***datos <- read.table(file.choose(),header=T)***

***attach(datos)***

***temp<-as.factor(temp)***

***pres<-as.factor(pres)***

***quimA.aov <- aov(quimA~temp\*pres)***

***summary(quimA.aov)***

Df Sum Sq Mean Sq F value Pr(>F)

temp 2 0.3011 0.1506 8.469 0.008539 \*\*

pres 2 0.7678 0.3839 21.594 0.000367 \*\*\*

temp:pres 4 0.0689 0.0172 0.969 0.470006

Residuals 9 0.1600 0.0178

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

***tempA.tuk<-TukeyHSD(quimA.aov,"temp",ordered=FALSE,conf.level=0.95)***

***tempA.tuk***

Tukey multiple comparisons of means

95% family-wise confidence level

Fit: aov(formula = quimA ~ temp \* pres)

$temp

diff lwr upr p adj

2-1 -0.1666667 -0.38159536 0.04826203 0.1313152

3-1 0.1500000 -0.06492869 0.36492869 0.1809078

3-2 0.3166667 0.10173797 0.53159536 0.0066518

***plot(tempA.tuk)***

***presA.tuk<-TukeyHSD(quimA.aov,"pres",ordered=FALSE,conf.level=0.95)***

***presA.tuk***

Tukey multiple comparisons of means

95% family-wise confidence level

Fit: aov(formula = quimA ~ temp \* pres)

$pres

diff lwr upr p adj

215-200 0.3166667 0.1017380 0.53159536 0.0066518

230-200 -0.1833333 -0.3982620 0.03159536 0.0944905

230-215 -0.5000000 -0.7149287 -0.28507131 0.0002951

***plot(presA.tuk)***

***quimB.aov<-aov(quimB~temp\*pres)***

***summary(quimB.aov)***

Df Sum Sq Mean Sq F value Pr(>F)

temp 2 59.57 29.784 7.953 0.0103 \*

pres 2 27.90 13.951 3.725 0.0663 .

temp:pres 4 49.26 12.316 3.289 0.0637 .

Residuals 9 33.71 3.745

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

***quimB.tuk <- TukeyHSD(quimB.aov,"temp:pres",ordered=FALSE,conf.level=0.9)***

***par(cex=0.5)***

***plot(quimB.tuk)***

***quimB.tuk***

Tukey multiple comparisons of means

90% family-wise confidence level

Fit: aov(formula = quimB ~ temp \* pres)

$`temp:pres`

diff lwr upr p adj

2:200-1:200 1.05 -5.61777281 7.7177728 0.9995586

3:200-1:200 3.50 -3.16777281 10.1677728 0.6785163

1:215-1:200 1.95 -4.71777281 8.6177728 0.9751939

2:215-1:200 7.55 0.88222719 14.2177728 0.0538466

3:215-1:200 2.60 -4.06777281 9.2677728 0.8937853

1:230-1:200 0.15 -6.51777281 6.8177728 1.0000000

2:230-1:200 4.95 -1.71777281 11.6177728 0.3163309

3:230-1:200 7.70 1.03222719 14.3677728 0.0484753

3:200-2:200 2.45 -4.21777281 9.1177728 0.9190549

1:215-2:200 0.90 -5.76777281 7.5677728 0.9998563

2:215-2:200 6.50 -0.16777281 13.1677728 0.1124259

3:215-2:200 1.55 -5.11777281 8.2177728 0.9937551

1:230-2:200 -0.90 -7.56777281 5.7677728 0.9998563

2:230-2:200 3.90 -2.76777281 10.5677728 0.5679720

3:230-2:200 6.65 -0.01777281 13.3177728 0.1012504

1:215-3:200 -1.55 -8.21777281 5.1177728 0.9937551

2:215-3:200 4.05 -2.61777281 10.7177728 0.5273975

3:215-3:200 -0.90 -7.56777281 5.7677728 0.9998563

1:230-3:200 -3.35 -10.01777281 3.3177728 0.7193956

2:230-3:200 1.45 -5.21777281 8.1177728 0.9959369

3:230-3:200 4.20 -2.46777281 10.8677728 0.4879524

2:215-1:215 5.60 -1.06777281 12.2677728 0.2080717

3:215-1:215 0.65 -6.01777281 7.3177728 0.9999876

1:230-1:215 -1.80 -8.46777281 4.8677728 0.9843658

2:230-1:215 3.00 -3.66777281 9.6677728 0.8089991

3:230-1:215 5.75 -0.91777281 12.4177728 0.1881866

3:215-2:215 -4.95 -11.61777281 1.7177728 0.3163309

1:230-2:215 -7.40 -14.06777281 -0.7322272 0.0598223

2:230-2:215 -2.60 -9.26777281 4.0677728 0.8937853

3:230-2:215 0.15 -6.51777281 6.8177728 1.0000000

1:230-3:215 -2.45 -9.11777281 4.2177728 0.9190549

2:230-3:215 2.35 -4.31777281 9.0177728 0.9337201

3:230-3:215 5.10 -1.56777281 11.7677728 0.2879935

2:230-1:230 4.80 -1.86777281 11.4677728 0.3467391

3:230-1:230 7.55 0.88222719 14.2177728 0.0538466

3:230-2:230 2.75 -3.91777281 9.4177728 0.8647602