1   絕對值 (|x|)

FUNCTIONS 函數	RESULTS 結果	MEANING 意義
=ABS(1–4)	3	absolute value
=ABS (–2)	#NAME?	no blank

2   整數

=INT(18/5), =INT(3.65)	3	integer part
=INT(–4.3)	–5	

3   去除小數

=TRUNC(3.65)	3	Truncate 截尾
=TRUNC(–4.3)	–4	
=TRUNC(123.456)	123	=INT(123.456)
=TRUNC(123.456,1)	123.4	1 位小數 (0.1)
=TRUNC(123.456,2)	123.45	2 位小數 (0.01)
=TRUNC(129.456,–1)	120	十位

4   餘數 (a%b)

=MOD(19,4)	3	餘數 remainder of 19/4
=MOD(–15,4)	1	意義不大
=MOD(15,–4)	–1	
=MOD(–15,–4)	–3	

5   四捨五入   ROUND, ROUNDUP, ROUNDDOWN

=ROUND(125.678,0)	126	126	125	準確至 1 (個位)
=ROUND(125.678,1)	125.7	125.7	125.6	1 位小數 (0.1)
=ROUND(125.678,2)	125.68	125.68	125.67	2 位小數 (0.01)
=ROUND(125.678,–1)	130	130	120	十位 10
=ROUND(125.678,–2)	100	200	100	百位 100

6   平方根 $\sqrt{x}$

=SQRT(16)	4	
=SQRT(–16)	#NUM!	Error

7   次方(x^n) ~pow()

=POWER(2,3)	8	=2^3 三次方
=POWER(3,2)	9	=3^2 二次方
=POWER(2,–3)	0.125	=2^{-3}

8   隨機數

=RAND()	0 ≤ x ≤ 0.999	random number (0–0.999)
=RAND()*100	0 ≤ x ≤ 99.999	
=INT(RAND()*100)	0 – 99	C: n=rand()%100;
=INT(RAND()*6)+1	1 – 6	C: n=rand()%6+1;

9   平方和 (a^2+b^2)

=SUMSQ(3, 4)	25	=3^2+4^2
=SUMSQ(10)	100	=10^2
=SUMSQ(A1:A3)	14	A1=1,A2=2,A3=3

	A	B	C	D	E
1	3	TRUE			
2	5	10			

10　總和 Σ

=SUM(A1,B1,2)	5	=3+TRUE(文字)+2
=SUM(A2:B2, 15)	30	=5+10+15
=SUM(3, 2)	5	
=SUM("3", 2, TRUE)	6	=3+2+TRUE(1)

	A	B	C	D	E
1	7	10	4		Sales
2	3.5	7	18		12/8/90
3	3.5	9	7		
4	1	27			19
5	2	2			22.24
6					TRUE
7					#DIV/0!

11　排名次　=RANK(數值 Num,範圍 Ref,次序 Order)

=RANK(A1, A1:A5, 0)	1	=0　由大至小 descending
=RANK(A1, A1:A5)	1	同上
=RANK(A1, A1:A5, 1)	5	≠0　由小至大 ascending

12　平均分

=AVERAGE(B1:B5)	11	=(10+7+9+27+2)/5
=AVERAGE(Scores)	11	Scores = B1:B5
=AVERAGE(B1:B5,5)	10	=(10+7+9+27+2+5)/6

13　數一數（數字、日期）

=COUNT(E1:E7)	3	數字儲存格
=COUNT(E1:E3)	1	包括 date
=COUNT(E1:E7, 2)	4	

14　數一數（非空格，空格）

=COUNTA(E1:E7)	6	非空白 non–blank
=COUNTA(E1:E7, 2)	7	
=COUNTBLANK(E1:E7)	1	空白 blank cells

	A	B	C	D	E
1	apples	oranges	peaches	apples	=IF(C3<50,"",C3)
2	32	54	75	86	=IF(C3<50,0,C3)

15　數一數（範圍，條件）

=COUNTIF(A1:D1,"apples")	2	如果等如"apples"
=COUNTIF(A2:D2,">=55")	2	如果大於或等如 55
=COUNTIF(A2:D2,">"&B2)	2	如果大於 54

