



Excel Gradebook Tricks

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About the speaker:

David H. Ringstrom, CPA, is an author and nationally recognized instructor who teaches scores of webinars each year. His Excel courses are based on over 25 years of consulting and teaching experience. His mantra is “Either you work Excel, or it works you.” David offers spreadsheet and database consulting services nationwide.

Grade Analysis Overview

	A	B	C	D	E	F	G	H	I	J	K	L
1	Student Name	Score1	Score2	Score3	Score4	Score5						
2	Carley Drake	66	60	84	65	96						
3	Anis Robbins	96	88	76	98	91						
4	Darius Carpenter	69	91	72	91	67						
5	Jardel Ridley	77	87	80	86	93						
6	Lara Foley	65	67	71	88	99						
7	Gurveer Gale	74	100	70	68	80						
8	Derren Solomon	64	92	77	95	67						
9	Parker Whitmore	85	68	72	62	100						
10	Nishat Rees	88	72	89	63	79						
11	Nelly Merrill	85	69	75	92	90						
12	Daphne Owens	90	63	89	71	100						
13	Montgomery Kirkpatrick	76	84	64	97	97						
14	Cade Nelson	81	86	70	97	100						
15	Ivo Armstrong	95	85	61	88	59						
16	Myles Abbott	59	60	61	100	62						
17	Francis Ware	95	81	67	67	83						
18	Tiegan Boyle	66	67	72	96	62						
19	John Keller	64	86	98	62	96						
20	Zena Singh	60	73	78	87	97						
21	Finnian Hills	71	86	92	76	96						
22												

Grade Analysis Goals:

1. Use AVERAGE function to get average score
2. Convert average to letter grade with VLOOKUP
3. Count letter grades with pivot table
4. Show student names with letter grades
4. Use LARGE function to keep top 3 grades
5. Use AVERAGE to average top 3 grades
6. Convert average to letter grade with VLOOKUP
7. Count letter grades with pivot table

Grades



Averaging Scores

	A	B	C	D	E	F	G	H	I	J	K	L
1	Student Name	Score1	Score2	Score3	Score4	Score5	Average					
2	Carley Drake	66	60	84	65	96	74.2	=AVERAGE(B2:F2)				
3	Anis Robbins	96	88	76	98	91	90	=ROUND(AVERAGE(B3:F3),0)				
4	Darius Carpenter	69	91	72	91	67	78					
5	Jardel Ridley	77	87	80	86	93	85					
6	Lara Foley	65	67	71	88	99	78					
7	Gurveer Gale	74	100	70	68	80	78					
8	Derren Solomon	64	92	77	95	67	79	=AVERAGE(B2:F2)				
9	Parker Whitmore	85	68	72	62	100	77					
10	Nishat Rees	88	72	89	63	79	78					
11	Nelly Merrill	85	69	75	92	90	82					
12	Daphne Owens	90	63	89	71	100	83					
13	Montgomery Kirkpatrick	76	84	64	97	97	84					
14	Cade Nelson	81	86	70	97	100	87					
15	Ivo Armstrong	95	85	61	88	59	78					
16	Myles Abbott	59	60	61	100	60	60					
17	Francis Ware	95	81	67				=ROUND(AVERAGE(B2:F2),0)				
18	Tiegan Boyle	66	67	72								
19	John Keller	64	86									
20	Zena Singh	60	73									
21	Finnian Hills	71	86									
22												

=AVERAGE(B2:F2)

number1
B2:F2
First number or cell reference to average

[number2],...
Second number or cell reference to average, up to 255

=ROUND(AVERAGE(B2:F2),0)

number
AVERAGE(B2:F2)
Number you wish to round (by default Excel calculates numbers to as many 15 decimal places)

num_digits
0
Number of digits to round to

Convert Numeric Scores to Letters

	A	B	C	D	E	F	G	H	I	J	K	L
1	Student Name	Score1	Score2	Score3	Score4	Score5	Average	Letter Grade		Score	Letter	
2	Carley Drake	66	60	84	65	96	74	C		0	F	
3	Anis Robbins	96	88					90	A	60	D	
4	Darius Carpenter	69	91	72	91	67	78	C		70	C	
5	Jardel Ridley	77	87	80	86	93	85	B		80	B	
6	Lara Foley	65	67	71	88	99	78	C		90	A	
7	Gurveer Gale	74	100	70	68	80	78	C				
8	Derren Solomon	64	92	77	95	67	79	C				
9	Parker Whitmore	85	68	72	62	100	77	C				
10	Nishat Rees	88	72	89	63	79	78	C				
11	Nelly Merrill	85	69	75	92	90	82	B				
12	Daphne Owens	90	63	89	71	100	83	B				
13	Montgomery Kirkpatrick	76	84	64	97	97	84	B				
14	Cade Nelson											
15	Ivo Armstrong											
16	Myles Abbott											
17	Francis Ware											
18	Tiegan Boyle											
19	John Keller											
20	Zena Singh											
21	Finnian Hills											
22												

=VLOOKUP(G2,\$J\$2:\$K\$6,2,TRUE)

Establish a list of tiers before writing the VLOOKUP formula.

