

TD Tests de student

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```
> library(foreign, pos=16)
```

```
> Premature_excel <- readXL("U:/Prematures.xlsx", rownames=TRUE, head  
+   na="", sheet="Prematures", stringsAsFactors=TRUE)
```

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> Premature_excel <- readXL("U:/Prematures.xlsx", rownames=TRUE, head  
+   na="", sheet="Prematures", stringsAsFactors=TRUE)
```

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```
> library(abind, pos=17)
```

```
> library(e1071, pos=18)
```

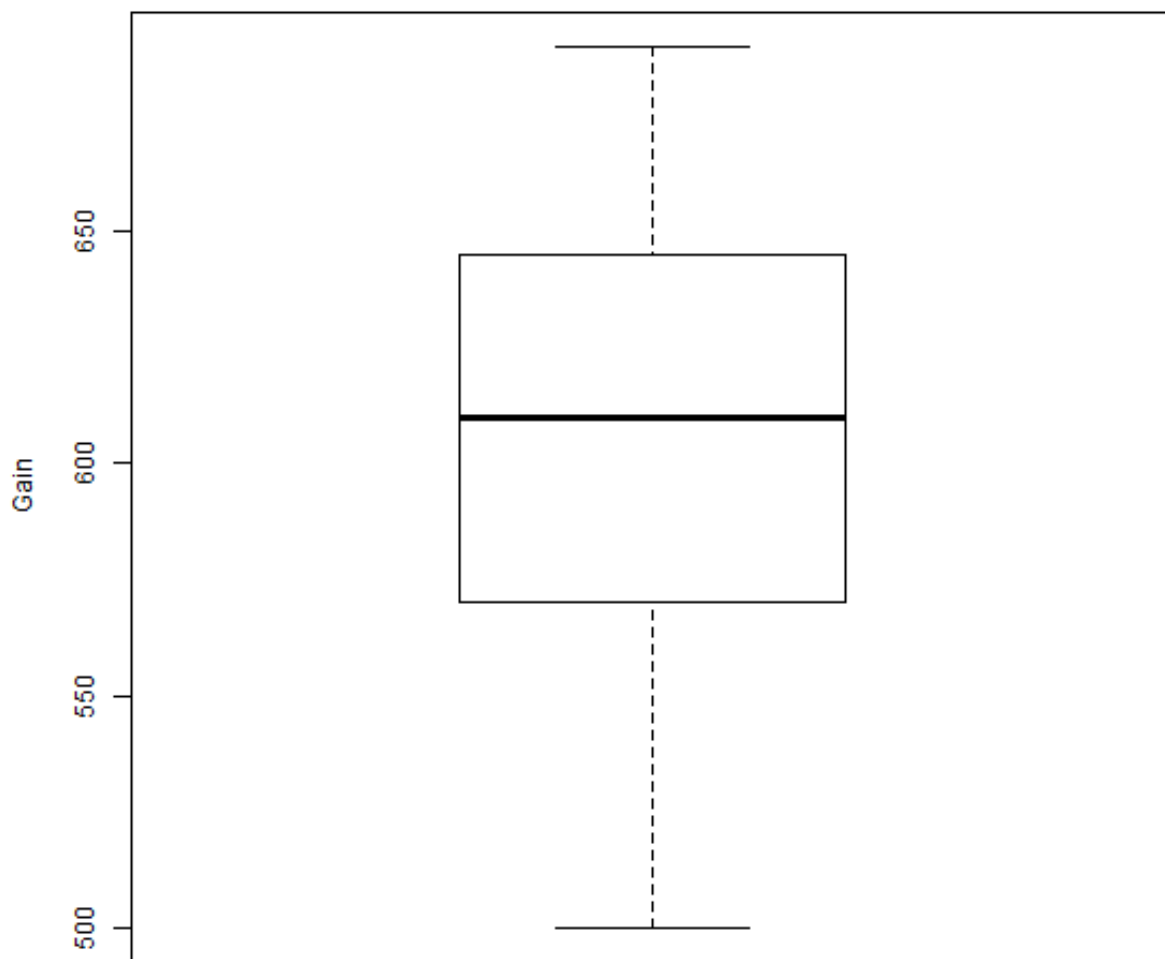
```
> numSummary(Premature_excel[, "Gain", drop=FALSE], statistics=c("mean",  
+   "IQR", "quantiles"), quantiles=c(0,.25,.5,.75,1))
```

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mean	sd	IQR	0%	25%	50%	75%	100%	n
606.5278	50.79116	72.5	500	570	610	642.5	690	36

