Nonprofit Support Program
Hartford Foundation for Public Giving

Using Microsoft Excel
A Powerful Tool

NSP Evaluation Roundtable

May 12, 2015

Anita M. Baker, Ed.D.
Evaluation Services

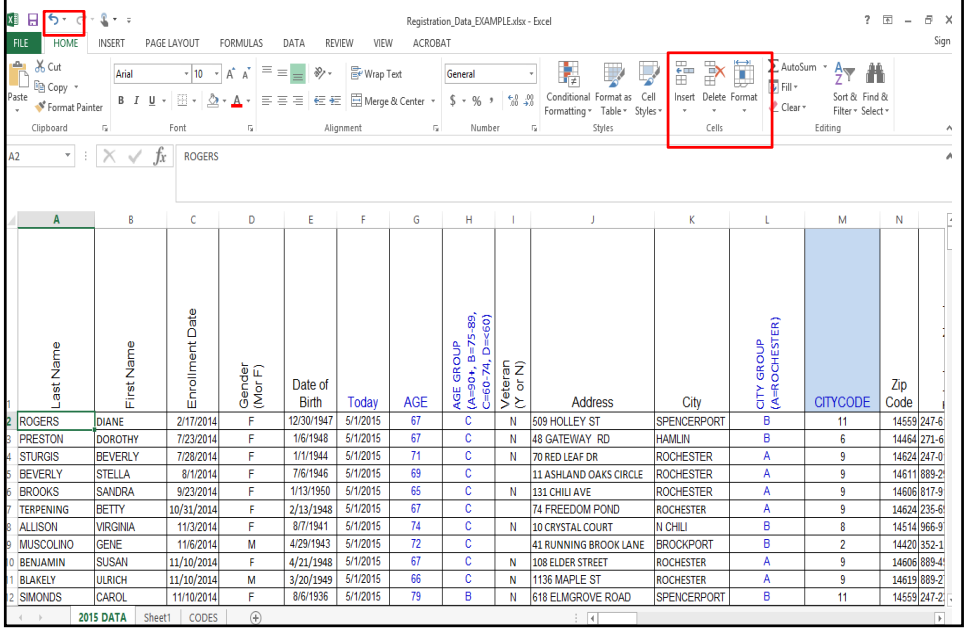
If you need to answer the following types of questions, this session is for you!

- ✓ Do we serve a diverse group of participants?
- ✓ Who is participating in any of our programs, or in one specific program?
- ✓ How many targeted participants (such as older adults, people living in isolation) are enrolled or attended?
- ✓ Did males attend more regularly than females?
- ✓ How many older participants were there compared to younger participants?
- ✓ Where do our participants live? Are we reaching participants throughout the region?
- ✓ AND other questions too.

Excel Basics

- ❑ Adding/deleting rows
- ❑ Undo
- ❑ Formatting cells
- ❑ Hide/Unhide
- ❑ Freeze panes
- ❑ Sorting
- ❑ Copying and pasting (formulas)
- ❑ Counts, sums, and averages in status bar

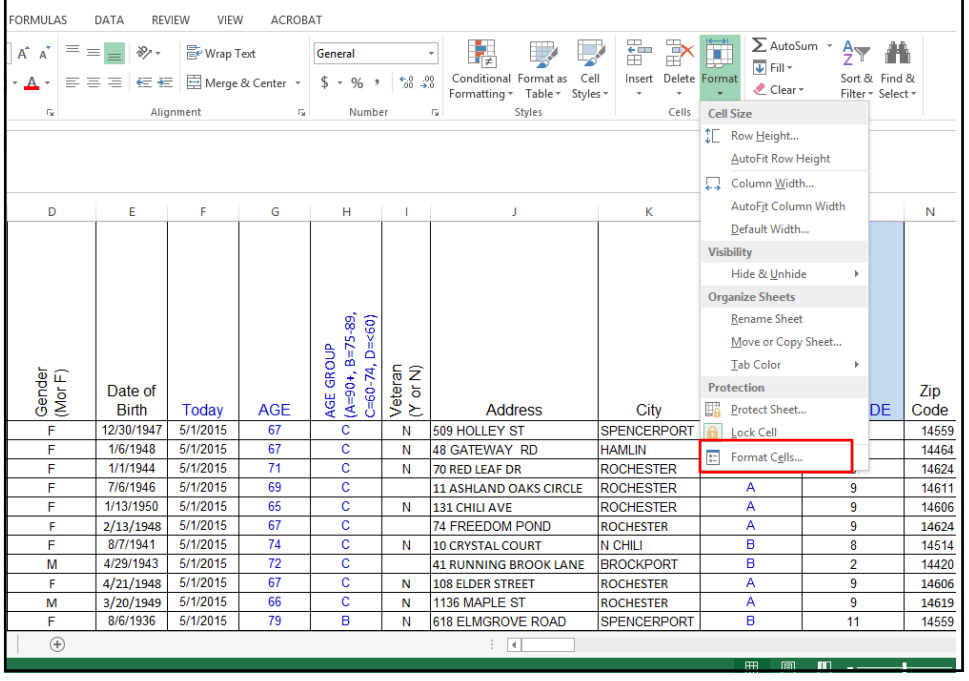
Most basic functions are accessible from your HOME toolbar menu. 3



Last Name	First Name	Enrollment Date	Gender (M or F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address	City	CITY GROUP (A=ROCHESTER)	CITYCODE	Zip Code
ROGERS	DIANE	2/17/2014	F	12/30/1947	5/1/2015	67	C	N	509 HOLLEY ST	SPENCERPORT	B	11	14559
PRESTON	DOROTHY	7/23/2014	F	1/6/1948	5/1/2015	67	C	N	48 GATEWAY RD	HAMLIN	B	6	14464
STURGIS	BEVERLY	7/28/2014	F	1/1/1944	5/1/2015	71	C	N	70 RED LEAF DR	ROCHESTER	A	9	14624
BEVERLY	STELLA	8/1/2014	F	7/6/1946	5/1/2015	69	C		11 ASHLAND OAKS CIRCLE	ROCHESTER	A	9	14611
BROOKS	SANDRA	9/23/2014	F	1/13/1950	5/1/2015	65	C	N	131 CHILI AVE	ROCHESTER	A	9	14606
TERPENING	BETTY	10/31/2014	F	2/13/1948	5/1/2015	67	C		74 FREEDOM POND	ROCHESTER	A	9	14624
ALLISON	VIRGINIA	11/3/2014	F	8/7/1941	5/1/2015	74	C	N	10 CRYSTAL COURT	N CHILI	B	8	14514
MUSCOLINO	GENE	11/6/2014	M	4/29/1943	5/1/2015	72	C		41 RUNNING BROOK LANE	BROCKPORT	B	2	14420
BENJAMIN	SUSAN	11/10/2014	F	4/21/1948	5/1/2015	67	C	N	108 ELDER STREET	ROCHESTER	A	9	14606
BLAKELY	ULRICH	11/10/2014	M	3/20/1949	5/1/2015	66	C	N	1136 MAPLE ST	ROCHESTER	A	9	14619
SIMONDS	CAROL	11/10/2014	F	8/6/1936	5/1/2015	79	B	N	618 ELMGROVE ROAD	SPENCERPORT	B	11	14559

