

oneway_power3.R

John

Mon Jul 23 13:33:23 2018

```
# oneway_power3.R
# Power analysis for one-way ANOVA
# Load necessary libraries
library(ggplot2)

# H1 means, standard deviation, power, alpha
groupmeans <- c(20,22,22,25,18)
stddev <- 3
power <- 0.8
alpha <- 0.05

# Power analysis
powout <- power.anova.test(groups=length(groupmeans),power=power,
  between.var=var(groupmeans),within.var=stddev^2,sig.level=alpha)
powout
```

```
##
##      Balanced one-way analysis of variance power calculation
##
##      groups = 5
##      n = 4.995751
##      between.var = 6.8
##      within.var = 9
##      sig.level = 0.05
##      power = 0.8
##
## NOTE: n is number in each group
```