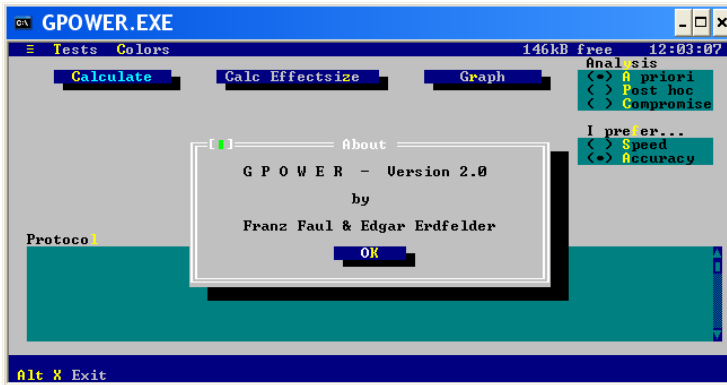


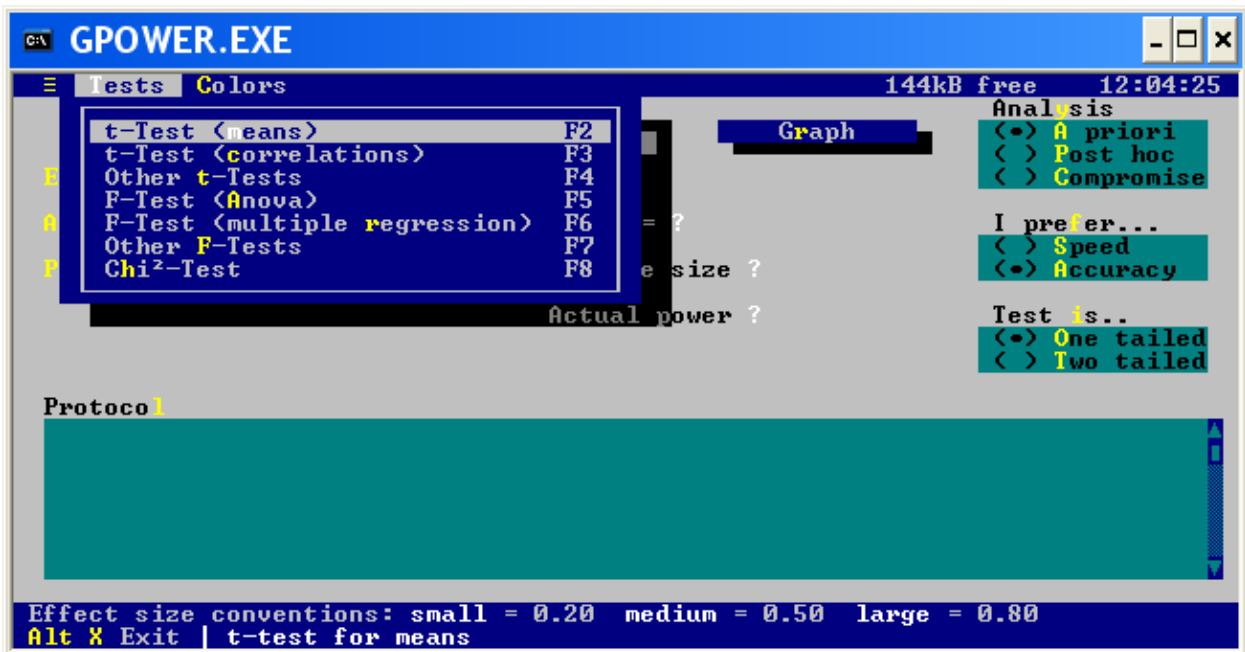
G*Power: One-Way Independent Samples ANOVA

See the power analysis done by hand in my document [One-Way Independent Samples Analysis of Variance](#). Here I shall do it with [G*Power](#).