2015 DATA Sheet1 CODES

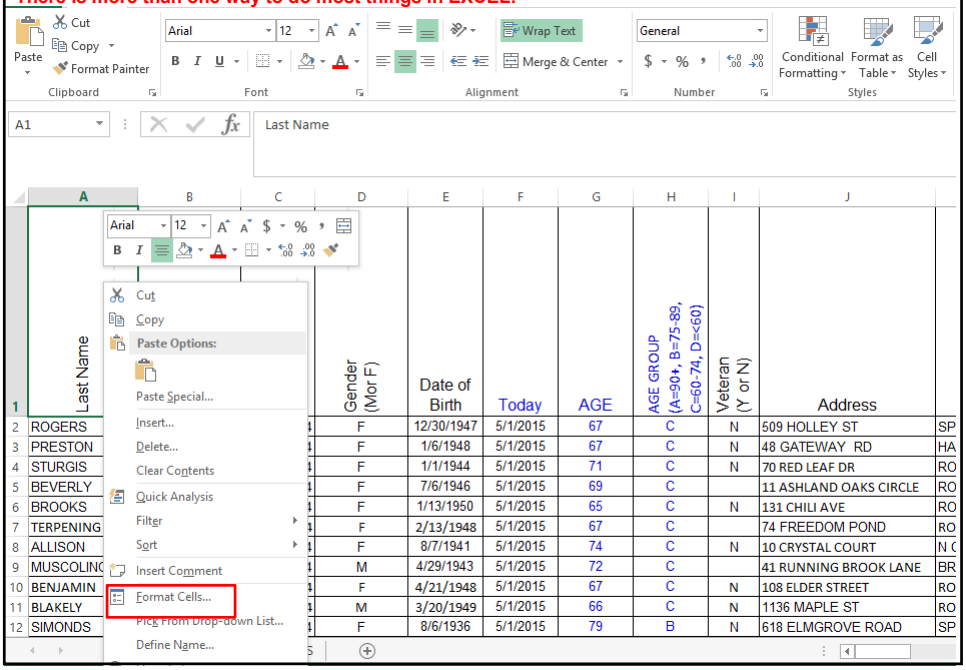
4



Gender (M or F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address	City			Zip Code
F	12/30/1947	5/1/2015	67	C	N	509 HOLLEY ST	SPENCERPORT			14559
F	1/6/1948	5/1/2015	67	C	N	48 GATEWAY RD	HAMLIN			14464
F	1/1/1944	5/1/2015	71	C	N	70 RED LEAF DR	ROCHESTER			14624
F	7/6/1946	5/1/2015	69	C		11 ASHLAND OAKS CIRCLE	ROCHESTER	A	9	14611
F	1/13/1950	5/1/2015	65	C	N	131 CHILI AVE	ROCHESTER	A	9	14606
F	2/13/1948	5/1/2015	67	C		74 FREEDOM POND	ROCHESTER	A	9	14624
F	8/7/1941	5/1/2015	74	C	N	10 CRYSTAL COURT	N CHILI	B	8	14514
M	4/29/1943	5/1/2015	72	C		41 RUNNING BROOK LANE	BROCKPORT	B	2	14420
F	4/21/1948	5/1/2015	67	C	N	108 ELDER STREET	ROCHESTER	A	9	14606
M	3/20/1949	5/1/2015	66	C	N	1136 MAPLE ST	ROCHESTER	A	9	14619
F	8/6/1936	5/1/2015	79	B	N	618 ELMGROVE ROAD	SPENCERPORT	B	11	14559

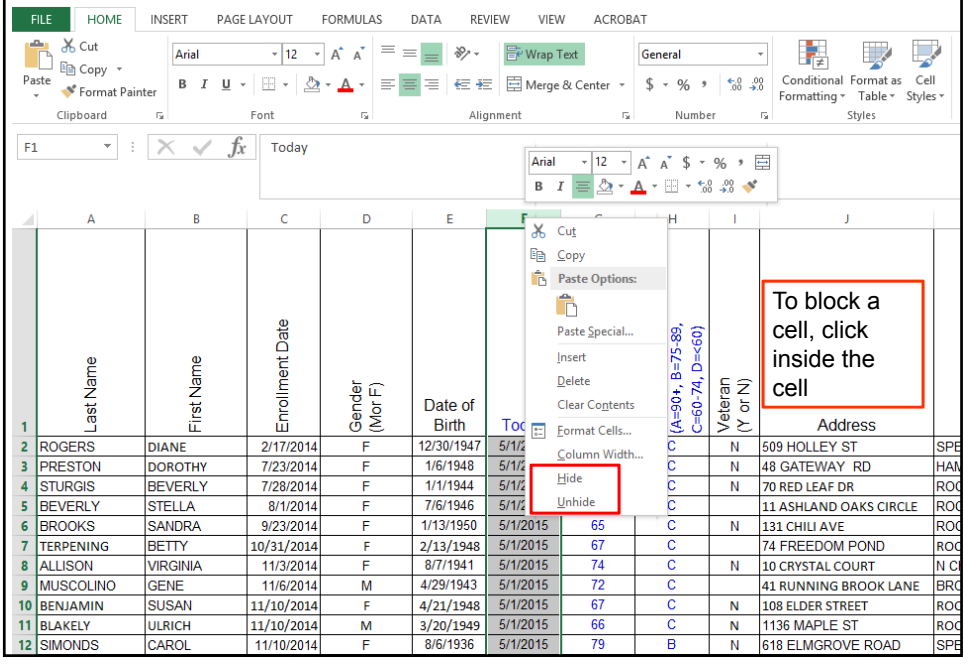
You can also get to the format cells menu by right clicking from any cell. 5

There is more than one way to do most things in EXCEL!



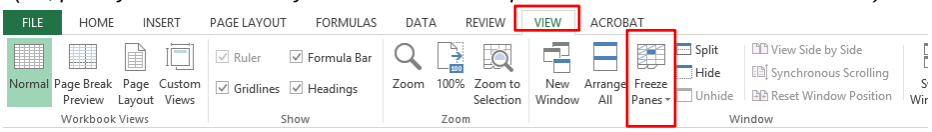
Last Name	Gender (M or F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address
ROGERS	F	12/30/1947	5/1/2015	67	C	N	509 HOLLEY ST
PRESTON	F	1/6/1948	5/1/2015	67	C	N	48 GATEWAY RD
STURGIS	F	1/1/1944	5/1/2015	71	C	N	70 RED LEAF DR
BEVERLY	F	7/6/1946	5/1/2015	69	C		11 ASHLAND OAKS CIRCLE
BROOKS	F	1/13/1950	5/1/2015	65	C	N	131 CHILI AVE
TERPENING	F	2/13/1948	5/1/2015	67	C		74 FREEDOM POND
ALLISON	F	8/7/1941	5/1/2015	74	C	N	10 CRYSTAL COURT
MUSCOLINO	M	4/29/1943	5/1/2015	72	C		41 RUNNING BROOK LANE
BENJAMIN	F	4/21/1948	5/1/2015	67	C	N	108 ELDER STREET
BLAKELY	M	3/20/1949	5/1/2015	66	C	N	1136 MAPLE ST
SIMONDS	F	8/6/1936	5/1/2015	79	B	N	618 ELMGROVE ROAD

Be sure to block/select the entire row or column you want hidden. To block a ROW click on the ROW number; to block a COLUMN click on the letter of the COLUMN. 6



Last Name	First Name	Enrollment Date	Gender (M or F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address
ROGERS	DIANE	2/17/2014	F	12/30/1947	5/1/2015	67	C	N	509 HOLLEY ST
PRESTON	DOROTHY	7/23/2014	F	1/6/1948	5/1/2015	67	C	N	48 GATEWAY RD
STURGIS	BEVERLY	7/28/2014	F	1/1/1944	5/1/2015	71	C	N	70 RED LEAF DR
BEVERLY	STELLA	8/1/2014	F	7/6/1946	5/1/2015	69	C		11 ASHLAND OAKS CIRCLE
BROOKS	SANDRA	9/23/2014	F	1/13/1950	5/1/2015	65	C	N	131 CHILI AVE
TERPENING	BETTY	10/31/2014	F	2/13/1948	5/1/2015	67	C		74 FREEDOM POND
ALLISON	VIRGINIA	11/3/2014	F	8/7/1941	5/1/2015	74	C	N	10 CRYSTAL COURT
MUSCOLINO	GENE	11/6/2014	M	4/29/1943	5/1/2015	72	C		41 RUNNING BROOK LANE
BENJAMIN	SUSAN	11/10/2014	F	4/21/1948	5/1/2015	67	C	N	108 ELDER STREET
BLAKELY	ULRICH	11/10/2014	M	3/20/1949	5/1/2015	66	C	N	1136 MAPLE ST
SIMONDS	CAROL	11/10/2014	F	8/6/1936	5/1/2015	79	B	N	618 ELMGROVE ROAD

Freeze panes is located on the View menu. Be sure you anchor properly (*i.e., place your cursor where you want to freeze the panes so those above and to left show).* 7

