Monday Feb 16 due by Feb 23

We begin today's lesson with a list and review of everything I hope you should know from the first 3 lessons. Lesson 4 is our midpoint of the course. My goal (and probably yours) is to increase your skills and awareness with Excel significantly so this is a good point to pause and reflect. These are in order of the 3 lessons.

background color of cells
column width
row height
number formats
date formats
rotated text
vertical text
align horizontally
align vertically
wrapping text
merging text in a rectangle of cells
using a graphic
magic fill down
SUM formula
AVERAGE formula
MIN formula
MAX formula
& usage in a formula
MID
COUNT
COUNTBLANK
COUNTA
COUNTIF
make your own formula
printing so all data fits on 1 page
printing so there is a border around each cell
printing so you have minimal margins
SORTING with several levels
Using MY LIST HAS HEADERS to your advantage
inserting rows or columns
FILTERS
HIDE a column
The SHIFT CLICK trick
How to highlight non-contiguous rows or columns

Splitting windows
Freezing rows and/or columns
Finding Excel files on the web
IF formula
Conditional formatting
LOOKUP formula
VALIDATION for cell entry

I am going to now create an EXCEL spreadsheet with your names using a new feature called VALIDATION. I want you to see every step of the process so here is the 17 minute video to watch: http://youtu.be/NZeql0HaZmY

HW 4.1: Watch this video above that deals with the creation of this spreadsheet below and the new feature called VALIDATION.

H17 =LOOKUP(G17,$C$50:$C$52,$D$50:$D$52)

	A	B	C	D	E	F	G	H
1	AVER	For each TOPIC, please enter a 1, 2 or 3 in the column underneath your name. Thanks!	Deborah	results in	Michael	results in	Robb	results in
27	#DIV/0!	MIN formula	*	#N/A	*	#N/A	*	#N/A
28	#DIV/0!	number formats	*	#N/A	*	#N/A	*	#N/A
29	#DIV/0!	printing so all data fits on 1 page	*	#N/A	*	#N/A	*	#N/A
30	#DIV/0!	printing so there is a border around each cell	*	#N/A	*	#N/A	*	#N/A
31	#DIV/0!	printing so you have minimal margins	*	#N/A	*	#N/A	*	#N/A
32	#DIV/0!	rotated text	*	#N/A	*	#N/A	*	#N/A
33	#DIV/0!	row height	*	#N/A	*	#N/A	*	#N/A
34	#DIV/0!	SORTING with several levels	*	#N/A	*	#N/A	*	#N/A
35	#DIV/0!	Splitting windows	*	#N/A	*	#N/A	*	#N/A
36	#DIV/0!	SUM formula	*	#N/A	*	#N/A	*	#N/A
37	#DIV/0!	The SHIFT CLICK trick	*	#N/A	*	#N/A	*	#N/A
38	#DIV/0!	using a graphic	*	#N/A	*	#N/A	*	#N/A
39	#DIV/0!	Using MY LIST HAS HEADERS to your advantage	*	#N/A	*	#N/A	*	#N/A
40	#DIV/0!	VALIDATION for cell entry	*	#N/A	*	#N/A	*	#N/A
41	#DIV/0!	vertical text	*	#N/A	*	#N/A	*	#N/A
42	#DIV/0!	wrapping text	*	#N/A	*	#N/A	*	#N/A
43								
44		SUMMARY	0	Number of 1s	0	Number of 1s	0	Number of 1s
45			0	Number of 2s	0	Number of 2s	0	Number of 2s
46			0	Number of 3s	0	Number of 3s	0	Number of 3s
47								
48								
49								
50			1	I knew this feature before the course began.				
51			2	I learned this as part of the first few lessons.				
52			3	I am still shaky on this feature.				

HW 4.2: Enter 1,2 or 3 into each location of this spreadsheet underneath your name preferably using the SHARED FILE that I have put into Dropbox. This way we can have one document with all of your entries.

Plan B: However, if Dropbox is not accessible to you then use the attached file and send it back to me as an attached file. I will then COPY and PASTE into the SHARED one.

Next topic: Pivot Table Exercises and a Pivot Table Video

Here are 7 problems to do using the new feature on Pivot Tables.

HW 4.3A: Using the US Presidents spreadsheet, let's analyze the colleges attended by the 35 presidents and tally by the political part.

HW 4.3B: Using the US Presidents spreadsheet, let's analyze the occupations of the 35 presidents and tally by the inauguration age.