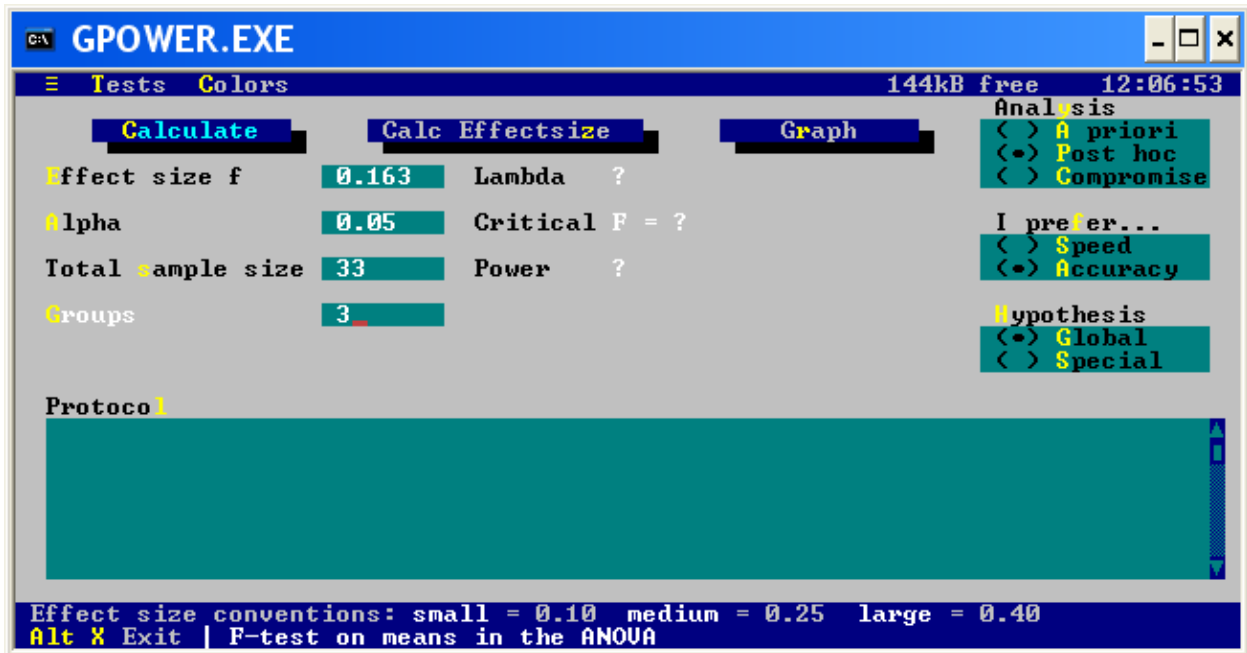
We want to know how much power we would have for a three-group ANOVA where we have 11 cases in each group and the effect size in the population is $\phi' = f = .163$. When we did by hand, using the table in our text book, we found power = 10%. Boot up G*Power:



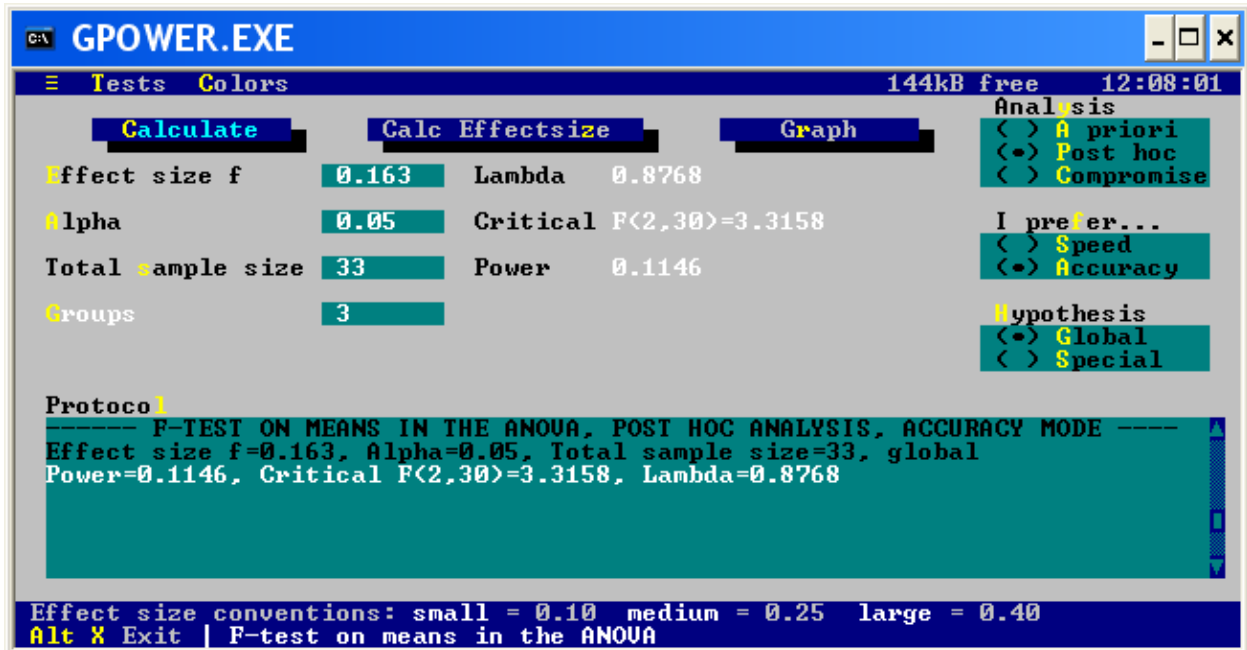
Click OK. Click OK again on the next window.