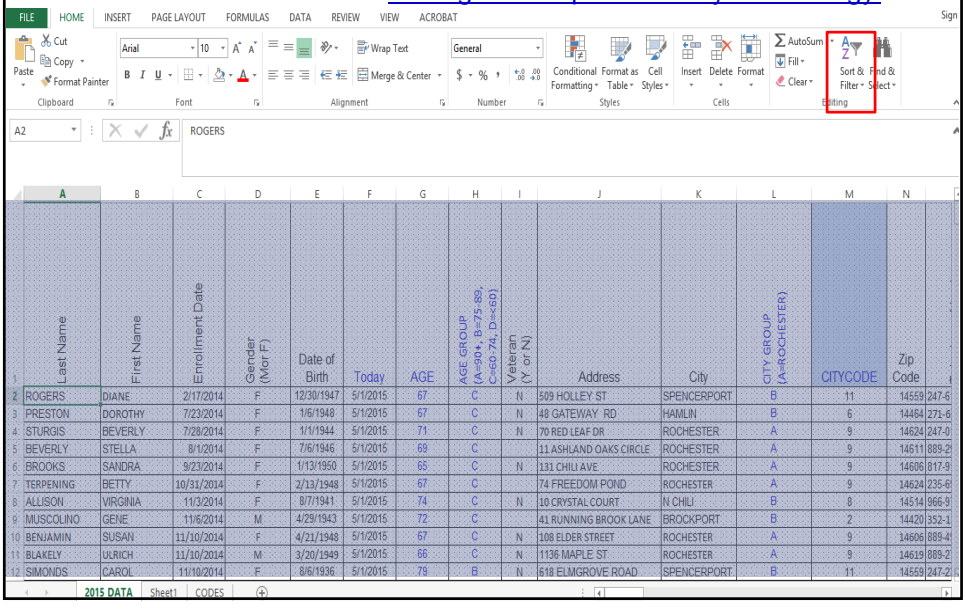


F1 | Today

	A	B	C	D	E	F	G	H	I	J
1	Last Name	First Name	Enrollment Date	Gender (M or F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address
2	ROGERS	DIANE	2/17/2014	F	12/30/1947	5/1/2015	67	C	N	509 HOLLEY ST
3	PRESTON	DOROTHY	7/23/2014	F	1/6/1948	5/1/2015	67	C	N	48 GATEWAY RD
4	STURGIS	BEVERLY	7/28/2014	F	1/1/1944	5/1/2015	71	C	N	70 RED LEAF DR
5	BEVERLY	STELLA	8/1/2014	F	7/6/1946	5/1/2015	69	C		11 ASHLAND OAKS CIRCLE
6	BROOKS	SANDRA	9/23/2014	F	1/13/1950	5/1/2015	65	C	N	131 CHILI AVE
7	TERPENING	BETTY	10/31/2014	F	2/13/1948	5/1/2015	67	C		74 FREEDOM POND
8	ALLISON	VIRGINIA	11/3/2014	F	8/7/1941	5/1/2015	74	C	N	10 CRYSTAL COURT
9	MUSCOLINO	GENE	11/6/2014	M	4/29/1943	5/1/2015	72	C		41 RUNNING BROOK LANE
10	BENJAMIN	SUSAN	11/10/2014	F	4/21/1948	5/1/2015	67	C	N	108 ELDER STREET
11	BLAKELY	ULRICH	11/10/2014	M	3/20/1949	5/1/2015	66	C	N	1136 MAPLE ST
12	SIMONDS	CAROL	11/10/2014	F	8/6/1936	5/1/2015	79	B	N	618 ELMGROVE ROAD

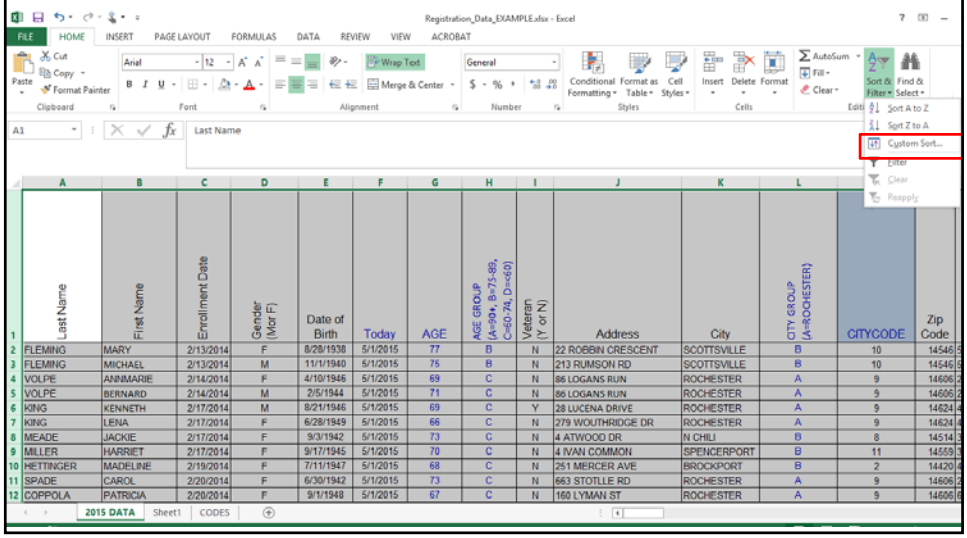
When you SORT data be sure to block/select ALL the desired rows in your database so the data remain associated. 8

Sorting is an important analytical strategy.

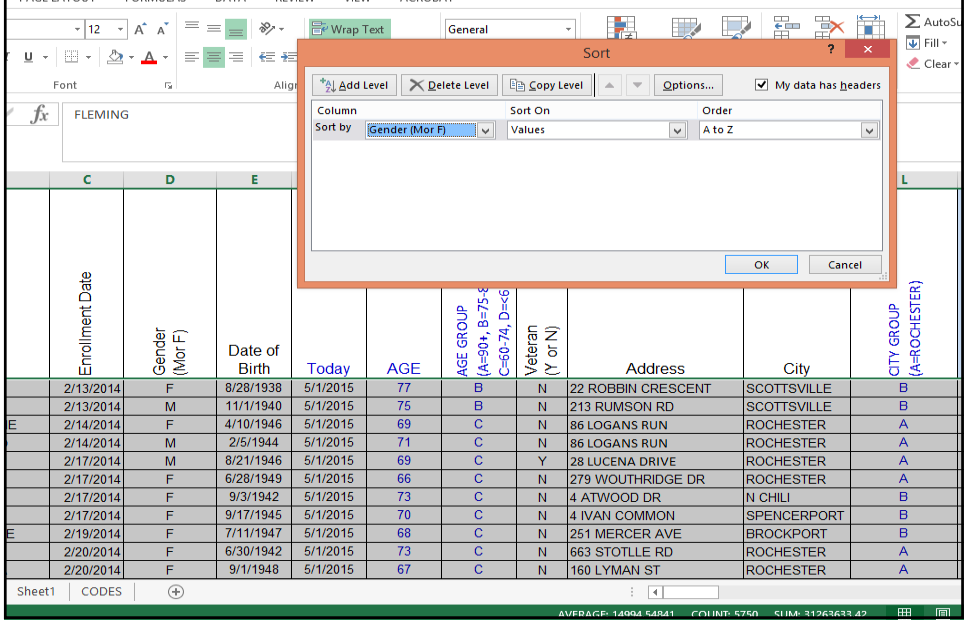


	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Last Name	First Name	Enrollment Date	Gender (M or F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address	City	CITY GROUP (A=ROCHESTER)	CITYCODE	Zip Code
2	ROGERS	DIANE	2/17/2014	F	12/30/1947	5/1/2015	67	C	N	509 HOLLEY ST	SPENCERPORT	B	11	14559
3	PRESTON	DOROTHY	7/23/2014	F	1/6/1948	5/1/2015	67	C	N	48 GATEWAY RD	HAMLIN	B	6	14464
4	STURGIS	BEVERLY	7/28/2014	F	1/1/1944	5/1/2015	71	C	N	70 RED LEAF DR	ROCHESTER	A	9	14624
5	BEVERLY	STELLA	8/1/2014	F	7/6/1946	5/1/2015	69	C		11 ASHLAND OAKS CIRCLE	ROCHESTER	A	9	14611
6	BROOKS	SANDRA	9/23/2014	F	1/13/1950	5/1/2015	65	C	N	131 CHILI AVE	ROCHESTER	A	9	14606
7	TERPENING	BETTY	10/31/2014	F	2/13/1948	5/1/2015	67	C		74 FREEDOM POND	ROCHESTER	A	9	14624
8	ALLISON	VIRGINIA	11/3/2014	F	8/7/1941	5/1/2015	74	C	N	10 CRYSTAL COURT	N CHILI	B	8	14514
9	MUSCOLINO	GENE	11/6/2014	M	4/29/1943	5/1/2015	72	C		41 RUNNING BROOK LANE	BROCKPORT	B	2	14420
10	BENJAMIN	SUSAN	11/10/2014	F	4/21/1948	5/1/2015	67	C	N	108 ELDER STREET	ROCHESTER	A	9	14606
11	BLAKELY	ULRICH	11/10/2014	M	3/20/1949	5/1/2015	66	C	N	1136 MAPLE ST	ROCHESTER	A	9	14619
12	SIMONDS	CAROL	11/10/2014	F	8/6/1936	5/1/2015	79	B	N	618 ELMGROVE ROAD	SPENCERPORT	B	11	14559

