**Summary of Necessary Conditions by Test**

1 proportion Z-test

-SRS

-population>10n

-np>=10

nq>=10

2 proportion Z-test

-SRS

-population>10n for each group

-np>=10

nq>=10 (for each group)

1 sample T-test

-n>30 (CLT)

-SRS

-population>10n

2 sample T-test

-both groups are normal/>30 (CLT)

-SRS

-population>10n for each group

Matched Pair T-test

-difference is normal (CLT)

-SRS

-all>10n

Goodness of Fit Chi-Square Test

-SRS

-all>10n

-all expected counts>=5

Homogeneity Chi-Square Test

-SRS

-all>10n

-all expected counts>=5

Independence Chi-Square test

-SRS

-all>10n

-all expected counts>=5

Regression test

-scatterplot looks approximately linear

-no patterns in residuals

-consistent spread for residuals

-histogram of residuals is approximately normal