Statistics Handouts for Graphing Calculator

Chapter 4 Counting

To find arrangement of items when the order does not matter use the Combination:

1. Type n (bigger number)
2. Hit Math key
3. Select Prob
4. Select nCr
5. Type r (smaller number)

To find arrangement of items when the order does matter use the Permutation:

1. Type n (bigger number)
2. Hit Math key
3. Select Prob
4. Select nPr
5. Type r (smaller number)

Chapter 5 Binomial Distribution

To find the probability:

1. **Exactly or equal** 2nd Vars binomialpdf (n, p, x)
2. **At most or less than or equal** 2nd Vars binomialcdf (n, p, x)
3. **Less than** 2nd Vars binomialcdf (n, p, x-1)
4. **At least or greater than or equal** 2nd Vars 1-binomialcdf (n, p, x-1)
5. **Greater than** 2nd Vars 1-binomialcdf (n, p, x)

Chapter 6 Normal Distribution

To find the probability, percentage or area when n=1: 2nd Vars normalcdf (lower, upper, mean, standard deviation)

To find the probability, percentage or area when n>1: 2nd Vars normalcdf (lower, upper, mean, standard deviation/$\sqrt{n}$)

To find the number or the score: 2nd Vars invnorm (left area, mean, standard deviation)

Chapter 7 Confidence Interval

To find Confidence Interval for proportion (single population):

STAT

TEST

1-PropZInt

To find Confidence Interval for mean (single population):

1. If population standard deviation σ given STAT   TESTS   Zinterval
2. If sample standard deviation s given STAT   TESTS   Tinterval

Chapter 8 Hypothesis Testing

To test a claim for proportion (single population):

STAT

TESTS

1-PropZTest

To test a claim for mean (single population):

1. If population standard deviation σ given STAT   TESTS   ZTest
2. If sample standard deviation s given STAT   TESTS   TTest

Chapter 9 Inferences from Two Samples

To find Confidence Interval for the difference of proportions (dual population):

STAT

TESTS

2-PropZInt

To find Confidence Interval for the difference of means (dual population):

1. If population standard deviations σ_1, σ_2 given STAT   TESTS   2-SampZinterval
2. If sample standard deviations s_1, s_2 given STAT   TESTS   2-SampTinterval

To find Confidence Interval for dependent pairs μ_d (dual population):

1. Put the data in L1 and L2
2. In L3 type L1 - L2
3. STAT
4. TESTS

5. TInterval

To test the claim about the dependent pairs μ$_d$ (dual population):

1. Put the data in L1 and L2
2. In L3 type L1 - L2
3. STAT
4. TESTS
5. TTest

To test the claim for the difference of proportions (dual population):

STAT

TESTS

2-PropZTest

To test the claim for the difference of means (dual population):

1. If population standard deviations σ$_1$, σ$_2$ given STAT   TESTS   2-SampZTest
2. If sample standard deviations s$_1$, s$_2$ given STAT   TESTS   2-SampTTest

Chapter 10 Correlation

To test the claim for correlation:

1. Put the data in L1 and L2
2. STAT
3. TESTS
4. LinRegTtest

Chapter 11 Goodness of Fit

To test the claim for good fit:

1. Enter observed frequency in L1
2. Enter expected frequency in L2
3. STAT
4. TESTS
5. X^2 GOF-Test