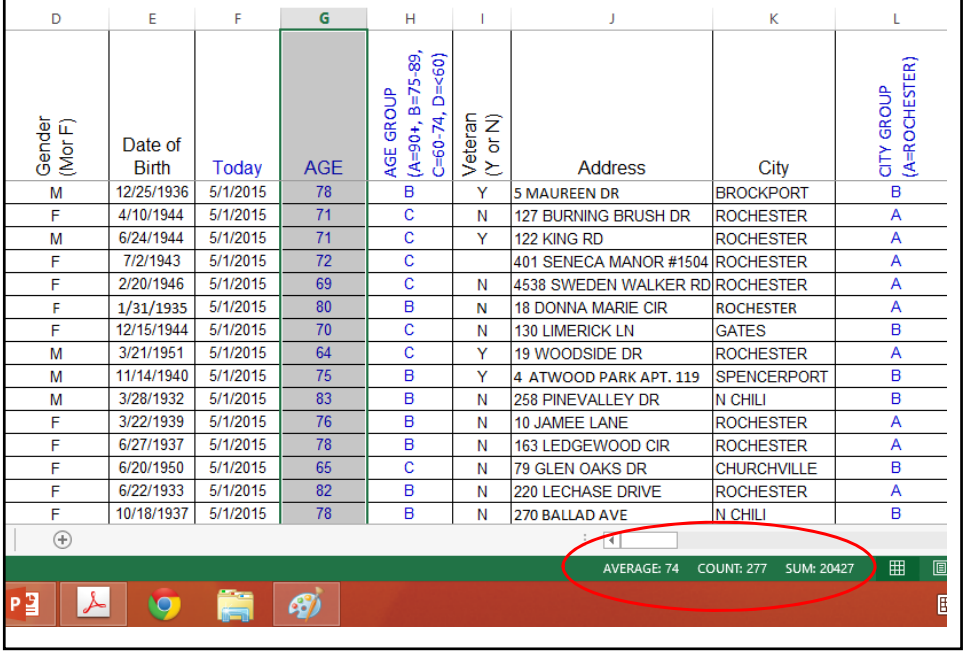
After blocking your data so that your headers show and all rows are completely selected, click on Sort & Filter on the home menu, and then select CUSTOM SORT



The custom sort screen looks like this. Select the variable to sort on and clarify whether you want it sorted ascending or descending (A to Z or Z to A). Add levels as needed (e.g., Sort by Last Name, add level, First Name; or Gender then age, etc.



Click and drag your cursor to see averages, counts and sums in the status bar!



D	E	F	G	H	I	J	K	L
Gender (Mor F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address	City	CITY GROUP (A=ROCHESTER)
M	12/25/1936	5/1/2015	78	B	Y	5 MAUREEN DR	BROCKPORT	B
F	4/10/1944	5/1/2015	71	C	N	127 BURNING BRUSH DR	ROCHESTER	A
M	6/24/1944	5/1/2015	71	C	Y	122 KING RD	ROCHESTER	A
F	7/2/1943	5/1/2015	72	C		401 SENECA MANOR #1504	ROCHESTER	A
F	2/20/1946	5/1/2015	69	C	N	4538 SWEDEN WALKER RD	ROCHESTER	A
F	1/31/1935	5/1/2015	80	B	N	18 DONNA MARIE CIR	ROCHESTER	A
F	12/15/1944	5/1/2015	70	C	N	130 LIMERICK LN	GATES	B
M	3/21/1951	5/1/2015	64	C	Y	19 WOODSIDE DR	ROCHESTER	A
M	11/14/1940	5/1/2015	75	B	Y	4 ATWOOD PARK APT. 119	SPENCERPORT	B
M	3/28/1932	5/1/2015	83	B	N	258 PINEVALLEY DR	N CHILI	B
F	3/22/1939	5/1/2015	76	B	N	10 JAMEE LANE	ROCHESTER	A
F	6/27/1937	5/1/2015	78	B	N	163 LEDGEWOOD CIR	ROCHESTER	A
F	6/20/1950	5/1/2015	65	C	N	79 GLEN OAKS DR	CHURCHVILLE	B
F	6/22/1933	5/1/2015	82	B	N	220 LECHASE DRIVE	ROCHESTER	A
F	10/18/1937	5/1/2015	78	B	N	270 BALLAD AVE	N CHILI	B

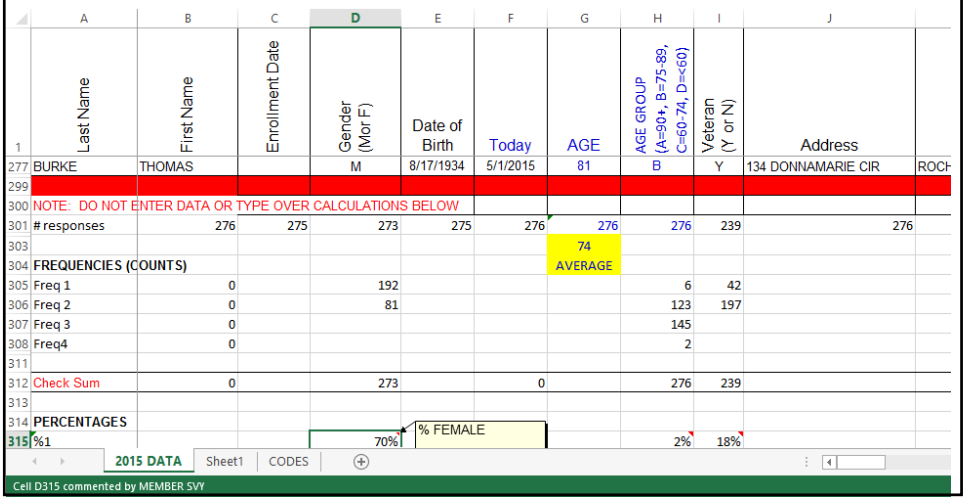
Using Databases: Summarizing

CALCULATORS

- Denominator
- Function (with argument) = Result
- Result/Denominator = %

Checking and Verifying

- In addition to automatic re-coding formulas, summary formulas or Automatic Calculators can be added to databases.
- The results in the automatic calculators can be used like a look-up table to answer analytical questions.
- Formulas can be copied and pasted and modified as needed.



1	Last Name	First Name	Enrollment Date	Gender (M or F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address	
277	BURKE	THOMAS		M	8/17/1934	5/1/2015	81	B	Y	134 DONNAMARIE CIR	ROCH
299											
300	NOTE: DO NOT ENTER DATA OR TYPE OVER CALCULATIONS BELOW										
301	# responses	276	275	273	275	276	276	276	239	276	
303							74				
304	FREQUENCIES (COUNTS)						AVERAGE				
305	Freq 1	0		192				6	42		
306	Freq 2	0		81				123	197		
307	Freq 3	0						145			
308	Freq4	0						2			
311											
312	Check Sum	0		273		0		276	239		
313											
314	PERCENTAGES										
315	%1			70%	% FEMALE			2%	18%		

2015 DATA | Sheet1 | CODES

Cell D315 commented by MEMBER SVY

Function = COUNTING

=COUNTA(D2:D298)

Counts any occupied cell

=COUNT(G2:G298)

Counts any cell with a number in it (also in status bar)

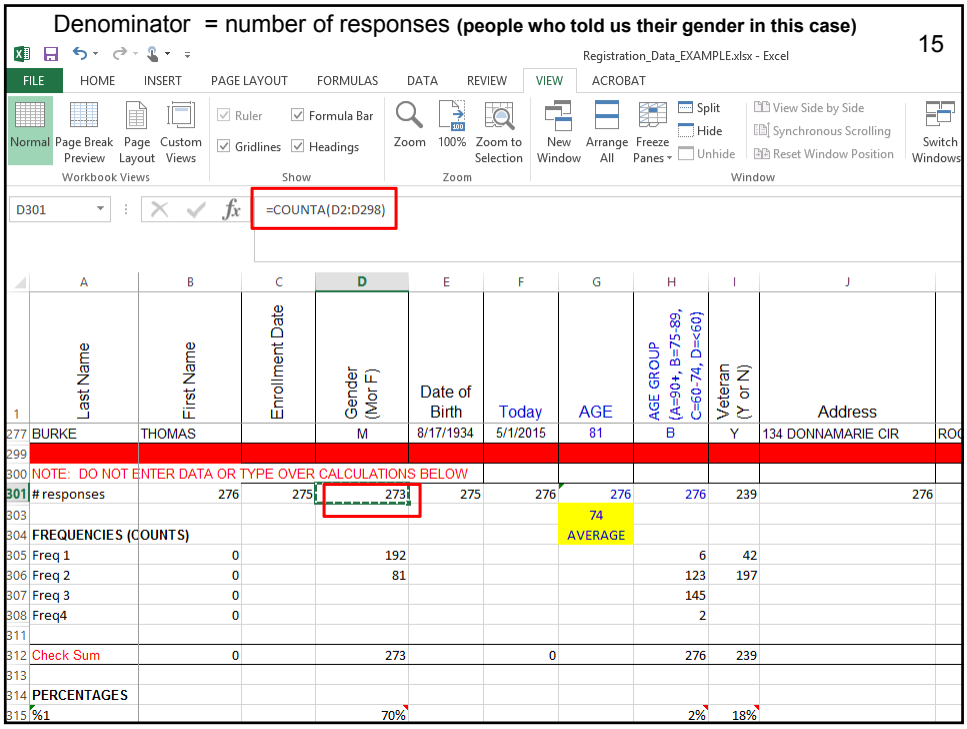
=COUNTIF(V2:V:298,1)

Finds all the 1's in Column V *(1 is the code for new to YMCA)*

(Similarly, =COUNTIF(D2:D298,"F") will count all cells in Column D containing the letter F – the code for Female). ***Please note you MUST use full quotation marks around the code you are searching for. AND IT MUST BE EXACT.***

