Considered Functions in Excel

Command	Description
`BINOMDIST(...)`	binomial distribution *Number_s* – number of "successes" we have in the sample *Trials* – sample size (in lecture *n*) *Probability_s* – probability of "success", in lecture – *p* *Cumulative* = false
`HYPGEOMDIST(...)`	hypergeometric distribution *Sample_s* – number of "successes" we have in the sample *Number_s* – sample size (in lecture *n*) *Population_s* – number of "successes" we have in total population (in lecture *r*) *Number_pop* – population size (in lecture *N*)
`POISSON(...)`	Poisson distribution *X* – number of events happened (in lecture *x*) *mean* – average number of events (in lecture μ) *Cumulative* = false
`COUNTIF(...)`	Counts number of cells which meet specified conditions *Range* – range of cells from which you want to count *Criteria* – condition in the form of number, expression or text
`NORMDIST(...)`	normal distribution (gives p.d.f. or c.d.f) *x* – value *mean, sd* – mean and standard deviation *cumulative* – if **false** – p.d.f., if **true** – c.d.f.
`NORMINV(...)`	inverted normal distribution (gives value *x*) *probability* – probability for which x is calculated *mean, sd* – mean and standard deviation
`EXPONDIST(...)`	hypergeometric distribution *x* – value *lambda* – the rate, or 1/mean *cumulative* – if **false** – p.d.f., if **true** – c.d.f.
`CONFIDENCE(...)`	confidence interval, assuming normal distribution *alpha* – significance level *sd* – mean and standard deviation *cumulative* – if **false** – p.d.f., if **true** – c.d.f.
`NORMSINV(...)`	inverted normal standard distribution (gives quantile *x*) *probability* – probability for which x (quantile) is calculated. For **95%** confidence use **0.025**
`TINV(...)`	inverted normal distribution (gives quantile *x*) *probability* – probability for which x (quantile) is calculated. For **95%** confidence use **0.05** *df* – number of degree of freedom (*n*-1)
`TTEST(...)`	perform a t-test on the data *array1* – dataset 1 *array2* – dataset 1 *tails* – 1 or 2 tails *type* – 1 for paired, 2 for equal population, 3 for unequal population

Complete List of Statistical Functions in Excel

http://office.microsoft.com/en-us/excel/HP052030661033.aspx

AVEDEV	Returns the average of the absolute deviations of data points from their mean
AVERAGE	Returns the average of its arguments
AVERAGEA	Returns the average of its arguments, including numbers, text, and logical values
BETADIST	Returns the beta cumulative distribution function
BETAINV	Returns the inverse of the cumulative distribution function for a specified beta distribution
BINOMDIST	Returns the individual term binomial distribution probability
CHIDIST	Returns the one-tailed probability of the chi-squared distribution
CHIINV	Returns the inverse of the one-tailed probability of the chi-squared distribution
CHITEST	Returns the test for independence
COMBIN	Number of combinations
CONFIDENCE	Returns the confidence interval for a population mean
CORREL	Returns the correlation coefficient between two data sets
COUNT	Counts how many numbers are in the list of arguments
COUNTA	Counts how many values are in the list of arguments
COUNTBLANK	Counts the number of blank cells within a range
COUNTIF	Counts the number of nonblank cells within a range that meet the given criteria
COVAR	Returns covariance, the average of the products of paired deviations
CRITBINOM	Returns the smallest value for which the cumulative binomial distribution is less than or equal to a criterion value
DEVSQ	Returns the sum of squares of deviations
EXPONDIST	Returns the exponential distribution
FDIST	Returns the F probability distribution
FINV	Returns the inverse of the F probability distribution
FISHER	Returns the Fisher transformation
FISHERINV	Returns the inverse of the Fisher transformation
FORECAST	Returns a value along a linear trend
FREQUENCY	Returns a frequency distribution as a vertical array
FTEST	Returns the result of an F-test
GAMMADIST	Returns the gamma distribution
GAMMAINV	Returns the inverse of the gamma cumulative distribution
GAMMALN	Returns the natural logarithm of the gamma function, Γ(x)
GEOMEAN	Returns the geometric mean
GROWTH	Returns values along an exponential trend
HARMEAN	Returns the harmonic mean
HYPGEOMDIST	Returns the hypergeometric distribution
INTERCEPT	Returns the intercept of the linear regression line
KURT	Returns the kurtosis of a data set
LARGE	Returns the k-th largest value in a data set
LINEST	Returns the parameters of a linear trend
LOGEST	Returns the parameters of an exponential trend
LOGINV	Returns the inverse of the lognormal distribution
LOGNORMDIST	Returns the cumulative lognormal distribution
MAX	Returns the maximum value in a list of arguments
MAXA	Returns the maximum value in a list of arguments, including numbers, text, and logical values

MEDIAN	Returns the median of the given numbers
MIN	Returns the minimum value in a list of arguments
MINA	Returns the smallest value in a list of arguments, including numbers, text, and logical values
MODE	Returns the most common value in a data set
NEGBINOMDIST	Returns the negative binomial distribution
NORMDIST	Returns the normal cumulative distribution
NORMINV	Returns the inverse of the normal cumulative distribution
NORMSDIST	Returns the standard normal cumulative distribution
NORMSINV	Returns the inverse of the standard normal cumulative distribution
PEARSON	Returns the Pearson product moment correlation coefficient
PERCENTILE	Returns the k-th percentile of values in a range
PERCENTRANK	Returns the percentage rank of a value in a data set
PERMUT	Returns the number of permutations for a given number of objects
POISSON	Returns the Poisson distribution
PROB	Returns the probability that values in a range are between two limits
QUARTILE	Returns the quartile of a data set
RANK	Returns the rank of a number in a list of numbers
RSQ	Returns the square of the Pearson product moment correlation coefficient
SKEW	Returns the skewness of a distribution
SLOPE	Returns the slope of the linear regression line
SMALL	Returns the k-th smallest value in a data set
STANDARDIZE	Returns a normalized value = $(x - m)/s$
STDEV	Estimates standard deviation based on a sample
STDEVA	Estimates standard deviation based on a sample, including numbers, text, and logical values
STDEVP	Calculates standard deviation based on the entire population
STDEVPA	Calculates standard deviation based on the entire population, including numbers, text, and logical values
STEYX	Returns the standard error of the predicted y-value for each x in the regression
TDIST	Returns the Student's t-distribution
TINV	Returns the inverse of the Student's t-distribution
TREND	Returns values along a linear trend
TRIMMEAN	Returns the mean of the interior of a data set
TTEST	Returns the probability associated with a Student's t-test
VAR	Estimates variance based on a sample
VARA	Estimates variance based on a sample, including numbers, text, and logical values
VARP	Calculates variance based on the entire population
VARPA	Calculates variance based on the entire population, including numbers, text, and logical values
WEIBULL	Returns the Weibull distribution
ZTEST	Returns the one-tailed probability-value of a z-test