Lab exercises for Week 2

1. Use Murphy, Myors & Wolach (2014) Appendix E to walk people through the main ideas of power analysis
   1. dfhyp is basically an index of the complexity of the problem. Compare 2 groups and dfhyp = 1; compare 5 groups and dfhyp = 1. Use seven X variables to predict Y and dfhyp = 6
   2. This table uses two alternative ways of indexing effect size, *d* and *PV*, or the percentage of variance explained
   3. Use *PV* = .01, .10 and .25 to represent small, moderately large and large effects, and find the value of dferror needed to have power of .80 (alpha=.05) for simple (dfhyp = 1), moderately complicated (dfhyp = 4) and more complicated (dfhyp = 10) questions
   4. Calculate sample size required (dfhyp + dferr + 1)
2. Download G\*Power
   1. Go through the tutorial with them
   2. Have them work out power for independent t-test and for ANOVA (F tests) with 4 groups
      1. Work out all five variations of power analysis (e.g.,compute N given ES, alpha etc)