Denominator = number of responses **(people who told us their gender in this case)**

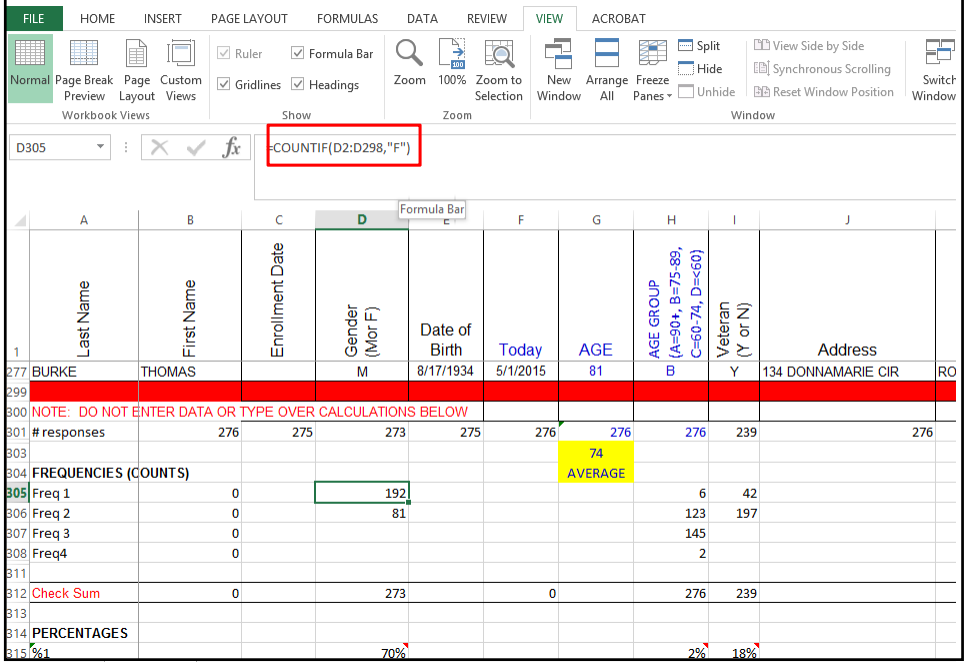
15



	A	B	C	D	E	F	G	H	I	J
1	Last Name	First Name	Enrollment Date	Gender (Mor F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address
277	BURKE	THOMAS		M	8/17/1934	5/1/2015	81	B	Y	134 DONNAMARIE CIR
299										
300	NOTE: DO NOT ENTER DATA OR TYPE OVER CALCULATIONS BELOW									
301	# responses	276	275	273	275	276	276	276	239	276
303							74			
304	FREQUENCIES (COUNTS)						AVERAGE			
305	Freq 1	0		192				6	42	
306	Freq 2	0		81				123	197	
307	Freq 3	0						145		
308	Freq4	0						2		
311										
312	Check Sum	0		273		0		276	239	
313										
314	PERCENTAGES									
315	%1			70%				2%	18%	

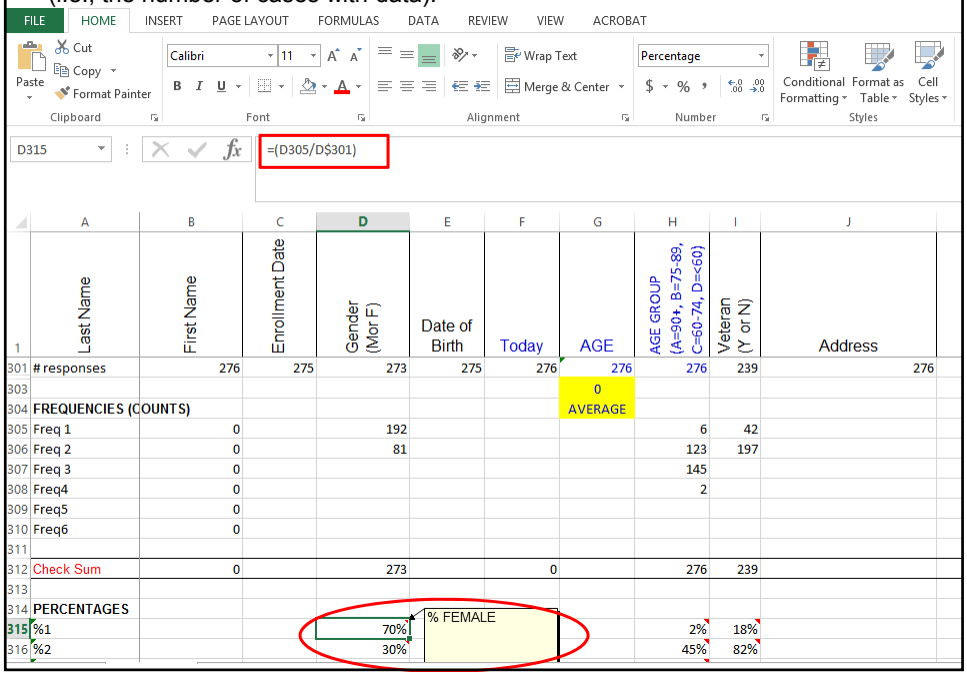
Result = number of cases that meet the criterion **(in this case, people who reported on their intake forms they were females and therefore have an "F" in the database)**

16



	A	B	C	D	E	F	G	H	I	J
1	Last Name	First Name	Enrollment Date	Gender (Mor F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address
277	BURKE	THOMAS		M	8/17/1934	5/1/2015	81	B	Y	134 DONNAMARIE CIR
299										
300	NOTE: DO NOT ENTER DATA OR TYPE OVER CALCULATIONS BELOW									
301	# responses	276	275	273	275	276	276	276	239	276
303							74			
304	FREQUENCIES (COUNTS)						AVERAGE			
305	Freq 1	0		192				6	42	
306	Freq 2	0		81				123	197	
307	Freq 3	0						145		
308	Freq4	0						2		
311										
312	Check Sum	0		273		0		276	239	
313										
314	PERCENTAGES									
315	%1			70%				2%	18%	

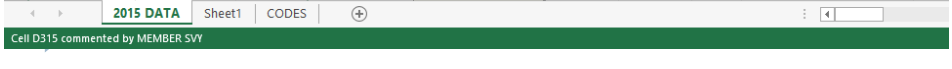
- The final step is to convert the results to percentages by dividing by the denominator (i.e., the number of cases with data).



1	A Last Name	B First Name	C Enrollment Date	D Gender (Mor F)	E Date of Birth	F Today	G AGE	H AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	I Veteran (Y or N)	J Address
301	# responses	276	275	273	275	276	276	276	239	276
303							0 AVERAGE			
304	FREQUENCIES (COUNTS)									
305	Freq 1	0		192				6	42	
306	Freq 2	0		81				123	197	
307	Freq 3	0						145		
308	Freq4	0						2		
309	Freq5	0								
310	Freq6	0								
311										
312	Check Sum	0		273		0		276	239	
313										
314	PERCENTAGES									
315	%1			70%	% FEMALE			2%	18%	
316	%2			30%				45%	82%	

In this example, the percentage is then labeled using a comment box.
(You can access the comment boxes from the insert menu.)

1	A Last Name	B First Name	C Enrollment Date	D Gender (Mor F)	E Date of Birth	F Today	G AGE	H AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	I Veteran (Y or N)	J Address	
277	BURKE	THOMAS		M	8/17/1934	5/1/2015	81	B	Y	134 DONNAMARIE CIR	ROCH
299											
300	NOTE: DO NOT ENTER DATA OR TYPE OVER CALCULATIONS BELOW										
301	# responses	276	275	273	275	276	276	276	239	276	
303							74 AVERAGE				
304	FREQUENCIES (COUNTS)										
305	Freq 1	0		192				6	42		
306	Freq 2	0		81				123	197		
307	Freq 3	0						145			
308	Freq4	0						2			
311											
312	Check Sum	0		273		0		276	239		
313											
314	PERCENTAGES										
315	%1			70%	% FEMALE			2%	18%		



- It's always a good idea to check frequencies and percentages using the check sum feature to make sure your formulas are working.
- **The check sum after the frequencies should equal the number of responses, and the check sum after the percentages should = 100%. IF NOT – check for erroneous data entry, or erroneous or missing formulas.**

	A	B	C	D	E	F	G	H	I	J
1	Last Name	First Name	Enrollment Date	Gender (M or F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address
301	# responses	276	275	273	275	276	276	276	239	276
303							0			
304	FREQUENCIES (COUNTS)						AVERAGE			
305	Freq 1	0		191				6	42	
306	Freq 2	0		80				123	197	
307	Freq 3	0						145		
311										
312	Check Sum	0		271		0		276	239	
313										
314	PERCENTAGES									
315	%1			70%				2%	18%	
316	%2			29%				45%	82%	
321										
322										
323	Check Sum			99%		0%		100%	100%	

