

ArrayConstants

S. California	Pacific NW	SouthWest	Central	SouthEast	NorthEast	
Entered using the TRANSPOSE function.						
S. California	Pacific NW	SouthWest	Central	SouthEast	NorthEast	
A 6-element vertical array.						
S. California	Pacific NW	SouthWest	Central	SouthEast	NorthEast	
<p>This workbook has a vertical array constant, named SalesRegions. The constant was created using the Insert Name Define command. SalesRegions is defined as:</p> <pre>={"S. California";"Pacific NW";"SouthWest";"Central";"SouthEast";"NorthEast"}</pre>						

Test value:	Gomer				
	Names				
Homer	David	Bud		Name is in the list	
Bill	Carl	Jeremy			
Frank	Herman	Annette			
Louis	Jack	Warren			
Lori	Homer	Phil			
Jill	Bart	Toby			
Joice	Marge	Shirley			
Ken	Gail	Anthony			
Jeff	Sally	Tanya			
Stephanie	Al	Gomer			

This worksheet demonstrates how to use an array formula to determine if a value (or text) is contained in a particular range.

CountLetters

Wordlist	74	= Number of letters in WordList		
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

This array formula returns the number of letters in the range WordList.

MaxMin_Change

	Test 1	Test 2		
Student 1	45	56	-5	Largest Decrease
Student 2	78	73	11	Largest Increase
Student 3	91	93		
Student 4	62	69		
Student 5	74	71		
Student 6	87	87		
Student 7	81	89		
Student 8	83	80		
Student 9	53	53		
This workbook demonstrates how an array formula can eliminate the need for intermediary formulas.				

Sum of Digits

7845	<--- Number		
24	< --- Sum of the digits (array formula)		

This array formula processes each digit in a cell. It returns the sum of the digits of an integer contained in the cell named Number.

Sum Every Nth

	N:	3	= nth value				
		1,683	= Result returned by a single array formula				
		1,683	= Result returned by using formulas in column B:C				
	Data						
	1	1					
	2	2					
	3	0	3				
	4	1					
	5	2					
	6	0	6				
	7	1					
	8	2					
	9	0	9				
	10	1					
	11	2					
	12	0	12				
	13	1					
	14	2					
	15	0	15				
	16	1					
	17	2					
	18	0	18				
	19	1					
	20	2					
	21	0	21				
	22	1					
	23	2					
	24	0	24				
	25	1					
	26	2					
	27	0	27				
	28	1					
	29	2					
	30	0	30				
	31	1					
	32	2					
	33	0	33				
	34	1					
	35	2					
	36	0	36				
	37	1					

This workbook demonstrate how to use an array formula to return the sum of every nth value in a vertical range. The range is named Data.

The array formula does not require the intermediary formulas in columns C and D.

Enter "n" in cell C2

Sum Every Nth

38	2						
39	0	39					
40	1						
41	2						
42	0	42					
43	1						
44	2						
45	0	45					
46	1						
47	2						
48	0	48					
49	1						
50	2						
51	0	51					
52	1						
53	2						
54	0	54					
55	1						
56	2						
57	0	57					
58	1						
59	2						
60	0	60					
61	1						
62	2						
63	0	63					
64	1						
65	2						
66	0	66					
67	1						
68	2						
69	0	69					
70	1						
71	2						
72	0	72					
73	1						
74	2						
75	0	75					
76	1						
77	2						
78	0	78					
79	1						
80	2						
81	0	81					

Sum Every Nth

82	1						
83	2						
84	0	84					
85	1						
86	2						
87	0	87					
88	1						
89	2						
90	0	90					
91	1						
92	2						
93	0	93					
94	1						
95	2						
96	0	96					
97	1						
98	2						
99	0	99					
100	1						

Salesperson	Sales	Excel's Rank Function	Ranks With Array Formula	
Adams	123,000	6	6	
Bigelow	98,000	9	10	
Fredericks	98,000	9	10	Assigned middle rank
Georgio	98,000	9	10	
Jensen	25,000	12	12	
Juarez	101,000	8	8	
Klein	305,000	1	1	
Lynch	145,000	3	3.5	
Mayne	145,000	3	3.5	Assigned average rank
Roberton	121,000	7	7	
Slokum	124,000	5	5	
Wu	150,000	2	2	

This worksheet demonstrates how to use array formulas to produce rank orders that handle ties better than Excel's RANK() function. If items are tied, each is assigned the middle (or average) ranking.

Scores	Score	Array Formulas	COUNTIF Formulas
1	1	6	6
3	2	7	7
2	3	5	5
4	4	6	6
4			
2			
3			
3		Counting discrete items using array formulas vs. COUNTIF functions.	
2			
1			
1			
4			
3			
2			
1			
1			
4			
2			
2			
3			
4			
1			
2			
4			

Nondiscrete_Distribution

Scores	Score	Array Formulas	COUNTIF Formulas
1.4	1	#NAME?	#NAME?
3.2	2	#NAME?	#NAME?
2.5	3	#NAME?	#NAME?
4.6	4	#NAME?	#NAME?
4.9	99		
2.0			
3.1			
3.4		Counting nondiscrete items using array formulas vs. COUNTIF functions.	
2.8			
1.9			
1.3			
4.5			
3.5			
2.1			
1.4			
1.9			
4.4			
2.9			
2.5			
3.4			
4.1			
1.5			
2.5			
4.3			

Dates	Categories	Amounts							
4-Jan	Food	23.50			Transp	Food	Lodging		
4-Jan	Transp	15.00	4-Jan	160.50	49.57	65.95			
4-Jan	Food	9.12	5-Jan	20.00	27.80	89.00			
4-Jan	Food	16.95	6-Jan	0.00	101.96	75.30			
4-Jan	Transp	145.50	7-Jan	11.50	25.00	112.00			
4-Jan	Lodging	65.95							
5-Jan									
5-Jan									
5-Jan									
5-Jan									
				{=SUM(IF(\$E3&F\$2=Dates&Categories,Amounts)}					
6-Jan	Food	9.00							
6-Jan	Food	3.50							
6-Jan	Food	11.02							
6-Jan	Food	78.44							
6-Jan	Lodging	75.30							
7-Jan	Transp	11.50							
7-Jan	Food	15.50							
7-Jan	Food	9.50							
7-Jan	Lodging	112.00							

This worksheet demonstrates how to create a dynamic crosstab table using a array formulas.

)} }

1996

December 1996

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
This worksheet uses a single array formula in B6:H11 to calculate the calendar. It also uses two other named arrays: Week and Weekday.			11	12	13	14
			18	19	20	21
			22	23	24	25
29	30	31				

TheMonth 12
TheYear 1996
StartDate 12/1/1996
StartDOW 0
MonthName: January
February
March
April
May
June
July
August
September
October
November
December