```
> Boxplot( ~ Gain, data=Premature_excel, id.method="y")
```



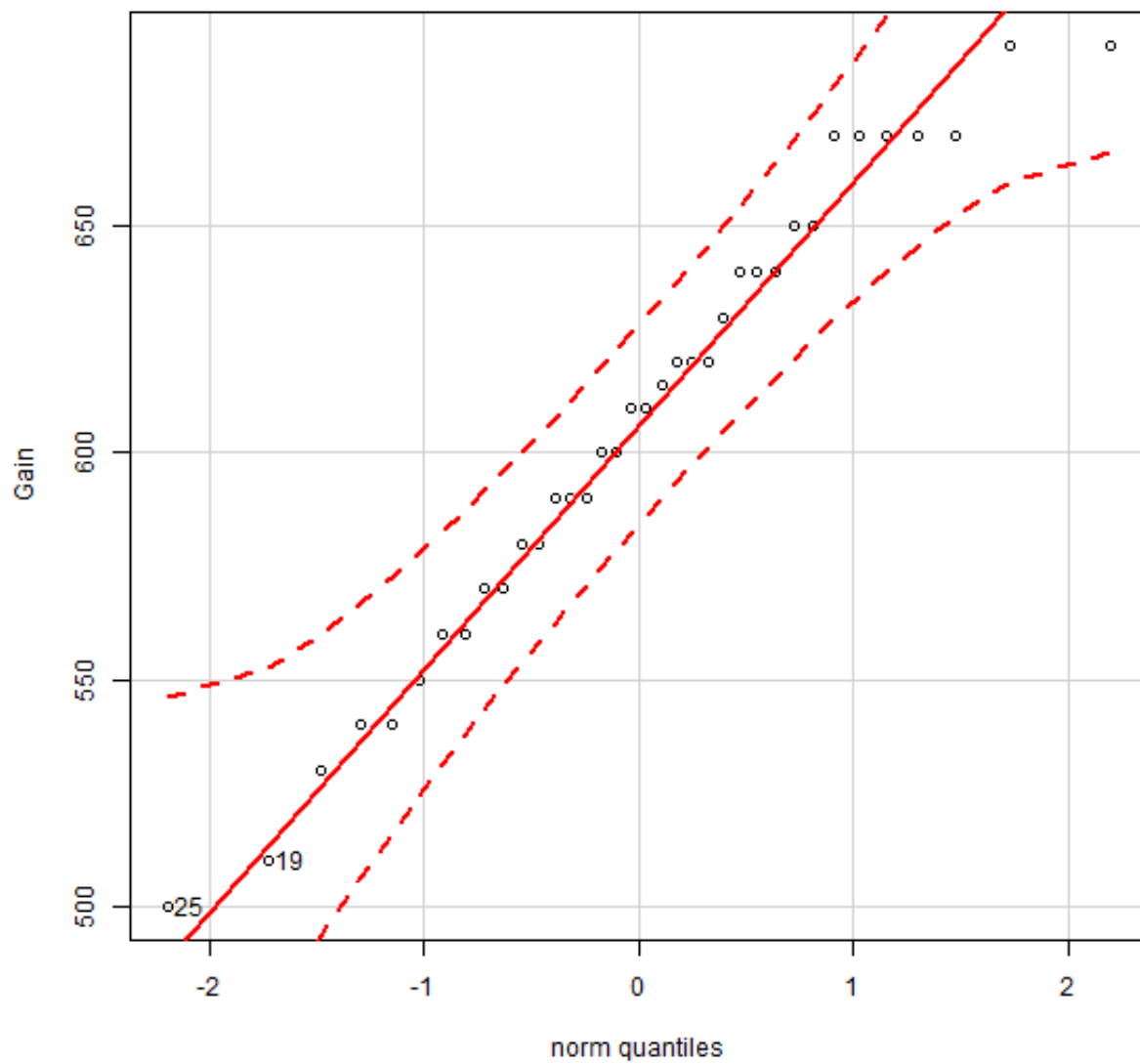
```
> normalityTest(~Gain, test="shapiro.test", data=Premature_excel)
```

Shapiro-Wilk normality test

data: Gain
W = 0.97198, p-value = 0.4821

```
> with(Premature_excel, qqPlot(Gain, dist="norm", id.method="y", id.r  
+   labels=rownames(Premature_excel)))
```





```
25 19
1 2
```

```
> with(Premature_excel, (t.test(Gain, alternative='two.sided', mu=650,
+   conf.level=.95)))
```



One Sample t-test

```
data: Gain
t = -5.1354, df = 35, p-value = 0.00001065
alternative hypothesis: true mean is not equal to 650
95 percent confidence interval:
 589.3425 623.7130
sample estimates:
mean of x
 606.5278
```

```
> with(Premature_excel, (t.test(Gain, alternative='less', mu=650.0,
+   conf.level=.95)))
```

One Sample t-test

```
data: Gain
t = -5.1354, df = 35, p-value = 0.000005326
alternative hypothesis: true mean is less than 650
95 percent confidence interval:
 -Inf 620.8303
sample estimates:
mean of x
 606.5278
```

```
> Premature_texte <- read.table("U:/Prematures.csv", header=TRUE, sep
+   na.strings="NA", dec="," , strip.white=TRUE)
```

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>

```
> Premature_texte <- read.table("U:/Prematures.csv", header=TRUE, sep
+   na.strings="NA", dec="," , strip.white=TRUE)
```

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>

```
> row.names(Premature_texte) <- as.character(Premature_texte$Bébé)
> Premature_texte$Bébé <- NULL
```