



¹Two analyses that are closely related (and can be seen as approximations) to the likelihood ratio test are the Wald test and the score test.

²When the aim is to test whether a population mean is equal to a given test value, use the (one sample) *t*-test when the true population variance is *not* known and the *Z*-test when it is known.

³The Mann-Whitney *U*-test is also sometimes referred to as the Wilcoxon rank-sum test.

⁴Note that the Kruskal-Wallis test can only test main effects (i.e., no interaction effects).

Note 1. This sheet does obviously not cover every single statistical hypothesis test. For conciseness, I purposefully left out infrequently used methods such as polynomial regression or multinomial probit regression. The sheet does currently also not consider mixed or random effect models and excludes predictive analyses that are typically not used for hypothesis testing (e.g., tree-based machine learning methods). Those types of models might be added later. However, if you have some constructive feedback on this sheet, please feel free to reach out: drawstim@gmail.com.
Note 2. All of the statistical tests mentioned on this sheet are usually conducted as classical (frequentist) hypothesis tests, which should be possible using any statistical software. However, most of them also have a Bayesian version that can be performed using R or JASP.
Variable types. In some cases, the variable type *categorical* is split up in *nominal* and *ordinal*.