



DRA'S & HOW MICROSOFT EXCEL CAN HELP YOU!

Written by PJ Karaffa

HOW TO COUNT GAINS ON DRA PRE & POST DATA

ID Number	Grade	SPED or ELL	Jan DRA	Jan Retell	Jan Bil DRA	Jan Bil Retell	May DRA	May Retell	May Bil DRA	May Bil Retell	Gains
8042202	K		BA				1				2
8040102	K		1				2				1
8044407	K	ELL	1	4			2				1
8041635	K		BA				2				3
8044408	K		A				2				2
8044409	K		A				2				2
8045402	K		1				3	3			2
8041890	K		BA				3	4			4
8045415	K		1				3	3			2
8044410	K		A				6	3			5
8045408	K		2				3	3			1
8039054	K	SPED	A				3	4			3
8041404	K	ELL	2				3	3			1
8045403	K		2				3	4			1
8038066	K	ELL	1				BA	4			-2
8040429	K	ELL	2				3	3			1
8044412	K		1				3	3			2
9399045	K		1				3	4			2
8048344	K		2				4	4			2
8044216	K		2				4	3			2
8044406	K		2	4			6	3			3
8045498	K		2				6	3			3
8045423	K		2				6	4			3
8045426	K		2				6	4			3
8045401	K		1				6	3			4
8045418	K		2				8	3			4

BUILD A LOOKUP TABLE

Jan DRA	May DRA	Gains							Lookup Table	
BA	1	2							BA	0
1	4	3							A	1
BA	6	6							1	2
A	14	9							2	3
									3	4
									4	5
									6	6
									8	7
									10	8
									12	9
									14	10
									16	11
									18	12
									20	13
									24	14
									28	15
									30	16
									34	17
									38	18
									40	19
									44	20

=VLOOKUP(B2,\$I\$2:\$J\$22,2,FALSE)-VLOOKUP(A2,\$I\$2:\$J\$22,2,FALSE)

SIGNIFICANT GAINS

USING AN EXCEL FORMULA

Grade	Jan DRA	May DRA	Gains	Substantial Gain
K	14	20	3	SG
1	BA	14	9	SG
2	6	10	2	
3	A	10	7	SG
3	1	2	1	

=IF(D2="", "", IF(AND(A2="K", D2 >= 2), "SG", IF(AND(A2=1, D2 >= 4), "SG", IF(AND(A2=2, D2 >= 3), "SG", IF(AND(A2=3, D2 >= 3), "SG", ""))))))

```
Public Function substantial(grade As String, pre As String, post As String) As String
    substantial = ""
```

```
    If IsNumeric(pre) And IsNumeric(post) Then
        Dim gs As String
        gs = gain(pre, post)
        If IsNumeric(gs) Then
            Dim g As Long
            g = CLng(gs)
```

```
        Select Case Trim(UCase(grade))
            Case "K"
                If g >= 3 Then substantial = "SG"
            Case "1"
                If g >= 4 Then substantial = "SG"
            Case "2"
                If g >= 3 Then substantial = "SG"
            Case "3"
                If g >= 3 Then substantial = "SG"
```

```
        End Select
    End If
End Function
```

```
Public Function gain(pre As String, post As String)
    gain = "-"
    If score(pre) < 0 Then Exit Function
    If score(post) < 0 Then Exit Function
    gain = CLng(score(post) - score(pre))
End Function
```

```
Private Function score(x As String) As Long
    score = -1
    On Error GoTo fail
    Select Case UCase(Trim(x))
```

```
        Case "BA": score = 0
        Case "A": score = 1
        Case "1": score = 2
        Case "2": score = 3
        Case "3": score = 4
        Case "4": score = 5
        Case "6": score = 6
        Case "8": score = 7
        Case "10": score = 8
        Case "12": score = 9
        Case "14": score = 10
        Case "16": score = 11
        Case "18": score = 12
        Case "20": score = 13
        Case "24": score = 14
        Case "28": score = 15
        Case "30": score = 16
        Case "34": score = 17
        Case "38": score = 18
        Case "40": score = 19
        Case "44": score = 20
```

```
    End Select
fail:
End Function
```



AVERAGING DRA's

DRA SCORE INTERVAL SCALE

BA	0
A	0.5
1	1
2	2
3	3
4	4
6	5
8	6
10	7
12	8
14	9
16	10
18	11
20	12
24	13
28	14
30	15
34	16
38	17
40	18

Averaging DRA Scores

The screenshot shows a Microsoft Excel spreadsheet with the following data:

Student Name	DRA II Score
A	BA
B	BA
C	BA
D	1
E	1
F	10
G	1
H	14
I	1
J	1
K	A
L	A
M	A
N	B
O	BA

The formula bar shows the following formula:

$$=SUM(B2:B16,SUMPRODUCT(SUM(COUNTIF(B2:B16,{"BA","A"})*{0,0.5}))/MAX(1,COUNT(B2:B16)+COUNTIF(B2:B16,"?*""))$$

The result of the formula is 2.033333333.

$$=SUM(B2:B16,SUMPRODUCT(SUM(COUNTIF(B2:B16,{"BA","A"})*{0,0.5}))/MAX(1,COUNT(B2:B16)+COUNTIF(B2:B16,"?*""))$$

Getting the Average Interval Rounded Scale

Student Name	DRA II Score	
A	BA	
B	BA	
C	BA	
D	A	
E	8	
F	14	
G	2	
H	A	
I	BA	
J	A	
K	BA	
L	A	
M	BA	
N	12	
O	16	
		Average Interval
	3.6	4

$$=INDEX(\{0,0.5,1,2,3,4,6,8,10,12,14,16,18,20,24,28,30,34,38,40\},MATCH(B18,\{0,0.5,1,2,3,4,6,8,10,12,14,16,18,20,24,28,30,34,38,40\})+(B18 \geq SUM(INDEX(\{0,0.5,1,2,3,4,6,8,10,12,14,16,18,20,24,28,30,34,38,40\},MATCH(B18,\{0,0.5,1,2,3,4,6,8,10,12,14,16,18,20,24,28,30,34,38,40\}))+INDEX(\{0,0.5,1,2,3,4,6,8,10,12,14,16,18,20,24,28,30,34,38,40\},MATCH(B18,\{0,0.5,1,2,3,4,6,8,10,12,14,16,18,20,24,28,30,34,38,40\}))+1))/2))$$



USEFULL CHARTS