16　如果‥，則‥，否則‥

=IF(A10>=50, "Pass", "Fail")	如果 A10>=50，則"Pass"，否則"Fail"
=IF(A10=100,SUM(B5:B15),"")	如果 A10=100，則 SUM(B5:B15)，否則""
=IF(A2>89, "A", IF(A2>79, "B", IF(A2>69, "C", IF(A2>59, "D", "F"))))	

	A	B	C	D
1	房屋價值	銷售佣金		10
2	100,000	7,000		7
3	200,000	14,000	✓	9
4	300,000	21,000	✓	27
5	400,000	28,000	✓	2

17　加總 B2:B5，如果 A2:A5 大於 160000

=SUMIF(A2:A5,">160000",B2:B5)	63,000	

18　最大、最小

=MAX(D1:D5)	27	最大
=MAX(D1:D5,30)	30	
=MIN(D1:D5)	2	最小
=MIN(D1:D5, 0)	0	

	A	B	C	D
1	Frequency	Color	顏色	
2	4.1423	red	紅	
3	4.1934	orange	橙	
4	5.1723	yellow	黃	
5	5.7734	green	綠	
6	6.3898	blue	藍	已排序
7	7.3134	violet	紫	** Sorted List

19　LOOKUP(目標數值，尋找範圍，回傳範圍) sorted list required

=LOOKUP(4.91, A2:A7, B2:B7)	orange	
=LOOKUP(5.00, A2:A7, B2:B7)	orange	
=LOOKUP(7.66, A2:A7, B2:B7)	violet	
=LOOKUP(1.66, A2:A7, B2:B7)	#N/A	
=LOOKUP(4.91, A2:A7, C2:C7)	橙	
=LOOKUP("RED", B2:B7, C2:C7)	紅	not case sensitive
=LOOKUP("blue", B2:B7, C2:C7)	#N/A	B2:B7 is unsorted

20

=LOOKUP("C",{"a","b","c","d";1,2,3,4})	3	
=LOOKUP("bump",{"a",1;"b",2;"c",3})	2	

	A	B	C	D
1	Axles	Bearings	Bolts	汽車零件存貨
2	4	4	9	
3	5	7	10	
4	6	8	11	

21　HLOOKUP(目標數值，尋找範圍，回傳範圍，近似)

=HLOOKUP("Axles", A1:C4,2,TRUE)	4	
=HLOOKUP("Bearings",A1:C4,3,FALSE)	7	
=HLOOKUP("Bearings",A1:C4,3,TRUE)	7	
=HLOOKUP("Bolts",A1:C4,4)	11	
=HLOOKUP("Bolt",A1:C4,4,TRUE)	8	

	A	B	C	D
1	在 1 atm 壓力下的空氣			
2	密度	黏度	溫度	
3	(kg/m^3)	$(kg/m*s)*10^5$	(°C)	
4	0.457	3.55	500	
5	0.525	3.25	400	
6	0.616	2.93	300	
7	0.675	2.75	250	
8	0.764	2.57	200	
9	0.835	2.38	150	
10	0.946	2.17	100	
11	1.09	1.95	50	
12	1.29	1.71	0	

22　VLOOKUP(目標數值，尋找範圍，回傳範圍，近似)　　設 Range = A4:C12

=VLOOKUP(1,Range,1,TRUE)	0.946	最接近=TRUE
=VLOOKUP(1,Range,2)	2.17	default = TRUE
=VLOOKUP(1,Range,3,TRUE)	100	
=VLOOKUP(.746,Range,3,FALSE)	200	
=VLOOKUP(0.1,Range,2,TRUE)	#N/A	value 0.1 not found
=VLOOKUP(2,Range,2,TRUE)	1.71	
=IFERROR(VLOOKUP(…),"",VLOOKUP(…))		偵錯

