

Calculating percentages of totals

When working with data, we frequently have to perform simple calculations to give the numbers meaning. In this instance, we will work with Canadian Citizenship and Immigration Canada's [Refugee claimants by top 50 countries of citizenship](#), the fourth tab from the bottom that breaks down the numbers by country. The "Refugee claimants by top 50 countries of citizenship" table tracks individuals who successfully make their asylum claims from within Canada, and then become so-called protected persons. They must then apply for permanent resident status. This is why the total numbers are lower than the overall yearly numbers for refugees, which include claims made outside Canada.

Once you download the table, paste the website's URL into the first available cell in the first row, and save the table as an updated Excel version. Be sure to work from the copied version.

Before working with the table, we always want to do the necessary clean-up, which means that the first row contains the column labels and there is nothing at the bottom. If there is a row that contains the total for each column, which there is in this case, you want to make sure that it is separated from the entire table so that those numbers don't get caught up in the sorting and skew your results.

Because column A doesn't have a title, let's give it one. Call it "Countries".

	A	B	C	D	E	F	G	H	I	J	K
1	Countries	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
2	China, People's Republic of	1,643	1,500	1,343	1,475	1,449	1,528	1,794	1,666	760	1,188
3	Pakistan	645	609	356	387	421	516	895	865	630	774
4	Iraq	106	183	270	291	232	146	157	165	239	580
5	Nigeria	580	672	749	760	768	849	683	713	470	579
6	Colombia	1,110	1,373	2,589	3,066	2,256	1,336	864	701	598	576
7	Syria	58	33	69	64	87	120	176	345	495	565
8	Slovak Republic	8	6	7	74	355	263	316	443	33	480
9	Afghanistan	238	253	289	433	408	406	417	368	388	463
10	Hungary	21	29	23	307	2,539	2,350	4,454	1,883	96	391
11	Haiti	356	708	3,244	4,252	1,440	1,061	510	393	329	362
12	Ukraine	187	206	175	186	153	119	127	177	62	360
13	Congo, Democratic Republic of the	306	415	338	423	312	316	371	356	307	346
14	Somalia, Democratic Republic of	265	219	249	504	536	444	439	445	289	337
15	Bangladesh	169	119	79	92	110	121	118	125	156	321
16	India	804	757	540	550	481	523	642	688	228	293
17	Egypt	76	50	52	47	42	112	156	171	257	252
18	Eritrea	148	156	155	222	205	147	180	230	229	251
19	Sri Lanka	853	861	789	1,011	833	1,216	635	416	191	197
20	Jamaica	157	152	125	241	269	275	315	263	138	192
21	Honduras	220	182	239	469	365	347	334	299	150	182
22	Turkey	264	268	149	235	238	291	330	365	179	174
23	Cameroon, Federal Republic of	79	129	139	144	139	125	117	132	131	171
24	United States of America	526	650	1,817	2,297	1,115	771	626	391	124	168

Create a new column in M and label it “Percent of Total – 2014”. Use the formula for calculating the percent of total, which is also covered on pages 74 and 75 of Computer-Assisted Reporting. The formula looks like this:

K	M
2014	Percent of Total – 2014
1,188	=K2/K54
774	
580	
579	
576	

K2 is the first value in column K – “China, People’s Republic of” – and K54 is the total at the bottom of the table. Before pressing enter, we want to anchor the total value in K54 to ensure that the numbers for each country are calculated as a percentage of the same total. To do this, we use a dollar sign at either side of the

K in K54, format the number as a percent with one decimal place, and then copy it to the bottom.

K	M	N
2014	Percent of Total – 2014	
1,188	8.9%	
774	5.8%	
580	4.3%	
579	4.3%	
576	4.3%	
565	4.2%	
480	3.6%	
463	3.4%	
391	2.9%	
362	2.7%	
360	2.7%	
346	2.6%	
337	2.5%	
321	2.4%	
293	2.2%	
252	1.9%	
251	1.9%	
197	1.5%	
192	1.4%	
182	1.4%	
174	1.3%	
171	1.3%	
168	1.3%	
163	1.2%	
162	1.2%	
161	1.2%	
157	1.2%	
156	1.2%	
151	1.1%	
140	1.0%	
125	0.9%	

You can now sort column M in ascending or descending order. To get the hang of this and determine how those percent of totals have changed over the years, perform the same calculation for each year, meaning that you will have to insert a new column after each year.