Basic Analyses

- **Frequencies for all descriptive data** (e.g., gender, race/ethnicity, age, living status, location, grade, program participation etc.)
- **Calculating age from birth-date**
- **Re-coding data**
- **Cross-tabulating data**
- **Determining adjusted attendance rates**
- **Automatically comparing data to targets**

Calculating Age (in years) from a Birthdate

=F2-E2/365

Where F2= a cell that has today's date - Today()
And E2= is the participant's date of Birth

Then format the cell into a number:
Format cell > Number

Alternative

=YEAR(F2)-YEAR(E2)

Where F2= a cell that has today's date - Today()
And E2= is the participant's date of Birth

Then format the cell into a number:
Format cell > Number

Recoding: Example → Age to Age Group

- If (logical _test,[value_if true], value_if false])
- if (G2>89, "A", if (G2>74, "B", if (G2>59, "C", "D")))

IN ENGLISH:

Four age groups are pre-determined:
Group A = 90 or older B = 75 – 89 C = 60 – 74 Group D = <60

Soooo, the age in G2 is compared to see if it is greater than 89, if so, the case gets an "A" designation, if its not A, then the age in G2 is compared to see if it is greater than 74 (this will pick up everyone 75 – 89, everyone older than 89 are already in Group A), if so the case gets a "B" designation. If its not A or B, then the age in G2 is compared to see if it is greater than 59 (this will pick up everyone who is 60 – 74, everyone who is older is already in Group A or B). Lastly if the age in G2 does not meet any of the criteria, it will receive a "D" designation.

Just remember to WORK BACKWARDS.

Calculating age and age group automatically using Excel Functions. 23

Don't forget – once you enter the formulas for one row, you can copy them for all other rows where they apply and Excel will automatically make the adjustment.

H2 =IF(G2>89,"A",IF(G2>74,"B",IF(G2>59,"C","D")))

	A	B	C	D	E	F	G	H	I	J
1	Last Name	First Name	Enrollment Date	Gender (M or F)	Date of Birth	Today	AGE	AGE GROUP (A=90+, B=75-89, C=60-74, D=<60)	Veteran (Y or N)	Address
2	RHODES	DUNCAN	3/1/2010	M	12/25/1936	5/1/2015	78	B	Y	5 MAUREEN DR
3	BOWIE	SARA	4/1/2010	F	4/10/1944	5/1/2015	71	C	N	127 BURNING BRUSH DR
4	BOWIE	TIMOTHY	6/1/2010	M	6/24/1944	5/1/2015	71	C	Y	122 KING RD
5	MOYNIHAN	GRACE	2/17/2013	F	7/2/1943	5/1/2015	72	C		401 SENECA MANOR #1504
6	PAXTON	FAYE	12/17/2013	F	2/20/1946	5/1/2015	69	C	N	4538 SWEDEN WALKER RD
7	DONOGHUE	NANCY JO	1/20/2014	F	1/31/1935	5/1/2015	80	B	N	18 DONNA MARIE CIR
8	BRODY	SANDRA	2/4/2014	F	12/15/1944	5/1/2015	70	C	N	130 LIMERICK LN
9	EVANS	PHILIP	2/5/2014	M	3/21/1951	5/1/2015	64	C	Y	19 WOODSIDE DR
10	MCDONALD	HARVEY	2/6/2014	M	11/14/1940	5/1/2015	75	B	Y	4 ATWOOD PARK APT. 119
11	HILTON	MICHAEL	2/6/2014	M	3/28/1932	5/1/2015	83	B	N	258 PINEVALLEY DR
12	ANTINONE	VALERIE	2/6/2014	F	3/22/1939	5/1/2015	76	B	N	10 JAMEE LANE
13	CREVIER	PATRICIA	2/6/2014	F	6/27/1937	5/1/2015	78	B	N	163 LEDGEWOOD CIR

2015 DATA | Sheet1 | CODES

Summarizing and Recoding: **Adjusting Attendance Data**/Hitting Targets

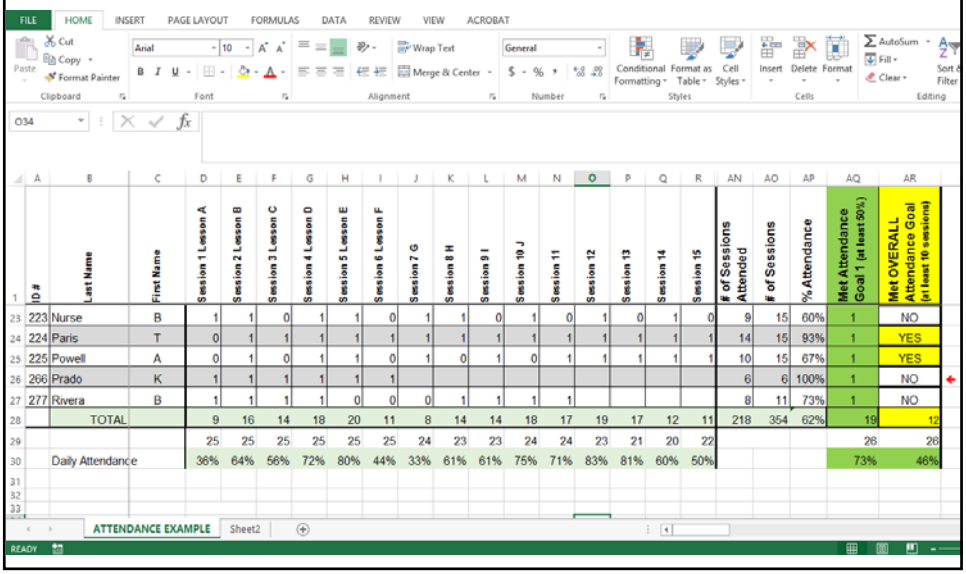
Attendance tracking is relatively straightforward.

- Rows = individuals expected to attend
- Columns = all the possible dates for attendance
- Data = **1 if in attendance, 0 if absent, blank if not expected**

Add a calculator:

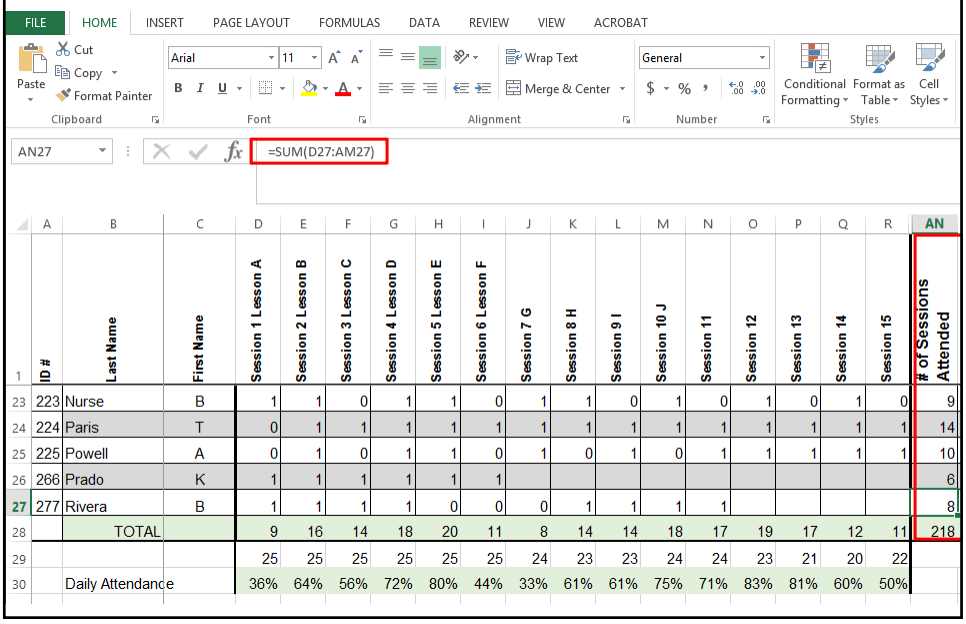
- Total number of sessions attended
- Total number of possible sessions
- Percent of possible sessions
- Number and percent attending each session

Classic attendance database with calculator and target status.