=VLOOKUP(G2,\$J\$2:\$K\$6,2,TRUE)

lookup_value G2 what to look for (in this case, the average score)	table_array \$J\$2:\$K\$6 cell coordinates of our list	col_index_num 2 column from which to return data	[range_lookup] TRUE type of match 0 or FALSE: exact match 1 or TRUE: approximate match
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Count Letter Grades with Pivot Table

1 Select any cell within a list.

2 Insert

3 PivotTable

4 OK

5 Drag Letter Grade into both the Rows and Values sections. The pivot table report will then return a count of the letter grades.

Student Name	Score1	Score2
Carley Drake	66	
Jarden Ridley	77	
Lara Foley	65	
Gurveer Gale	74	
Derren Solomon	64	
Parker Whitmore	85	
Nishat Rees	88	
John Keller	64	
Zena Singh	60	
Finnian Hills	71	
Carley Drake	66	
Anis Robbins	96	

Grades

Create PivotTable

Choose the data that you want to analyze

- Select a table or range
 - Table/Range: Grades!\$A\$1:\$H\$21
- Use an external data source
 - Choose Connection...
- Use this workbook's Data Model

Choose where you want the PivotTable report to be placed

- New Worksheet
- Existing Worksheet
 - Location:

Choose whether you want to analyze multiple tables

- Add this data to the Data Model

Letter Grade

Count of Lett...

Defer Layout Update

Update

Viewing Students by Letter Grade

1 Pivot table counts the number of letter grades.

2 Student Name

3 The pivot table now shows the students that received each letter grade.

Row Labels	Count of Letter Grade
A	1
B	7
C	11
D	1
Grand Total	20

PivotTable Fields

Choose fields to add to report:

Search

Student Name

Score1

Score2

Score3

Score4

Drag fields between areas below:

Filters

Columns

Rows

Letter Grade

Student Name

Values

Count of Lett...

Defer Layout Update

Update

Row Labels	Count of Lett
A	1
Anis Robbins	1
B	7
Cade Nelson	1
Daphne Owens	1
Finnian Hills	1
Jardel Ridley	1
John Keller	1
Montgomery Kirkpatrick	1
Nelly Merrill	1
C	11
Carley Drake	1
D	1
F	1
G	1
Ivo Armstrong	1
Lara Foley	1
Nishat Rees	1

Drop Two Lowest Scores

1	Student Name	Score1	Score2	Score3	Score4	Score5	Average	Letter Grade
2	Carley Drake	66	60	84	65	96	74	C
3	Anis Robbins	96	88	76	98	91	90	A
4	Darius Carpenter	69						
5	Jardel Ridley	77						
6	Lara Foley	65						
7	Gurveer Gale	74						
8	Derren Solomon	64						
9	Parker Whitmore	85						
10	Nishat Bees	88						

=LARGE(\$B2:\$F2,I\$1)

array
A3
range of numbers to return
x largest value from

k
I\$1
x largest number
to return

\$ sets absolute references so that the column letters don't change when we copy the formula to the right.

2 Drag Fill Handle across to cell K2.

3 Double-click Fill Handle to copy formulas down to the bottom of the list.

4 The worksheet now has a list of the 3 highest scores.

Summarize Curved Grades

1 Select the data range (L2:M6).

2 Insert > PivotTable

3 Select the data source (L2:\$P\$6)

4 Click OK.

5 Select the fields for the PivotTable (Letter Grade2)

6 The curved scores are summarized.

Student Name	Score4	Score5	Average	Letter Grade
Carley Drake	65	96	74	C
Anis Robbins	98	91	90	A
Darius Carpenter	91	67	78	C
Jardel Ridley	86	93	85	B
Lara Foley	88	99	78	C
Gurveer Gale	68	80	78	C
Derren Solomon	95	67	79	C
Parker Whitmore	62	100	77	C
Nishat Bees	63	79	78	C

Row Labels	Count of Letter Grade2
A	6
B	12
C	2
Grand Total	20

Questions?



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Preview the exercises:
<http://video.studentsexcel.com>