

R-Lösung zur Übungsblatt 8

Aufgabe 2

```
(a) > t.test(Dioxin~Veteran,data=AgentOrange)

(b) > boxplot(Dioxin~Veteran,data=AgentOrange)
    > id.out<-which(AgentOrange$Dioxin>8)
    > boxplot(Dioxin~Veteran,data=AgentOrange[-id.out,])

(c) > var(AgentOrange[Veteran=="Other",1]) #5.29854
    > var(AgentOrange[Veteran!="Other",1]) #6.98342
    > #*****
    > var.test(Dioxin~Veteran,data=AgentOrange)
```

Aufgabe 3

```
> güte<-function(x){
  1-pnorm(1.96+x/0.2558014)+pnorm(-1.96+x/0.2558014)
}
> Y<-güte(seq(-1,1,by=0.01))
> plot(seq(-1,1,by=0.01),Y,type="b",col=4,
      xlab=expression(Delta*mu),ylab=expression(g(Delta*mu)))
```

Aufgabe 4

```
(a) > t.test(Freitag6,Freitag13)

(b) > t.test(Freitag6,Freitag13,paired = TRUE)
```

Aufgabe 5

2)

```
> uni.data1 <- data.frame(Geschlecht=rep(c("M","W"),c(700,500)),
  zulass=rep(c("ja","nein","ja","nein"),c(449,251,321,179)))
> mosaicplot(~Geschlecht+zulass,data=uni.data1)
```

3)

```
> uni.data2<-data.frame(Fachrichtung=rep(c("Wirtschaft","Jura"),c(800,400)),
  Geschlecht=rep(c("M","W","M","W"),c(600,200,100,300)),
  zulass=rep(c("ja","nein","ja","nein","ja","nein","ja","nein"),
  c(480,120,180,20,10,90,100,200)))
> mosaicplot(~Fachrichtung+Geschlecht+zulass,data=uni.data2)
```