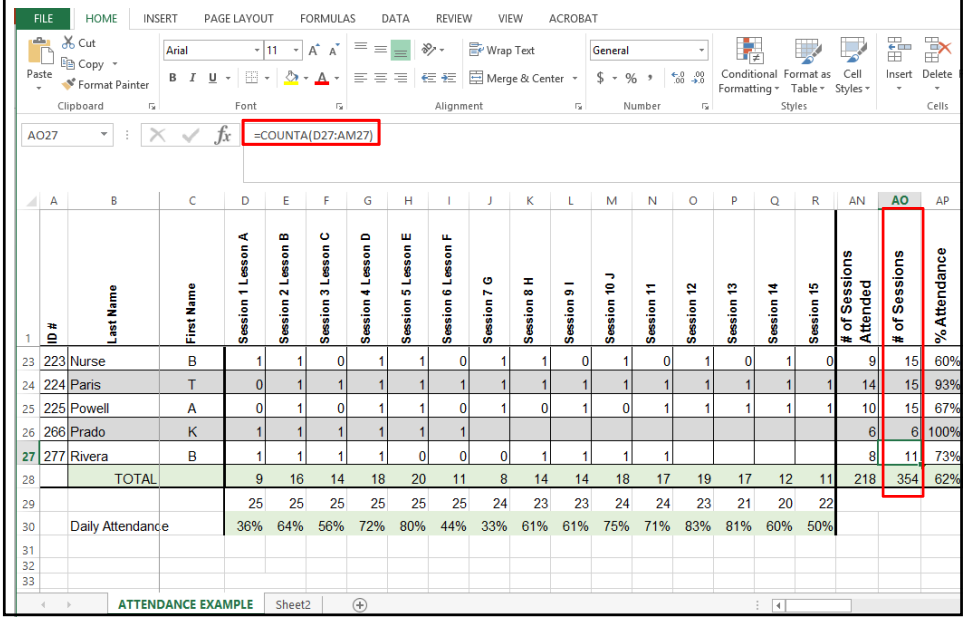
ID #	Last Name	First Name	Session 1 Lesson A	Session 2 Lesson B	Session 3 Lesson C	Session 4 Lesson D	Session 5 Lesson E	Session 6 Lesson F	Session 7 G	Session 8 H	Session 9 I	Session 10 J	Session 11	Session 12	Session 13	Session 14	Session 15	# of Sessions Attended	# of Sessions	% Attendance	Met Attendance Goal 1 (at least 50%)	Met OVERALL Attendance Goal (at least 10 sessions)
223	Nurse	B	1	1	0	1	1	0	1	1	0	1	0	1	0	1	0	9	15	60%	1	NO
224	Paris	T	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	15	93%	1	YES
225	Powell	A	0	1	0	1	1	0	1	0	1	0	1	1	1	1	1	10	15	67%	1	YES
266	Prado	K	1	1	1	1	1	1										6	6	100%	1	NO
277	Rivera	B	1	1	1	1	0	0	0	1	1	1	1					8	11	73%	1	NO
	TOTAL		9	16	14	18	20	11	8	14	14	18	17	19	17	12	11	218	354	62%	19	12
			25	25	25	25	25	25	24	23	23	24	24	23	21	20	22				26	26
	Daily Attendance		36%	64%	56%	72%	80%	44%	33%	61%	61%	75%	71%	83%	81%	60%	50%				73%	46%

Calculating total number of sessions attended.



ID #	Last Name	First Name	Session 1 Lesson A	Session 2 Lesson B	Session 3 Lesson C	Session 4 Lesson D	Session 5 Lesson E	Session 6 Lesson F	Session 7 G	Session 8 H	Session 9 I	Session 10 J	Session 11	Session 12	Session 13	Session 14	Session 15	# of Sessions Attended
223	Nurse	B	1	1	0	1	1	0	1	1	0	1	0	1	0	1	0	9
224	Paris	T	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
225	Powell	A	0	1	0	1	1	0	1	0	1	0	1	1	1	1	1	10
266	Prado	K	1	1	1	1	1	1										6
277	Rivera	B	1	1	1	1	0	0	0	1	1	1	1					8
	TOTAL		9	16	14	18	20	11	8	14	14	18	17	19	17	12	11	218
			25	25	25	25	25	25	24	23	23	24	24	23	21	20	22	
	Daily Attendance		36%	64%	56%	72%	80%	44%	33%	61%	61%	75%	71%	83%	81%	60%	50%	

Calculating total number of possible sessions. (Note this varies based on individual enrollment and discharge.)



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	AN	AO	AP
1	ID #	Last Name	First Name	Session 1 Lesson A	Session 2 Lesson B	Session 3 Lesson C	Session 4 Lesson D	Session 5 Lesson E	Session 6 Lesson F	Session 7 G	Session 8 H	Session 9 I	Session 10 J	Session 11	Session 12	Session 13	Session 14	Session 15	# of Sessions Attended	# of Sessions	% Attendance
23	223	Nurse	B	1	1	0	1	1	0	1	1	0	1	0	1	0	1	0	9	15	60%
24	224	Paris	T	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	15	93%
25	225	Powell	A	0	1	0	1	1	0	1	0	1	0	1	1	1	1	1	10	15	67%
26	266	Prado	K	1	1	1	1	1	1										6	6	100%
27	277	Rivera	B	1	1	1	1	0	0	0	1	1	1	1					8	11	73%
28		TOTAL		9	16	14	18	20	11	8	14	14	18	17	19	17	12	11	218	354	62%
29				25	25	25	25	25	25	24	23	23	24	24	23	21	20	22			
30		Daily Attendance		36%	64%	56%	72%	80%	44%	33%	61%	61%	75%	71%	83%	81%	60%	50%			

Adjusted attendance calculations, overall total and session totals.

	A	B	C	R	AN	AO	AP	AQ	AR
1	ID #	Last Name	First Name	Session 15	# of Sessions Attended	# of Sessions	% Attendance	Met Attendance Goal 1 (at least 50%)	Met OVERALL Attendance Goal (at least 10 sessions)
23	223	Nurse	B	0	9	15	60%	1	NO
24	224	Paris	T	1	14	15	93%	1	YES
25	225	Powell	A	1	10	15	67%	1	YES
26	266	Prado	K		6	6	100%	1	NO
27	277	Rivera	B		8	11	73%	1	NO
28		TOTAL		11	218	354	62%	19	12
29				22				26	26
30		Daily Attendance		50%	8			73%	46%

Number and % attending session 15

= AN28/AO28 % of possible sessions attended

= AVERAGE(AN2: AN27)
Average number of sessions attended.

Summarizing and Recoding: Adjusting Attendance Data/**Hitting Targets**

Attendance tracking is relatively straightforward.

- Rows = individuals expected to attend
- Columns = all the possible dates for attendance
- Data = **1 if in attendance, 0 if absent, blank if not expected**

Add a calculator:

- Total number of sessions attended
- Total number of possible sessions
- Percent of possible sessions
- Number and percent attending each session

Recode attendance results to determine if targets have been met!

- Did individual participants attend a large enough proportion of sessions?
- Did individual participants attend enough total sessions?

Summarizing and Recoding: Adjusting Attendance Data/**Hitting Targets**

- If (logical _test,[value_if true], value_if false])

Target 1: Participants will attend 50% of possible sessions.

- =IF (AP26>=50%,1,0)

IN ENGLISH:

The adjusted percent of sessions attended in cell AP26 is compared to see if it is greater than or equal to 50%. If so, the case gets a 1 to signify meeting the target, if not, the case gets a 0 to signify missing the target. Note that the total number and % of participants meeting the target is also summarized (AQ28 and AQ30).

Summarizing and Recoding:
Adjusting Attendance Data/**Hitting Targets**

- If (logical _test,[value_if true], value_if false])

Target 2: Participants will attend at least 10 of the 15 sessions.

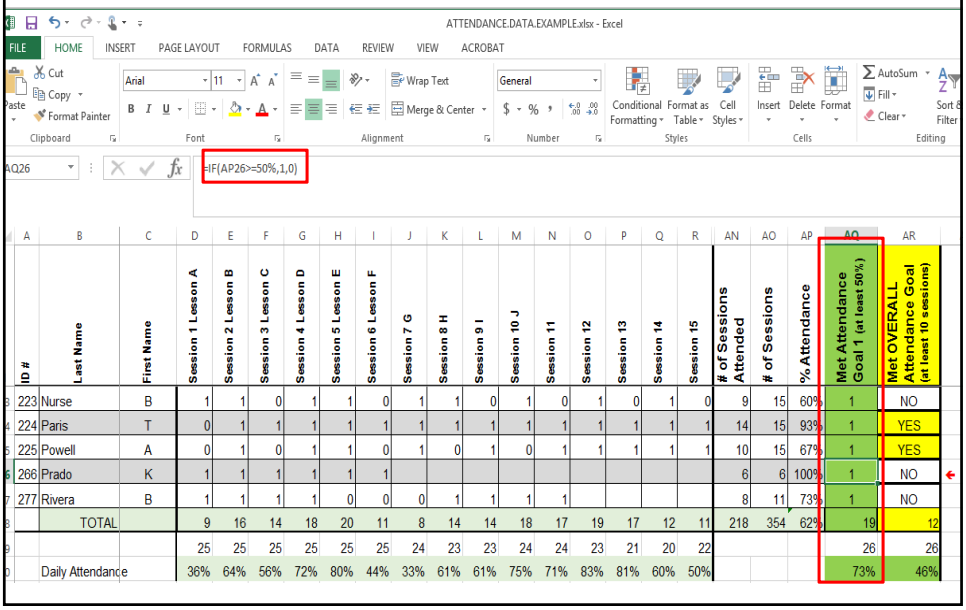
- if (AN26>=10, “YES”,”NO”)

IN ENGLISH:

The total number of sessions attended in cell AN26 is compared to see if it is greater than or equal to 10. If so, the case gets a YES to signify meeting the target, if not the case gets a NO.

