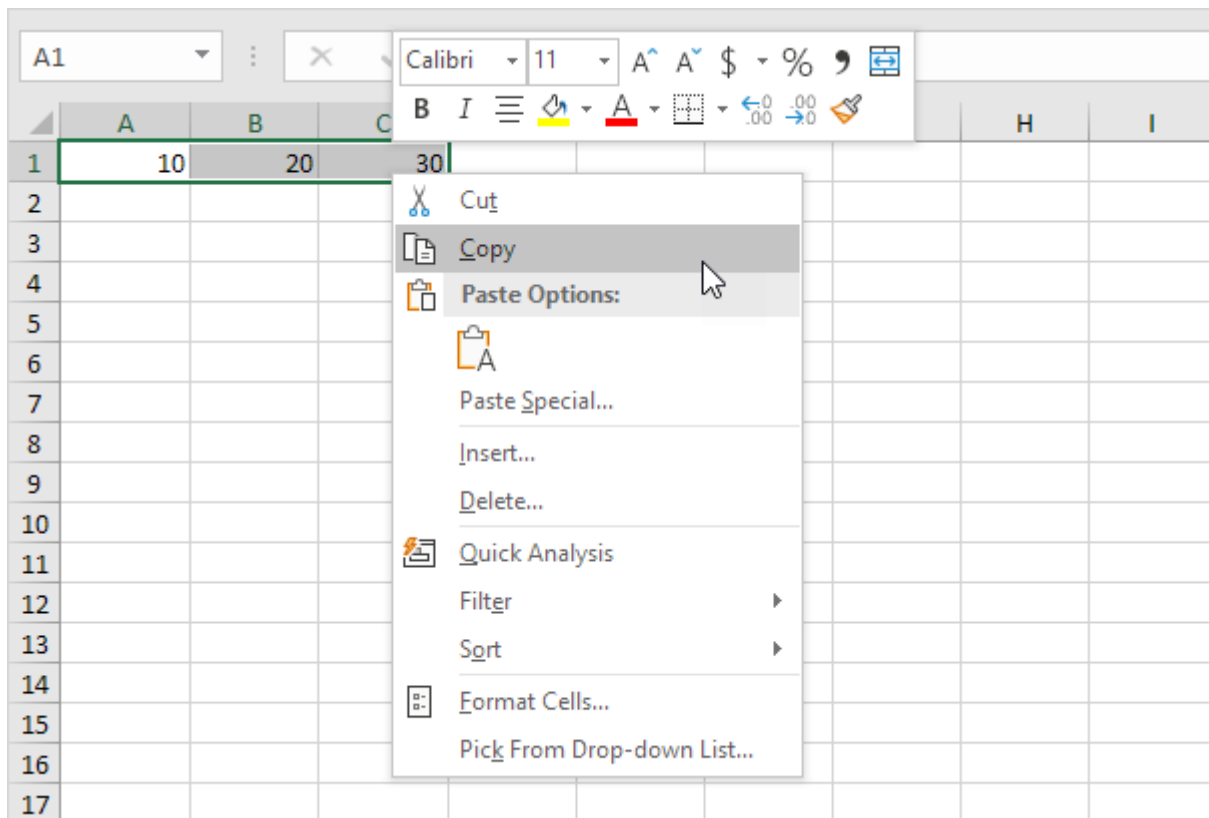
[Paste Special Transpose](#) | [Transpose Function](#) | [Transpose Table without Zeros](#) | [Transpose Magic](#)

Use the 'Paste Special Transpose' option to switch rows to columns or columns to rows in Excel. You can also use the TRANSPOSE function.

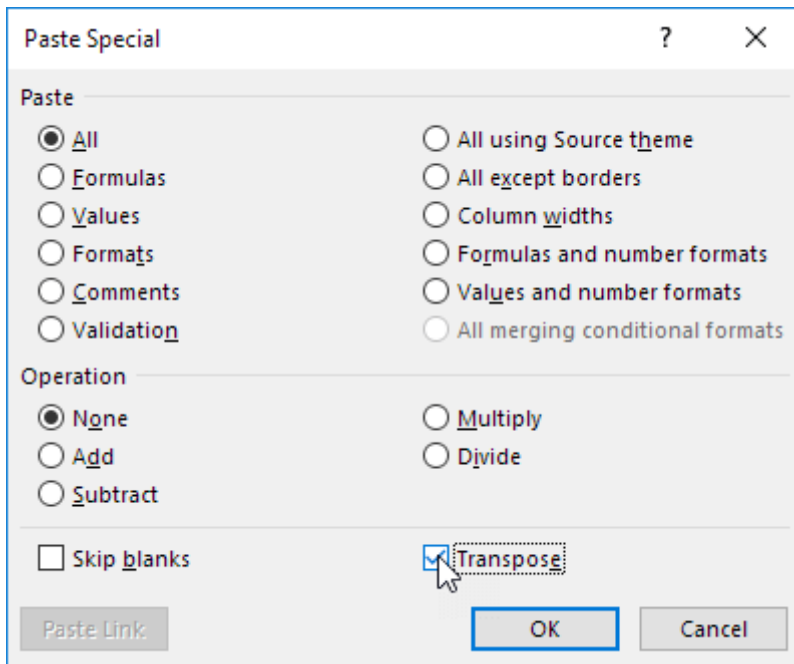
Paste Special Transpose

To transpose data, execute the following steps.