HW 4.3C: Using the US Presidents spreadsheet, let's analyze the political parties of the 35 presidents and tally the average % of electoral and popular votes.

HW 4.3D: Using the Countries of the World spreadsheet, let's analyze the regions of the 227 countries and tally the average population and infant mortality rates.

HW 4.3E: Using the Countries of the World spreadsheet, let's analyze the birth rate and death rate of the 227 countries and use a filter to find which 2 regions of the world are closest for each rate.

HW 4.3F: Using the Sample Scheduling spreadsheet, let's analyze the courses of the 155 students.

HW 4.3G: Using the Lesson 4 Florida Schools spreadsheet, let's analyze the 3187 schools by DISTRICTS and then tally averages for the TOTAL POINTS 2013 in column E.

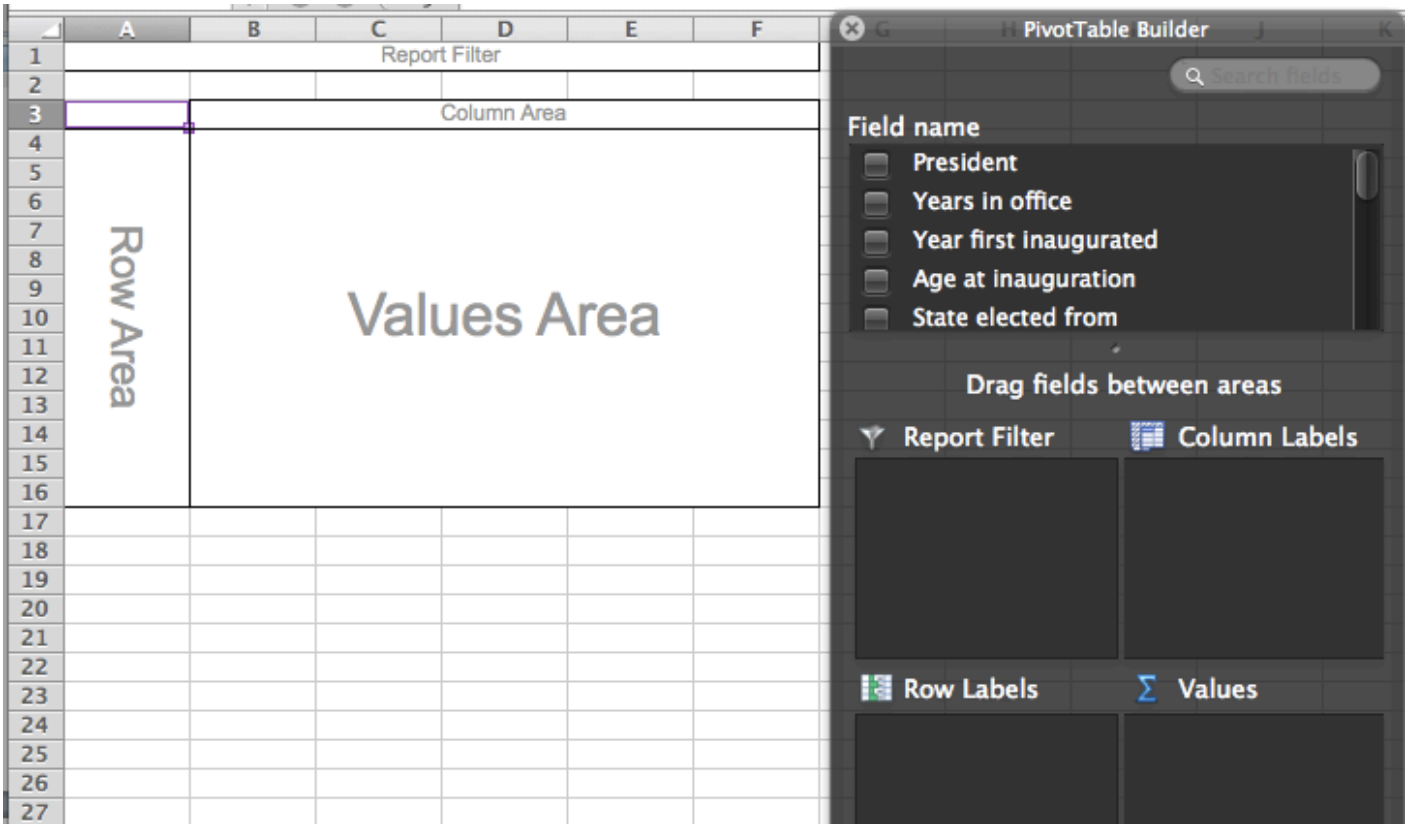
HW 4.25 This one 32 minute video will get you to be smart and skillful with Pivot Tables so that you can do these exercises, possibly while watching and pausing the

video -- your choice! So you might want to watch the entire video first or you might want to watch the first 10-15 minutes of the video and then try HW 4.3A and HW 4.3B. The video goes through the seven HW programs in an instructional way. Please do all seven, then pick any two of the seven and email them to me as proof that you have done all seven!

