Some useful math operations!

PLEASE NOTE: This is not a stats class (though the CCBB does offer a peer-led stats working group!). We're just giving you tools, it's up to you to ensure that you apply them appropriately. The SSC offers *free* statistics consulting. If you're unsure, ask for help!

Function	Use	Example	Need to import
tstat, pval = stats.ttest_ind(list1, list2)	Do a simple t-test and get a p-value	tstat, pval = stats.ttest_ind(subset1, subset2)	from scipy import stats
npr.permutation(object)	Randomly permute the data object	npr.permutation(subset2)	from numpy import random as npr
object.mean()	Get mean of object	subset2.mean()	import numpy
object1.cov(object2)	Estimate coefficient of covariance between two objects	subset1.cov(subset2)	import pandas
object1.corr(oject2, method='spearman')	Perform a Kendall, Spearman or Pearson correlation test	subset1.corr(subset2)	import pandas
rolling_mean(data frame, window).plot(style='k')	Get and plot a rolling mean in your data frame with window size x. Plot it	rolling_mean(df, 1).plot(style='k')	import pandas