1. Select the range A1:C1.
2. Right click, and then click Copy.



3. Select cell E2.
4. Right click, and then click Paste Special.
5. Check Transpose.



20 [Correlation](#): We can use the CORREL function or the Analysis Toolpak add-in in Excel to find the correlation coefficient between two variables.

21 [Time Sheet](#): This example teaches you how to create a simple timesheet calculator in Excel.

22 [Offset](#): The OFFSET function in Excel returns a cell or range of cells that is a specified number of rows and columns from a cell or range of cells.

23 [Pie Chart](#): Pie charts are used to display the contribution of each value (slice) to a total (pie). Pie charts always use one data series.

24 [Data Tables](#): Instead of creating different scenarios, you can create a data table to quickly try out different values for formulas. You can create a one variable data table or a two variable data table.

25 [t-Test](#): This example teaches you how to perform a t-Test in Excel. The t-Test is used to test the null hypothesis that the means of two populations are equal.

26 [Advanced Filter](#): This example teaches you how to apply an advanced filter in Excel to only display records that meet complex criteria.

27 [Frequency Distribution](#): Did you know that you can use pivot tables to easily create a frequency distribution in Excel? You can also use the Analysis Toolpak to create a histogram.

28 [Scatter Plot](#): Use a scatter plot (XY chart) to show scientific XY data. Scatter plots are often used to find out if there's a relationship between variable X and Y.

29 [Anova](#): This example teaches you how to perform a single factor ANOVA (analysis of variance) in Excel. A single factor or one-way ANOVA is used to test the null hypothesis that the means of several populations are all equal.

30 [Compare Two Lists](#): This example describes how to compare two lists using conditional formatting.

- 31 [Compound Interest](#): What's compound interest and what's the formula for compound interest in Excel? This example gives you the answers to these questions.
- 32 [Sumif](#): The powerful SUMIF function in Excel sums cells based on one criteria. This page contains many easy to follow SUMIF examples.
- 33 [Bar Chart](#): A bar chart is the horizontal version of a column chart. Use a bar chart if you have large text labels.
- 34 [Concatenate](#): Use CONCATENATE, CONCAT, TEXTJOIN or the & operator in Excel to concatenate (join) two or more text strings.
- 35 [Freeze Panes](#): If you have a large table of data in Excel, it can be useful to freeze rows or columns. This way you can keep rows or columns visible while scrolling through the rest of the worksheet.
- 36 [Weighted Average](#): To calculate a weighted average in Excel, simply use SUMPRODUCT and SUM.
- 37 [Index and Match](#): Use INDEX and MATCH in Excel and impress your boss. Instead of using VLOOKUP, use INDEX and MATCH. To perform advanced lookups, you'll need INDEX and MATCH.
- 38 [Delete Blank Rows](#): This example teaches you how to delete blank rows or rows that contain blank cells.
- 39 [Sumproduct](#): To calculate the sum of the products of corresponding numbers in one or more ranges, use Excel's powerful SUMPRODUCT function.
- 40 [Merge Cells](#): Merge cells into one large cell to make clear that a label in Excel applies to multiple columns. Use CONCATENATE, TEXTJOIN or Flash Fill to merge cells without losing data.
- 41 [Subtract](#): There's no SUBTRACT function in Excel. However, there are several ways to subtract numbers in Excel. Are you ready to improve your Excel skills?
- 42 [Percentage](#): Calculating percentages in Excel is easy. Percentage simply means 'out of 100', so 72% is '72 out of 100' and 4% is '4 out of 100', etc.
- 43 [Contains Specific Text](#): To check if a cell contains specific text, use ISNUMBER and SEARCH in Excel. There's no CONTAINS function in Excel.
- 44 [Pmt](#): The PMT function in Excel calculates the payment for a loan based on constant payments and a constant interest rate. This page contains many easy to follow PMT examples.
- 45 [Calculate Age](#): To calculate the age of a person in Excel, use DATEDIF and TODAY. The DATEDIF function has three arguments.
- 46 [Wrap Text](#): Wrap text in Excel if you want to display long text on multiple lines in a single cell.
- 47 [Indirect](#): Use the INDIRECT function in Excel to convert a text string into a valid reference. You can use the & operator to create text strings.
- 48 [Multiply](#): To multiply numbers in Excel, use the asterisk symbol (*) or the PRODUCT function. Learn how to multiply columns and how to multiply a column by a constant.
- 49 [Subtotal](#): Use the SUBTOTAL function in Excel instead of SUM, COUNT, MAX, etc. to ignore rows hidden by a filter or to ignore manually hidden rows.
- 50 [Goal Seek](#): If you know the result you want from a formula, use Goal Seek in Excel to find the input value that produces this formula result.