23　第 n 個最小

=SMALL(B4:B12,4)	2.38	第 4 小
=SMALL(B4:B12,2)	1.95	第 2 小

24　第 n 個最大

=LARGE(B4:B12,3)	2.93	第 3 大
=LARGE(B4:B12,7)	2.17	第 7 大

	A	B	C	D	E
1	1	3		2	3
2	2	1		3	2
3	3	2		1	1

25　先乘，然後再加總

=SUMPRODUCT(A1:A3,D1:D3)	11	=1*2 + 2*3 + 3*1
=SUMPRODUCT(A2:B2,A3:B3)	8	
=SUMPRODUCT(A1:B3,D1:E3)	24	

26　日期、時間、小時、分鐘 (0.2 days = 4 hours 48 minutes)

=NOW()	2007/9/1　23:45	date and time
=DATE(2007,12,25)	2007/12/25	yyyy,mm,dd
=HOUR(0.2)	4	hours 小時
=MINUTE(0.2)	48	minutes 分鐘
=WEEKDAY(TODAY(),2)	7 (sunday)	mon(1)–sun(7)

27　字符串 String

=CHAR(65)	A	ASCII → Character
=CODE("ABC")	65	Character → ASCII
=CONCATENATE("abc","xyz")	abcxyz	="abc"&"xyz"
=ISBLANK(A2)	true or false	是否空白

28　字符串長度

=LEN("")	0	length of a string
=LEN("abcde")	5	

29　從左面取字串的部分

=LEFT("abcde")	a	子字串 sub-string
=LEFT("abcde",3)	abc	
=LEFT("abcde",LEN("abcde")−1)	abcd	

30　從中間取字串的部分

=MID("abcde",2,3)	bcd	
=MID("abcde",9,3)		empty string

31　從右面取字串的部分

=RIGHT("abcde",3)	cde	
=RIGHT("abcde")	e	

32　轉小寫、一般、大寫、去除多餘空白

=LOWER("chAN tai MAN")	chan tai man	小寫
=PROPER("chAN tai MAN")	Chan Tai Man	一般
=UPPER("chAN tai MAN ")	CHAN TAI MAN	大寫
=TRIM(" abc def ")	abc def	去除多餘空白 spaces

	A	B	C	D
1	零件及代號			
2	Ceramic Insulators #124−TD45−87			
3	Copper Coils #12−671−6772			
4	Variable Resistors #116010			

33　MID+FIND

=MID(A2,1,FIND(" #",A2,1)−1)	Ceramic Insulators	
=MID(A3,1,FIND(" #",A3,1)−1)	Copper Coils	
=MID(A4,1,FIND(" #",A4,1)−1)	Variable Resistors	

34　比較字符串　~strcmp

=EXACT("abc","abc")	true 真	相同
=EXACT("abc","ABC")	false 假	不同

35　格式輸出

=TEXT(2.715, "$0.00")	$2.72	
=TEXT("1991/4/15","mmmm dd, yyyy")	April 15, 1991	
=TEXT(9,"00")&":"&TEXT(5,"00")	09:05	

36　字符串(文字)轉數值

=VALUE("$1,000")	1000	
=VALUE("1900/2/1")	32	32 days since 1/1/1900
=VALUE("12:00:00")	0.5	12 hrs = 0.5 days
=VALUE("16:48:00")−VALUE("12:00:00")	0.2	4 hrs 48 min = 0.2 days

37　找尋(目標，搜索範圍，開始位置)

=FIND("M","Miriam McGovern")	1	
=FIND("m","Miriam McGovern")	6	M≠m
=FIND("M","Miriam McGovern",3)	8	

	A	B
1	Margin	
2	Profit Margin	

38　找尋(目標，搜索範圍，開始位置)

=SEARCH("e","Statements",6)	7	
=SEARCH("E","Statements",6)	7	E=e
=SEARCH(A1,A2)	8	

39　取代(原文,開始,字數,代替文字)

=REPLACE("Profit Margin", 8, 6, "Amount")	Profit Amount
=REPLACE(A2, 8, 6, "Amount")	Profit Amount
=REPLACE(A2, SEARCH(A1,A2), LEN(A2), "Amount")	Profit Amount

40　選擇(n,選項 1,選項 2,…)