Note that the total number and % of participants meeting the target is also summarized (AR28, AR30)

Recoding to indicate target achievement: Target 1 attending 50% of sessions.



ID #	Last Name	First Name	Session 1 Lesson A	Session 2 Lesson B	Session 3 Lesson C	Session 4 Lesson D	Session 5 Lesson E	Session 6 Lesson F	Session 7 G	Session 8 H	Session 9 I	Session 10 J	Session 11	Session 12	Session 13	Session 14	Session 15	# of Sessions Attended	# of Sessions	% Attendance	Met Attendance Goal 1 (at least 50%)	Met OVERALL Attendance Goal (at least 10 sessions)
223	Nurse	B	1	1	0	1	1	0	1	1	0	1	0	1	0	1	0	9	15	60%	1	NO
224	Paris	T	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	15	93%	1	YES
225	Powell	A	0	1	0	1	1	0	1	0	1	0	1	1	1	1	1	10	15	67%	1	YES
266	Prado	K	1	1	1	1	1	1										6	6	100%	1	NO
277	Rivera	B	1	1	1	1	0	0	0	1	1	1	1					8	11	73%	1	NO
	TOTAL		9	16	14	18	20	11	8	14	14	18	17	19	17	12	11	218	354	62%	19	12
			25	25	25	25	25	25	24	23	23	24	24	23	21	20	22				26	26
	Daily Attendance		36%	64%	56%	72%	80%	44%	33%	61%	61%	75%	71%	83%	81%	60%	50%				73%	46%

Recoding to indicate target achievement: Target 2 attending at least 10 sessions.

=IF(AN26>=10,"YES","NO")

Session 1 Lesson A	Session 2 Lesson B	Session 3 Lesson C	Session 4 Lesson D	Session 5 Lesson E	Session 6 Lesson F	Session 7 G	Session 8 H	Session 9 I	Session 10 J	Session 11	Session 12	Session 13	Session 14	Session 15	# of Sessions Attended	# of Sessions	% Attendance	Met Attendance Goal 1 (at least 50%)	Met OVERALL Attendance Goal (at least 10 sessions)
1	1	0	1	1	0	1	1	0	1	0	1	0	1	0	9	15	60%	1	NO
0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	15	93%	1	YES
0	1	0	1	1	0	1	0	1	0	1	1	1	1	1	10	15	67%	1	YES
1	1	1	1	1	1										6	6	100%	1	NO
1	1	1	1	0	0	0	1	1	1	1					8	11	73%	1	NO
9	16	14	18	20	11	8	14	14	18	17	19	17	12	11	218	354	62%	19	12
25	25	25	25	25	25	24	23	23	24	24	23	21	20	22				26	26
6%	64%	56%	72%	80%	44%	33%	61%	61%	75%	71%	83%	81%	60%	50%				73%	46%

Sheet2

Multivariate Analysis: Crosstabs

Like everything else in Excel, there is more than one way to conduct multivariate analyses – i.e., to look at more than one variable at a time.

- Pivot Tables
- Cheaters Cross-tabs
  - Sort database
  - Copy database – make as many copies as partitions*
  - Delete those not in the partition, use the calculator as a look up for each partition.

*A partition is a variable that divides the data into groups of interest. For example, RACE/ETHNICITY, SEX, AGE, INCOME LEVELS are all partitions.

Cheaters cross tab: Females Only

	A	B	C	D	E	F	G	H	I	J
187	LOMKER	JUANITA (ANITA)	2/17/2015	F	7/11/1936	5/2/2015	79	B	N	32 GOLDEN OAKS WAY
188	TEMPLE	BEVERLY	2/17/2015	F	9/9/1932	5/2/2015	83	B		726 OGDEN PARMA TL RD
189	YOUNG	ALICE	2/17/2015	F		5/2/2015	115	A		PO BOX 60792
190	GIANCATERIN	MARIE	2/19/2015	F	9/10/1941	5/2/2015	74	C	N	24 FREEDOM POND LANE
191	PIMM	EILEEN	2/19/2015	F	4/5/1950	5/2/2015	65	C	N	47 MEACLOW FARM SOUTH
192	DODGE	PAT	2/00/2014	F	5/9/1937	5/2/2015	78	B		174 HASKINS LN S
193	CHARLES	ROBIN	4/00/2013	F	9/20/1946	5/2/2015	69	C	N	157 GATEWOOD AVE
215										
216	NOTE: DO NOT ENTER DATA OR TYPE OVER CALCULATIONS BELOW									
217	# responses	192	192	192	191	192	192	192	165	192
219							73			
220	FREQUENCIES (COUNTS)						AVERAGE			
221	Freq 1	0		192				4	2	
222	Freq 2	0		0				82	163	
223	Freq 3	0						106		
228	Check Sum	0		192		0		192	165	
230	PERCENTAGES									
231	%1			100%				2%	1%	
232	%2			0%				43%	99%	
233	%3							55%		
234	%4							0%		

2015 DATA | CODES | **FEMALES ONLY** | MALES ONLY | COPY - SORTED by GENDER

READY

Cheaters cross tab: Males Only

A118

	A	B	C	D	E	F	G	H	I	J
76	ROBERTSON	DON	2/17/2015	M	5/24/1943	5/2/2015	72	C	Y	50 ROWLEY DR
77	RYNDERS	DARIO	2/17/2015	M	3/19/1944	5/2/2015	71	C	Y	55 BURNING BRUSH DR
78	ATTRIDGE	WILLIAM	2/17/2015	M	11/22/1959	5/2/2015	55	D	N	10 PIRATES COVE
79	MATTLE	JAMES	2/17/2015	M	6/8/1940	5/2/2015	75	B	N	373 WHITTIER RD
80	BEMAN	WILLIAM	2/19/2015	M	7/14/1948	5/2/2015	67	C	Y	104 MARC-MAR TR
81	GIANCATERIN	MICHAEL	2/19/2015	M	2/21/1942	5/2/2015	73	C	Y	24 HIDDEN VALLEY RD
82	BURKE	THOMAS		M	8/17/1934	5/2/2015	81	B	Y	134 DONNAMARIE CIR
104										
105	NOTE: DO NOT ENTER DATA OR TYPE OVER CALCULATIONS BELOW									
106	# responses	81	80	81	81	81	81	81	72	8
108							75			
109	FREQUENCIES (COUNTS)						AVERAGE			
110	Freq 1	0		0				2	40	
111	Freq 2	0		81				40	32	
112	Freq 3	0						38		
113	Freq4	0						1		
117	Check Sum	0		81		0		81	72	
119	PERCENTAGES									
120	%1			0%				2%	56%	
121	%2			100%				49%	44%	
122	%3							47%		

% NOT VETRANS

2015 DATA | CODES | FEMALES ONLY | **MALES ONLY** | COPY - SORTED by GENDER

Other Handy Strategies

Link formulas across sheets:
='EXACTNAMEOFOTHERSHEET'!B3 or other cell you want

='2015 DATA'!B2

Calculating averages:

*Use the click and drag function when you can OR

* =AVERAGE(G2:G298)

Be sure to decide what to do if your data has zeros in it. They may artificially lower the average. Try sorting, and setting your data range to include only cells with non-zero numbers.

Demographics Summary Example

Appendix Table 1: Description of 2014 Matter of Balance Participants, n=238

AGE GROUP	
60 - 69	18%
70 - 79	33%
80 or older	49%
HOUSEHOLD	
Live alone	47%
Live with spouse	41%
Live with multiple family members	12%
HEALTH INSURANCE	
Medicare	90%
Medicaid	10%

Attendance Summary Examples

Table 2a: Semester 1 Attendance Summary, Young Scholars Program

	Females N=45	**Males N=41**	**TOTAL N=86**
Average number of Sessions	8	6	7
% Meeting Attendance Target **(50% of sessions)**	73%	68%	71%
% Meeting Attendance Target 2 **(At least 10 Sessions)**	47%	43%	45%

Appendix Table 2: Number and Percent of Matter of Balance Participants, in Attendance, by session, n=238

	1	2	3	4	5	6	At least 3
Number	171	190	105	179	193	198	188
%	72%	80%	44%	75%	81%	83%	79%

Now You Try

	#	**%**
Met Attendance Target 1		
Met Attendance Target 2		
Met Attendance Target 1 but not 2		
Number who Started Late		
Number who Withdrew Early		
Number of Sessions with attendance <50% (identify which ones in a footnote below)		

	Females N=	**Males N=**	**TOTAL N=**
INCOME			
Less than $15,000			
$15,000 - $24,999			
$25,000 – 44,999			
$45,000 - $74,999			
$75,000 or more			
AGE GROUPS			
90+			
75 – 89			
60 – 74			
Average Age			