a. $ME = z_* \cdot SE$ the margin of error, also called the error bound
b. CL = *confidence level*, = 1- α
c. $\alpha = 1 - CL$ = *significance level*
d. z_* = NORM.INV($\frac{1+CL}{2}, 0, 1$)
e. $z_x = \frac{x-\mu}{\sigma}$
f. $SE = \frac{\sigma}{\sqrt{n}} = \frac{s_x}{\sqrt{n}}$
g. $n = (\frac{z_* \cdot s_x}{ME})^2$
h. $SE = \sqrt{\frac{p' \cdot (1-p')}{n}}$
i. $n = (\frac{z_* \cdot \sqrt{p' \cdot (1-p')}}{ME})^2$
j. t-stat: $= \frac{\bar{x}-\mu_0}{SE}$
k. t_* crit value = T.INV((1+CL)/2,n-1) = =T.INV((1-$\frac{\alpha}{2}$),n-1)
l. p-value (2 Tailed) =T.DIST.2T(|t-stat|,n-1)
m. p-value (1 Tailed) =T.DIST(t-stat,n-1,1) =1-T.DIST.RT(t-stat,n-1)

a. $X \sim B(n,p)$; $E(X) = \mu = np$, $\sigma = \sqrt{np(1-p)}$
b. $X \sim U(a,b)$; $f(x) = \frac{1}{b-a}$; $\mu = \frac{a+b}{2}$; $\sigma = \sqrt{\frac{(b-a)^2}{12}}$; $P(c < X < d) = \frac{d-c}{b-a}$
c. $X \sim Exp(m)$; $f(x) = me^{-mx}$; $\mu = \frac{1}{m} = \sigma$; $P(a < X < b) = e^{-ma} - e^{-mb}$

a. =MIN(array)
b. =MAX(array)
c. =QUARTILE.INC(array, quart)
d. =MEDIAN(array)
e. =AVERAGE(array)
f. =COUNT(array)
g. =STDEV.s(array)
h. =VARIANCE(array)
i. =COMBIN(n, k)
j. =EXP(number)

a. =BINOM.DIST(k, n, p,TRUE) = $P(X \leq k)$
b. =BINOM.DIST(k, n, p,FALSE) = $P(X = k)$
c. =EXPON.DIST(x,m,TRUE) = $P(X \leq k)$
d. =NORM.DIST(x,μ, σ,TRUE)= $P(X \leq x)$ *the output is the area to the left of* x
e. =NORM.INV(k,μ, σ,TRUE) *the output is the score at the given* k*-th percentile*
f. =CONFIDENCE.NORM(α, s_x, n) *the output is the ME for mean*
g. =CONFIDENCE.NORM(α, $\sqrt{p(1-p)}$, n) *the output is the ME for proportion*
h. =CONFIDENCE.T(α, s_x, n) *the output is the ME for mean*
i. =CONFIDENCE.T(α, $\sqrt{p(1-p)}$, n) *the output is the ME for proportion*
j. =T.DIST(x,n,TRUE)= $P(X \leq x)$ *the output is the area to the left of* x *in a T-distribution*
k. =T.INV(p, df) *the output is the score for the given probability* p

a. To find "Text to Columns" look under DATA
b. To find the insert graphs look under INSERT
c. To transpose an array....copy (CTRL + C) the array then right click on the left upper most cell of where you want to transpose and choose the transpose function.