=CHOOSE(3,A3,A4,A5,A6)	A5
=SUM(A2:CHOOSE(2,A3,A4,A5))	=SUM(A2:A4)
=SUM(CHOOSE(2,A1:A2,A3:A4,A5:A6))	=SUM(A3:A4)

41　邏輯表 Truth table

AND	true	false
true	true	false
false	false	false

OR	true	false
true	true	true
false	true	false

NOT	
true	false
false	true

42　邏輯運算子 Logical operators

=AND(1<10,2<10)	true	(1<10) and (2<10)
=AND(1>10,2<10,3>10)	false	
=AND(1>10,2>10)	false	
=OR(1>10,"ABC"="abc")	true	(1>10) or (2<10)
=OR(1<10,2>10)	true	
=OR(1>10,2>10)	false	
=NOT(1=1)	false	negation
=NOT(1<>1)	true	
=AND(5=5,OR(1<10,2<10))	true	

43　潤年測試 Leap Year Test

	A	B	C
1	1980	=MOD(A1,400)=0	=OR(B1,AND(B2,B3))
2		=MOD(A1, 4)=0	
3		=MOD(A1,100)<>0	

潤年二月

=IF(OR(B1,AND(B2,B3)),29,28)	29	=B1 or (B2 and B3)
=OR(MOD(A1,400)=0,AND(MOD(A1,4)=0,MOD(A1,100)<>0))		

44　TRUE / FALSE

=TRUE()	TRUE	
=FALSE()	FALSE	

	A	B	C	D
1	4	小於或等於	Frequency	
2	7	9	2	=FREQUENCY(A$1:A$50,B2)
3	11	19	6	=FREQUENCY(A$1:A$50,B3)
4	16	29	12	
5	16	39	15	
6	17	49	21	
7	20	59	29	
8	21	69	36	
9	21	79	44	
10	24	89	48	
11	27	99	50	

{=FREQUENCY(A1:A50,B2:B11)}

45　統計資料

=MEDIAN(A1:A50)	53.5	中位數
=MODE(A1:A50)	53	出現次數最多
=FREQUENCY(A1:A11,10)	2	數值≤10 出現次數

46　上捨入 CEILING(數值，準確至最接近的)

=CEILING(169.65,1)	170	準確至 1
=CEILING(169.65,2)	170	準確至 2
=CEILING(169.65,0.1)	169.7	準確至 0.1
=CEILING(169.45,0.5)	169.5	準確至 0.5

47　下捨入 FLOOR(數值，準確至最接近的)

=FLOOR(169.65,1)	169	準確至 1
=FLOOR(169.65,2)	168	準確至 2
=FLOOR(169.65,0.1)	169.6	準確至 0.1
=FLOOR(169.45,0.5)	169	準確至 0.5

48

=PRODUCT(A1:A5)		A1*A2*A3*A4*A5
=ODD(10.6)	11	最接近的單數
=EVEN(10.6)	12	最接近的雙數
=ROMAN(2010)	MMX	羅馬數字
=PI()	3.14…	π
=FACT(4)	24	4! = 1×2×3×4

49　LOG(number,base)

=LOG(5,10)	0.69897	
=LOG(81,3)	4	
=LOG10(5)	0.69897	
=EXP(3)	20.08553692	e^3
=LN(20.08553692)	3	

	A	B	C	D
1		Date	Value	
2	2000	08/01/2000	10.5	2000
3	2003	05/12/2003	7.2	
4	2000	03/12/2000	100	
5	2001	07/30/2001	5.4	
6	2000	02/28/2000	8.1	

50 SUMIF(range1,criteria,range2)

=SUMIF(A2:A6,2000,C2:C6)	118.6	=10.5+100+8.1
=SUMIF(A:A,D2,C:C)	118.6	
=SUMIF(A2:A6, ">=2001", C2:C6)	12.6	

51 A1=Acer

=SUBSTITUTE(A1,"er","or",1)	Acor	把 A1 第 1 個內"er"取代為"or"
=FIXED(1234,1,TRUE)	1234.0	1 位小數，沒有(,)
=FIXED(1234,2,FALSE)	1,234.00	2 位小數，有(,)

