PROBLEM SET 1-1: Tables and Graphs

"Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write."

-H.G. Wells　(Don't know who that is? Look it up!)

1. Visit New York City Independent Budget Office's site: New York By The Numbers: http://ibo.nyc.ny.us/cgi-park2/

   Find one graph/dataset from NYC BTN particularly interesting to you to present to the group – use the archive links on the top right as well – endeavor to pick one you think no one else will.

The following table shows data on arrests made in NYC for 1 year according to NYPD figures:

New York City Arrests
Preliminary data as of 12/17/2013

	Dec 12	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13	Oct 13	Nov 13	% Change From Previous Month	Current Month 2012	Current Month 2013	% Change From Month in Previous Year	YTD 2012	YTD 2013
Felony Arrests within NYC																		
VFO	1,966	2,373	2,065	2,134	2,165	2,445	2,271	2,373	2,342	2,097	2,321	2,018	-13.1%	1,919	2,018	5.2%	25,181	24,604
Drug	1,242	1,856	1,593	1,713	1,723	1,793	1,584	1,642	1,681	1,396	1,649	1,597	-3.2%	1,026	1,597	55.7%	18,436	18,227
VTL	113	155	146	165	171	154	143	135	145	152	168	169	0.6%	92	169	83.7%	1,342	1,703
Other	2,855	3,507	3,313	3,530	3,746	3,808	3,385	3,790	3,621	3,313	3,762	3,393	-9.8%	2,568	3,393	32.1%	36,837	39,168
Total Felony	6,176	7,891	7,117	7,542	7,805	8,200	7,383	7,940	7,789	6,958	7,900	7,177	-9.2%	5,605	7,177	28.0%	81,796	83,702
Misdemeanor Arrests within NYC																		
VTL	721	765	717	840	992	890	702	724	848	769	792	863	9.0%	524	863	64.7%	7,901	8,902
Drug	4,471	5,454	4,808	5,100	5,183	5,579	4,661	4,761	5,001	4,344	4,924	4,637	-5.8%	3,364	4,637	37.8%	66,316	54,452
Other	11,313	13,465	12,837	13,926	13,892	14,316	12,977	13,409	13,512	12,476	13,293	12,364	-7.0%	10,107	12,364	22.3%	146,096	146,467
Total Misdemeanor	16,505	19,684	18,362	19,866	20,067	20,785	18,340	18,894	19,361	17,589	19,009	17,864	-6.0%	13,995	17,864	27.6%	220,313	209,821
Total Arrest	22,681	27,575	25,479	27,408	27,872	28,985	25,723	26,834	27,150	24,547	26,909	25,041	-6.9%	19,600	25,041	27.8%	302,109	293,523

Source: http://www.criminaljustice.ny.gov/crimnet/ojsa/greenbook.pdf 1/20/14

2. How many total arrests were made in NYC from Dec 2012 to Nov 2013? *316204*

3. What percentage of the total crimes were felonies? *89898/316204 ≈ 28%*

4. What percentage of the July misdemeanor arrests were drug related? *≈ 25%*

5. Write a complete sentence that fully describes where the number 5.2% (found in the VFO row) came from and what it means. *2018 - 1919 / 1919 ; 5.2% of prev year total + this years*

6. Do you see any patterns in arrests over the course of a calendar year? Describe.

7. How was 2013 compared to 2012? – write a brief summary with supporting evidence you could give to a news agency. Compare more than just total arrests. *Overall arrests are down ≈ 2.8%, but felony arrests ↑, particularly VTL & other. VTL up across board – so misdemeanor too. more crimes outside of specific categories listed*