

Microsoft Excel 2002

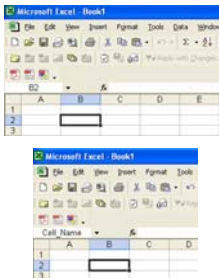
Learning the Syntax of MS Excel Functions

by
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Naming Cells and Ranges

- Assignment cell names and ranges may be used in formulas.
- Cell names defined in any one worksheet may be used in all other worksheets in the same workbook.
 - For example, entering
 - “=Rice+Beans” into Cell A3 provides the same results as entering “=A1+A2” into Cell A3

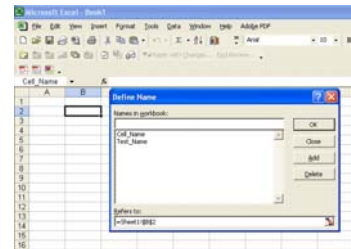
Defining names with the Name command



- A named cell takes precedence over the cell reference.
- Spaces may NOT be used in a cell name.

Define Name Dialog Box

- Quickly fetch the “Define Name” command by pressing Ctrl+F3



Rules for Naming Cells and Ranges

- Names must start with a letter, backslash (\), or an underscore (_).
- Names may include numbers.
- The backslash (\) or the underscore (_) are the only symbols allowed.
- Underscores (_) indicate blank spaces.
- Cell references may not be used as names
 - E.g., B5 or H3
- Except the letters “R” and “C,” all other single letters may be used as cell names.

Excel Functions

The many hundreds of Excel functions may be activated by typing the sign “=” in the “Fx” window followed by the function NAME and one or more ARGUMENTS.

	A	B	C	D	E	
2		1	29	91.5	183	1491
3		3	29	72.5	170	1281
4		5	22	72.6	176	1165
5		7	26	83.2	179	1670
6		9	23	102	196	1921
7		11	28	101	177	1721
8		13	23	84.6	172	1201
9		15	25	72.1	183	1561
10		17	30	90.2	177	1289
11		19	27	64.9	178	1167
12		21	23	56.6	168	869.5
13	M Sum		284	874.2	1958	15364.5
14	F Mean		25.81818	79.2	178	1396.5

The function named “SUM” instructs Excel to perform the “Argument” of adding all values in cells B2 through B12.

Example of a nameless function that uses two arguments.

Subject	WEIGHT	HEIGHT	BMI	Health Status
SS #1	98	1.8	27.16	Overweight
SS #2	75	1.8	23.15	Healthy
SS #3	109	1.8	33.64	Overweight
SS #4	70	1.8	21.60	Underweight
SS #5	44	1.53	18.80	Underweight

=B3/C3^2

The above argument instructs Excel to divide the value in cell B3 by the value in cell C3 squared. The result is displayed in cell D3

Types of Arguments

- Numeric Values
 - =PRODUCT(B2,B4,B7)
 - =SUM(B2:B7,C3-C10,D5-D8)
- Text Values
 - =TEXT(NOW(),"MMM D, YYYY")
- Logical Values
 - IF(logical_test,value_if_true,value_if_false)
- Named References
 - =SUM(CourseGrade)
 - the name CourseGrade is assigned to cells ranging from B2:B5 (B2,B3,B4,and B5)

Types of Arguments: Numeric Values

	A	B	C	D	E	F	G
1							
2							
3	10	20	30	6000			
4							
5							

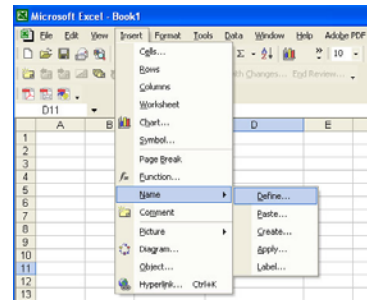
Types of Arguments: Text Values

	A	B	C	D	E	F	G
1							
2							
3	10	20	30	6000	Sep 18, 2006		
4							

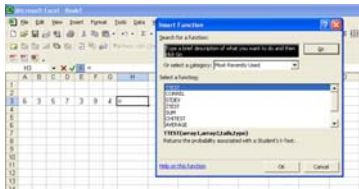
Types of Arguments: Logical Values

	A	B	C	D	E	F	G
1							
2							
3	10	20	30	6000	Sep 18, 2006	Profitable	
4							

Types of Arguments: Named References

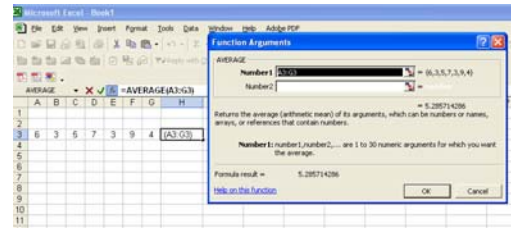


Entering Functions into a Worksheet



Excel functions may be entered by typing the sign “=” in the “Fx” window followed by the function NAME or a function may be selected from the Insert menu.

Function Dialog Box



- Once a function was selected, Excel displays the Function Dialog Box thus prompting the user to either enter or select the appropriate argument.

Questions?

Comments?

Now let's try some MS Excel functions typically used in KNS