52 TEXT

=TEXT(A1, "$#,##0.00")	"$7,678.87"
=TEXT(A1, "0")	"7679"
=TEXT(5, "00")	"05"
=TEXT(A2, "0.0")	"123.7"
=TEXT(1277, "#,##0")	"1,277"
=TEXT(C1, "yyyy/mm/dd")	"2003/12/31"
=TEXT(C1, "mmm dd, yyyy")	"Dec 31, 2003"

53 只顯示文字

=T(56)	""
=T("56")	"56"
=T("56 ABC")	"56 ABC"

54

=CLEAN(A1)	清除 A1 內所有非列印字符
=REPT("ab",3)	"ababab"
=CONCATENATE(A1,"/",B1,"/",C1)	合併文字 "25/12/2005"
= C1&"-"&B1&"-"&A1	合併文字 "2005-12-25"
=DOLLAR(A1+A2,2)	"$1,345.00"

55 SUBTOTAL(方法，範圍)

1	2	3	4	5	6	7	8	9	10	11
average	count	counta	max	min	product	stdev	stdevp	sum	var	varp

56

=PERCENTILE(A1:A10,0.5)	median (50%)
=PERCENTILE(A1:A10,0.75)	75%
=QUARTILE(A1:A10,n)	n=0..4
=STDEV(A1:A10)	標準差

=COMBIN(n,r)	Combination nCr
=PERMUT(n,r)	Permutation nPr

57

=INTERCEPT(y-values,x-values)	y-intercept (when x=0)
=INTERCEPT(A1:A5,B1:B5)	
=INDIRECT(A1)	

60　Custom Format: (自訂格式)

G/通用格式			
0	0.00	#,##0	#,##0.00
_-* #,##0_-;-* #,##0_-;_-* "-"_-;_-@_-			
_-* #,##0.00_-;-* #,##0.00_-;_-* "-"??_-;_-@_-			
_-$* #,##0_-;-$* #,##0_-;_-$* "-"_-;_-@_-			
_-$* #,##0.00_-;-$* #,##0.00_-;_-$* "-"??_-;_-@_-			
#,##0;-#,##0		$#,##0;-$#,##0	
#,##0;[紅色]-#,##0		$#,##0;[紅色]-$#,##0	
#,##0.00;-#,##0.00		$#,##0.00;-$#,##0.00	
#,##0.00;[紅色]-#,##0.00		$#,##0.00;-$#,##0.00	
0%		##0.0E+0	
0.00%		# ?/?	
0.00E+00		# ??/??	
"US$"#,##0_);("US$"#,##0)		"US$"#,##0_);[紅色]("US$"#,##0)	
"US$"#,##0.00_); ("US$"#,##0.00)		"US$"#,##0.00_); [紅色]("US$"#,##0.00)	
d-mmm		d-mmmm-yy	
mmm-yy		m/d/yy	
e"年"m"月"d"日"		e/m/d	
yyyy"年"m"月"d"日"		yyyy/m/d	
hh"時"mm"分"		hh:mm	
hh"時"mm"分"ss"秒"		hh:mm:ss	
上午/下午 hh"時"mm"分"		hh:mm AM/PM	
上午/下午 hh"時"mm"分"ss"秒"		hh:mm:ss AM/PM	
		yyyy/m/d hh:mm	
mm:ss		@	
mm:ss.0		[h]:mm:ss	

61　自定清單 Auto Fill

Horoscope?　Aquarius, Pisces, Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn
星座 ?　水瓶,雙魚,白羊,金牛,雙子,巨蟹,獅子,處女,天秤,天蠍,人馬,山羊座
十二生肖 ?　猴,雞,狗,豬,鼠,牛,虎,兔,龍,蛇,馬,羊
顏色 ?　紅,橙,黃,綠,青,藍,紫
one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen,twenty, thirty, forty, fifty, sixty, seventy, eighty, ninety
一二三四五六七八九十 I, II, III, IV, V, VI, VII VIII, XI, X, ..., L, D, M