http://youtu.be/S22hVV0nngI

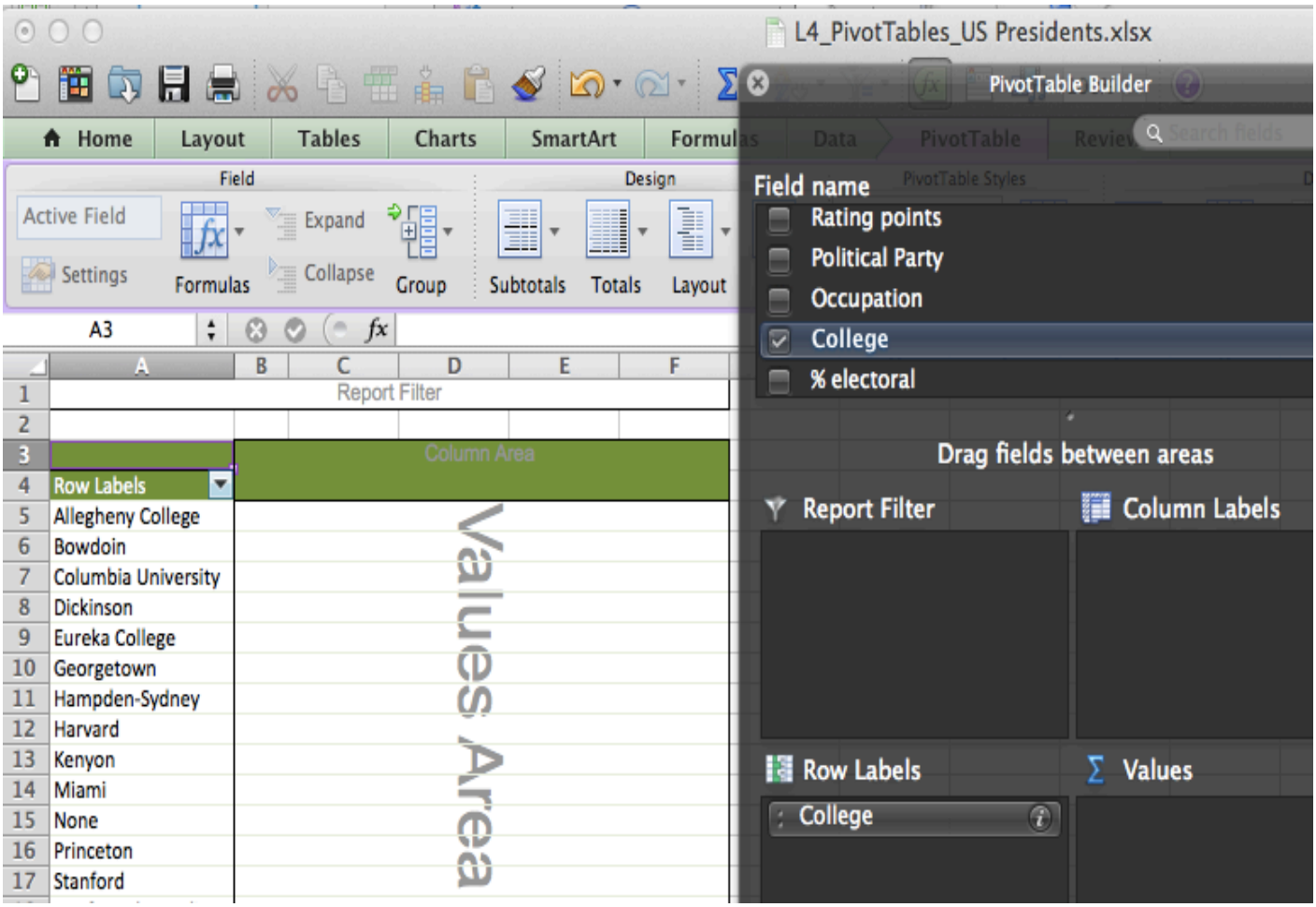
One piece of key advice is to SELECT ALL or SELECT the Key Rows and Columns and then choose PIVOT TABLES under the DATA MENU.