51 [CAGR](#): There's no CAGR function in Excel. However, simply use the RRI function in Excel to calculate the compound annual growth rate (CAGR) of an investment over a period of years.

52 [If Cell is Blank](#): Use the IF function and an empty string in Excel to check if a cell is blank. Use IF and ISBLANK to produce the exact same result.

53 [Average](#): The AVERAGE function in Excel simply calculates the average (arithmetic mean) of a group of numbers.

54 [Substring](#): There's no SUBSTRING function in Excel. Use MID, LEFT, RIGHT, FIND, LEN, SUBSTITUTE, REPT, TRIM and MAX in Excel to extract substrings.

55 [Count Characters](#): Learn how to count the number of characters in a cell or range of cells and how to count how many times a specific character occurs in a cell or range of cells.

56 [Sum](#): Use the SUM function in Excel to sum a range of cells. Use AutoSum to quickly sum a column or row of numbers.

57 [Compare Two Columns](#): To compare two columns, use IF, ISERROR and MATCH. For a quick row by row comparison, simply use the IF function in Excel.

58 [Divide](#): There's no DIVIDE function in Excel. Simply use the forward slash (/) to divide numbers in Excel.

59 [Remove Spaces](#): The TRIM function in Excel removes leading spaces, extra spaces and trailing spaces. Use the SUBSTITUTE function to remove all spaces or non-breaking spaces.

60 [Move Columns](#): To move columns in Excel, use the shift key or use Insert Cut Cells. You can also change the order of all columns in one magic move.

61 [Hide Columns or Rows](#): Sometimes it can be useful to hide columns or rows in Excel.

62 [Check Mark](#): To insert a check mark symbol in Excel, simply press SHIFT + P and use the Wingdings 2 font. You can also insert a [checkbox](#) in Excel.

63 [Insert Row](#): To quickly insert a row in Excel, select a row and use the shortcut CTRL SHIFT +.

64 [Comparison Operators](#): Use comparison operators in Excel to check if two values are equal to each other, if one value is greater than another value, etc.

65 [NPV](#): The correct NPV formula in Excel uses the NPV function to calculate the present value of a series of future cash flows and subtracts the initial investment.

66 [Bullet Points](#): This page illustrates three ways to insert bullet points in Excel.

67 [AverageIf](#): The AVERAGEIF function in Excel calculates the average of cells that meet one criteria. AVERAGEIFS calculates the average of cells that meet multiple criteria.

68 [Box and Whisker Plot](#): This example teaches you how to create a box and whisker plot in Excel. A box and whisker plot shows the minimum value, first quartile, median, third quartile and maximum value of a data set.

69 [Hyperlinks](#): Use the 'Insert Hyperlink' dialog box in Excel to create a hyperlink to an existing file, a web page or a place in this document. You can also use the HYPERLINK function.

70 [Shade Alternate Rows](#): This example shows you how to use conditional formatting to shade alternate rows.

- 71 [IRR](#): Use the IRR function in Excel to calculate a project's internal rate of return.
- 72 [Time Difference](#): Calculating the difference between two times in Excel can be tricky. Times are handled internally as numbers between 0 and 1.
- 73 [Quick Analysis](#): Use the Quick Analysis tool in Excel to quickly analyze your data. Quickly calculate totals, quickly insert tables, quickly apply conditional formatting and more.
- 74 [Strikethrough](#): This example teaches you how to apply strikethrough formatting in Excel.
- 75 [Today's Date](#): To enter today's date in Excel, use the TODAY function. To enter the current date and time, use the NOW function.
- 76 [Sparklines](#): Sparklines in Excel are graphs that fit in one cell. Sparklines are great for displaying trends. Excel offers three sparkline types: Line, Column and Win/Loss.
- 77 [Forecast](#): The FORECAST.LINEAR function in Excel predicts a future value along a linear trend. The FORECAST.ETS function in Excel predicts a future value using Exponential Triple Smoothing, which takes into account seasonality.
- 78 [Slicers](#): Use slicers in Excel to quickly and easily filter pivot tables. Connect multiple slicers to multiple pivot tables to create awesome reports.
- 79 [Split Cells](#): To split the contents of a cell into multiple cells, use the Text to Columns wizard, flash fill or formulas.
- 80 [Calendar](#): This example describes how to create a calendar in Excel (2022 calendar, 2023 calendar, etc). If you are in a hurry, simply download the Excel file.
- Check out all [300 examples](#).