Click Tests, F-Test (Anova).

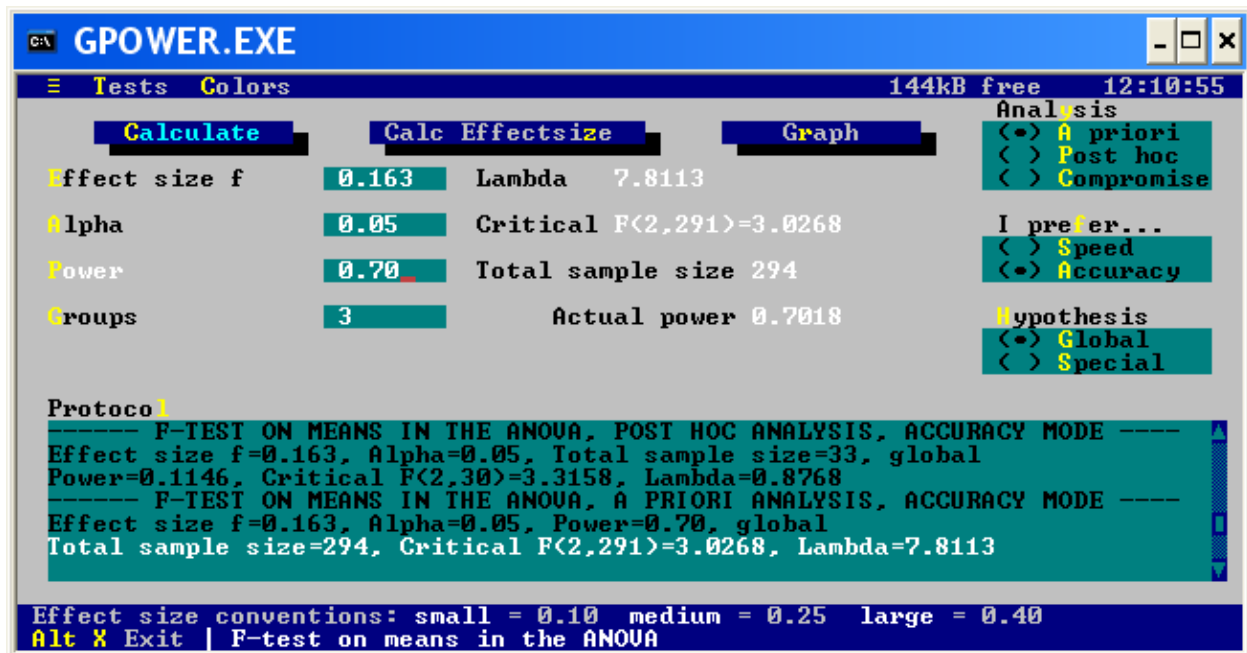


Under Analysis, select Post Hoc. Enter .163 as the Effect size f, .05 as the Alpha, 33 as the Total sample size, and 3 as the number of Groups. Click Calculate.



G*Power tell you that power = .1146.

OK, how many subjects would you need to raise power to 70%? Under Analysis, select A Priori, under Power enter .70, and click Calculate.



G*Power advises that you need 294 cases, evenly split into three groups, that is, 98 cases per group.

Alt-X, Discard to exit G*Power.

That was easy, wasn't it?

Links

- [Karl Wuensch's Statistics Lessons](#)
- [Internet Resources for Power Analysis](#)

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