Lösung: arithmetischer Mittelwert

```
waiting = faithful$waiting

mean(waiting)


## [1] 70.89706
```

Lösung: Median

```
waiting = faithful$waiting

median(waiting)


## [1] 76
```

Lösung: Quartile

```
waiting = faithful$waiting
quantile(waiting)
```

```
##   0%  25%  50%  75% 100%
##   43   58   76   82   96
```

Lösung: Quantile

```
waiting = faithful$waiting
quantile(waiting, c(0.17, 0.43, 0.67, 0.85))
```

```
## 17% 43% 67% 85%
##  54  73  80  84
```

Lösung: Spannweite

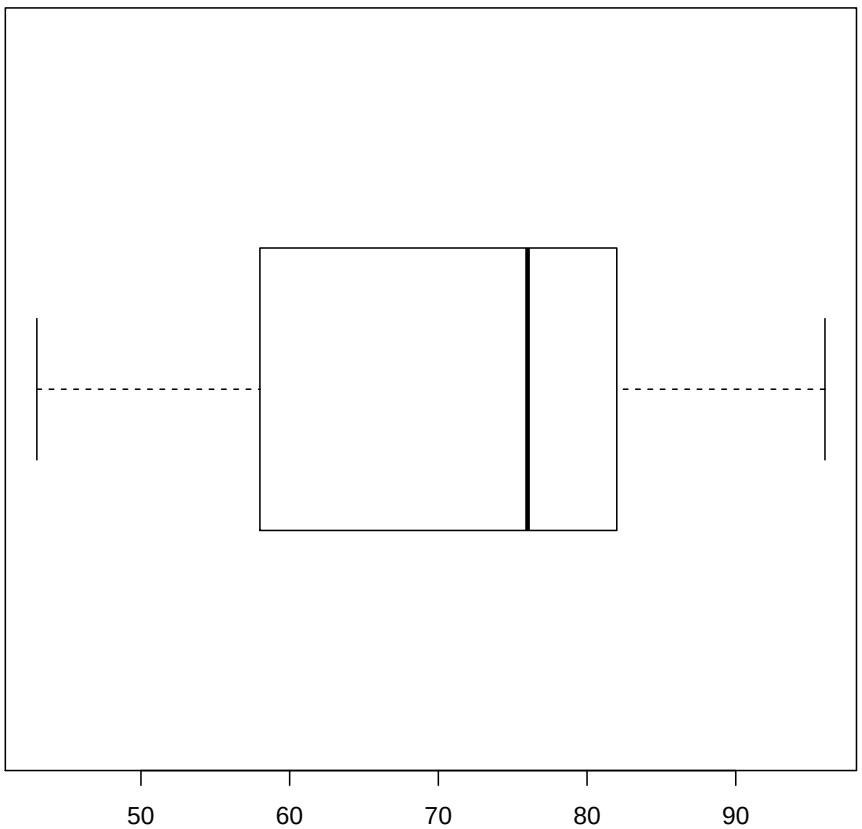
```
waiting = faithful$waiting

max(waiting)-min(waiting)


## [1] 53
```

Lösung: Interquartilsabstand

```
waiting = faithful$waiting

IQR(waiting)


## [1] 24
```

Lösung: Boxplot

```
waiting = faithful$waiting

boxplot(waiting, horizontal=TRUE)
```



Lösung: Varianz

```
waiting = faithful$waiting

# Stichprobenvarianz

var(waiting)


## [1] 184.8233


# Populationsvarianz

var(waiting)*(length(waiting)-1)/length(waiting)


## [1] 184.1438
```

Lösung: Standardabweichung

```
waiting = faithful$waiting

# Stichprobenvarianz

sd(waiting)


## [1] 13.59497


# Populationsvarianz

sqrt(var(waiting)*(length(waiting)-1)/length(waiting))


## [1] 13.56996
```

Lösung: Korrelationskoeffizient

```
fertility = swiss$Fertility
education = swiss$Education
cor(fertility, education)

## [1] -0.6637889
```

Es besteht somit ein gegenläufiger Zusammenhang zwischen der Fruchtbarkeitsrate und dem Ausbildungsniveau.

Übrigens: Ein CAS erhöht ebenfalls das Ausbildungsniveau...