**Some Useful Excel Syntax**

1. **Binomial Distribution**

Exactly:

=BINOMDIST(3,14,0.06,0)

= 0.039

Cumulative:

=BINOMDIST(3,14,0.06,1)

=.9920

1. **Poisson Distribution**

Exactly:

=poisson(x,u,0)

Cumulative:1

1. **Hypergeomtric Distribution**

Exactly:

**=**hypergeometric(x,n,r,N,0)

Cumulative: 1

1. **Normal Distribution**

**Normal:** Excel gives area to the left of a given value.

**RT-TEST**

**P(Z>2)=.0227**

=1-NORM**S**DIST(2) , **S** means standard

=.0227

=NORMSINV(1-0.027)

=2

**LT-TEST**

**P(Z<-2)=.0.0227**

=NORM**S**DIST(-2)

=.0227

=NORMSINV(0.0227)

=-2

**2T-TEST**

=2\*(1-NORSMDIST(2))

=2\*(NORMSDIST(-2))

**Note:** Use NORMDIS and NORMINV for non-standard normal

P(x>20) ? mean 10, s=8

=1-NORMDIST(20,10,8,1)

=0.10565

X=? , 1-.10565 above it , mean=10, S=8

=NORMINV(0.89435,10,8)

=20

1. **t-Distribution**:

Excel gives area to the right of a given value.

**RT-TEST and LT-TEST**

**P(X>1.31)=.10**

=TDIST(1.31,30,1)

=0.10

**Note**: Area of 2 tails must be given to find a t-value

What is the value of t that .10 above it? Must double it first

=TINV(2\*0.1,30)

=1.31 ,0.10 area above 1.31.

**Note:** t cannot be negative in Excel.

**2T-TEST**

=TDIST(1.31,30,2)

OR

=2\*(TDIST(1.31,30,1))

1. **Chi-Sqr-Distribution**

Excel gives area to the right of a given value.

**RT-TEST**

P(X>= 5.14)=.995

=CHIDIST(5.14,16)

=0.995

=CHIINV(0.995,16)

=5.14

=1-CHIDIST(5.14,16)

=.004

1. **F-Distribution:**

Excel gives area to the right of a given value.

P(X>= 39.9)=.1

=FDIST(39.9,1,1)

=0.10

=FINV(0.1,1,1)

=39.9

**Sampling:**

=rand()

When all got ranked, before you sort them in ascending order go to:

Excel option-Formula-Workbook calculation-Manual

**To see how many data =1:**

=COUNTIF(B:B,"=1")

**To see how many data >0:**

=COUNTIF(B:B,">0")

**To see how many data >= 37.7:**

=COUNTIF(B:B,"<=37.7")

**To see how many data =0:**

COUNTIF(C:C,"=0")

**To see how many data in column c:**

=COUNT(C:C)

**It will copy cell B7**

=B7

**If in G column data are >89 assign 1 otherwise 0:**

=IF(G2>89,(1),(0))