**6304 Module 2 Lecture**

**R Command File**

**pnorm(36,72,14)**

**pnorm(48,72,14)**

**pnorm(48,78,14)**

**pnorm(48,72,9)**

**dnorm(48,78,14)**

**curve(dnorm(x,72,14),from=30,to=120,lwd=3,ylim=c(0,.05))**

**curve(dnorm(x,78,9),from=30,to=120,lwd=3,col="red",add=TRUE)**

**my.norms=rnorm(5000,72,14)**

**mean(my.norms)**

**sd(my.norms)**

**hist(my.norms,col="red",main="My Little Red Histogram")**

**plot(density(my.norms),lwd=3,main="My 5000 Normal Random Deviates")**

**qqnorm(my.norms,pch=19)**

**qqline(my.norms,col="red",lwd=3)**

**library(moments)**

**skewness(my.norms)**

**kurtosis(my.norms)**

**my.uniforms=runif(1000,0,1)**

**hist(my.uniforms, col="red")**

**my.uniforms=runif(10000,0,1)**

**hist(my.uniforms, col="red")**

**plot(density(my.uniforms),lwd=3)**

**qqnorm(my.uniforms,pch=19)**

**qqline(my.uniforms,col="red",lwd=3)**

**skewness(my.uniforms)**

**kurtosis(my.uniforms)**

**punif(.4,0,1)**

**punif(.4,0,2)**

**punif(.4,0,2,lower.tail=FALSE)**

**curve(dunif(x,0,1),from=0,to=1,lwd=3)**

**curve(dunif(x,0,1),from=-.5,to=1.5,lwd=3)**

**curve(dnorm(x,72,14),from=30,to=120,lwd=3,ylim=c(0,.05))**

**for(i in 8:13){**

**curve(dnorm(x,72,i),from=30,to=120,lwd=3,add=TRUE)**

**}**

**curve(dweibull(x,shape=3,scale=5),from=0,to=20,lwd=3)**

**curve(dweibull(x,shape=3,scale=5),from=0,to=20,lwd=3,ylim=c(0,.5))**

**for(i in 1:5){**

**curve(dweibull(x,shape=i,scale=5),from=0,to=20,lwd=3,add=TRUE)**

**}**

**curve(dweibull(x,shape=3,scale=5),from=0,to=20,lwd=3,ylim=c(0,.5))**

**for(i in 1:5){**

**curve(dweibull(x,shape=3,scale=i),from=0,to=20,lwd=3,add=TRUE)**

**}**

**my.data=data.frame()**

**for(i in 1:1000){**

**my.data[i,1]=i**

**my.data[i,2]=i^2**

**}**

**colnames(my.data)=c("First","Second")**

**my.data[750,]**

**head(my.data)**

**tail(my.data)**

**my.row=data.frame()**

**my.row[1,1]=1001**

**my.row[1,2]=my.row[1,1]^2**

**colnames(my.row)=c("First","Second")**

**my.data=rbind(my.data,my.row)**

**my.data[1001,]**

**tail(my.data)**

**plot(my.data,col="red",main="My Little Red Exponential Curve")**