Then you will see this screen which is called the PIVOTTABLE BUILDER:



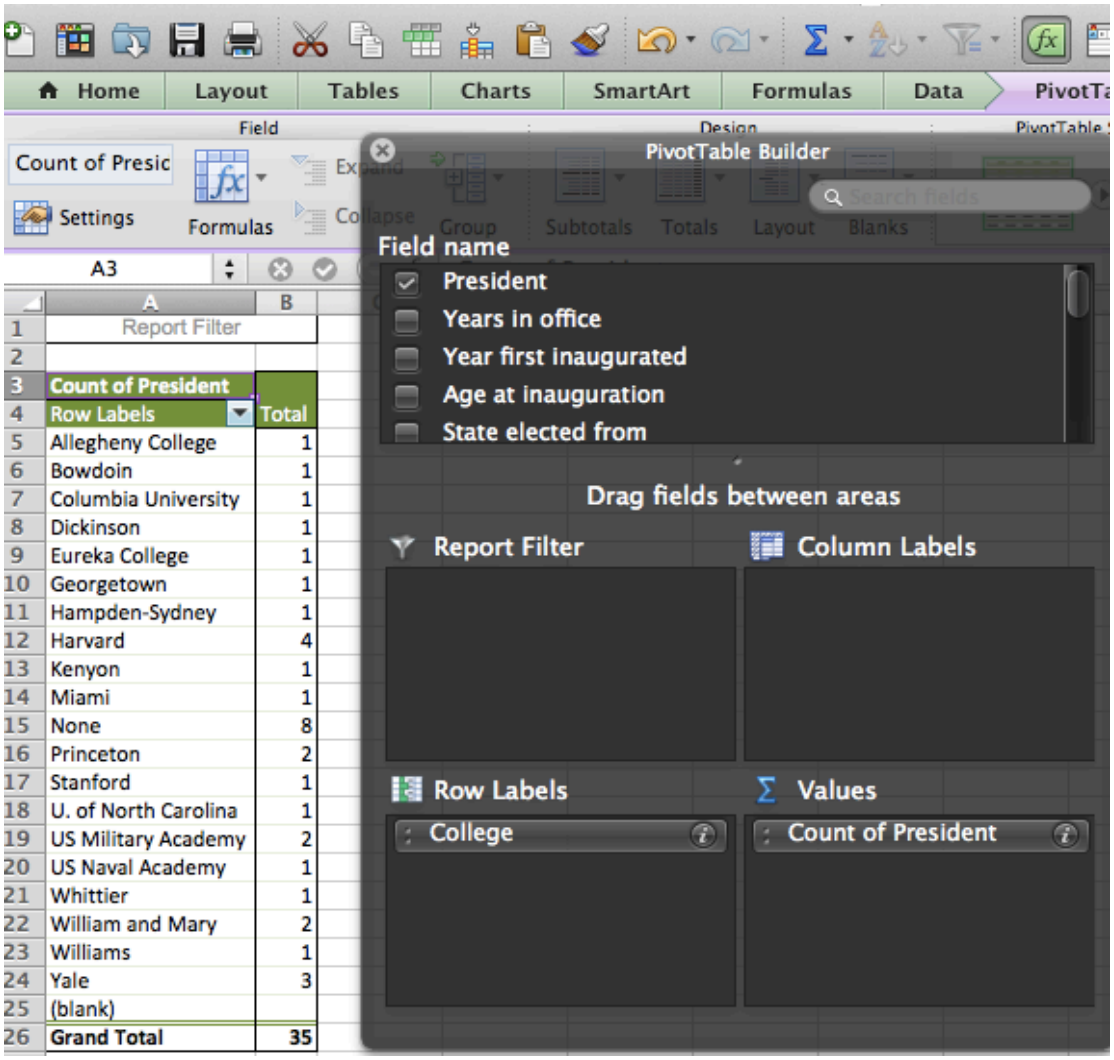
You will be moving ONE FIELD NAME (i.e. CATEGORY) from the TOP into either the ROW LABELS section or the COLUMN LABELS section or the VALUE section. If you mess up, you can pick it up and move it elsewhere.

Make just ONE move and notice what happens on the left. In the picture below I dragged the ONE field called COLLEGE and brought it into the ROW LABELS.



Notice how the colleges from Allegheny College to Stanford have filled up the rows from 5 to 17 above. Why? Because we move the FIELD called COLLEGE into the ROW LABELS area into the section of the PivotTable Builder.

Next I will take the field PRESIDENT and drag to the VALUE section.



	A	B
1	Report Filter	
2		
3	Count of President	
4	Row Labels	Total
5	Allegheny College	1
6	Bowdoin	1
7	Columbia University	1
8	Dickinson	1
9	Eureka College	1
10	Georgetown	1
11	Hampden-Sydney	1
12	Harvard	4
13	Kenyon	1
14	Miami	1
15	None	8
16	Princeton	2
17	Stanford	1
18	U. of North Carolina	1
19	US Military Academy	2
20	US Naval Academy	1
21	Whittier	1
22	William and Mary	2
23	Williams	1
24	Yale	3
25	(blank)	
26	Grand Total	35

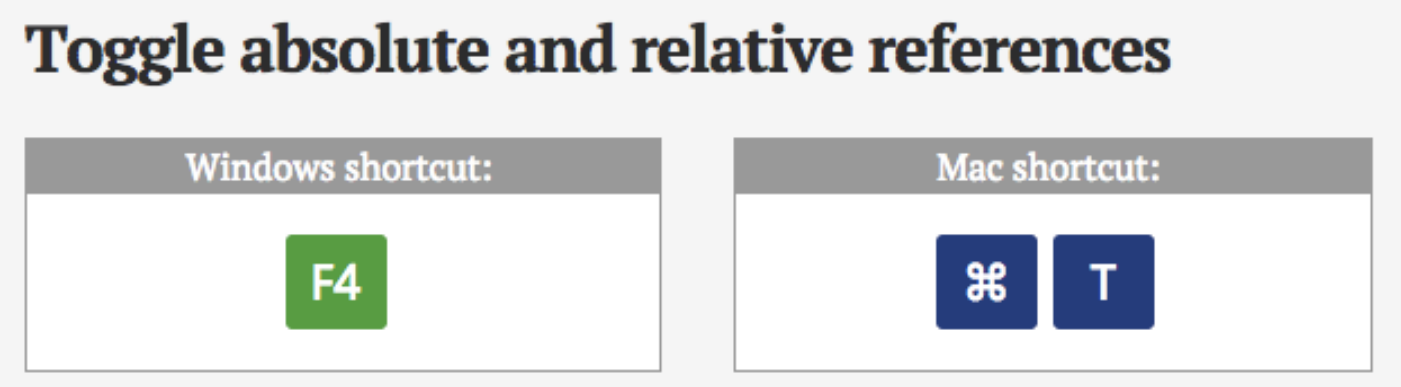
Notice that column B has now been populated with the # of Presidents who went to that college. Notice the Grand Total of 35 at the bottom. Why? Because we dragged President FIELD to the VALUE section of the PivotTable builder.

Notice that it says COUNT of PRESIDENT. Later in the video, you will see how to change COUNT to SUM or AVERAGE by using the "i" in a circle.

That is it for exercise A. Just drag two things and you have the analysis of college for the 35 presidents. You are done with exercise A!

Next Topic: shortcut for absolute reference

As promised, here is the shortcut for Mac or PC so that you don't have to type the $ symbol so often. In other words, if I have a formula such as =SUM(B3:B12) or a more complicated one like =LOOKUP(B3,M1:M5,N1:N5) all I do is click the cursor in the middle of the B3 and then when I push the TOGGLE button below, it cycles like a 4 way light switch to $B$3 then B$3 then $B3 then back to B3.



Have a good week. No challenge problem this week since I am still waiting for you to catch up with the previous challenge problems!

Steve

INDEX of HIGHLIGHTS can be found on the last page

HW 4.1: Watch the video that deals with the creation of this spreadsheet below and the new feature called VALIDATION. (p2)

HW 4.2: Enter 1,2 or 3 into each location of this spreadsheet underneath your name preferably using the SHARED FILE that I have put into Dropbox. (p3)

ATTACHED FILE named Lesson 4 Column Entry.xlsx

HW 4.25 This one 32 minute video will get you to be smart and skillful with Pivot Tables (pages 8-9)

Shortcut for absolute reference (page 9)