Perception of Mathematics - KAI

```
## Loading required package: ggplot2
```

```
## Warning: package 'ggplot2' was built under R version 3.3.2
```

KAI Perception of Mathematics

Dear Svetlana, I need your help to understand the data from your course in order to finish the analysis for the evaluation report of the project. So, we have four sources of data on the perception of mathematics coded as follow:

- peold = Pre test traditional course
- poold = Post test traditional course
- pemo = Pre test modernized course
- pomo = Post test modernized course

The survey contains 27 questions in a likert scale from 1 to 6, I'll summary here only the first two questions, coded as follow:

- N1: I think solving math problems is quite boring
- N2: Solving math problems is fun

So, both questions have more or less the same meaning. It means that the average of answers should be aproximately the same. But it's not what we see:

```
## Peold
summary(KAIpeoldfirst[,8:9])
```

```
##        N1              N2
##  Min.   :1.000   Min.   :1.000
##  1st Qu.:3.000   1st Qu.:3.000
##  Median :4.000   Median :4.000
##  Mean   :4.032   Mean   :3.762
##  3rd Qu.:5.000   3rd Qu.:5.000
##  Max.   :6.000   Max.   :6.000
```

```
## Poold
summary(KAIpooldfirst[,8:9])
```

```
##        N1              N2
##  Min.   :2.000   Min.   :1.000
##  1st Qu.:3.500   1st Qu.:3.000
##  Median :5.000   Median :4.000
##  Mean   :4.651   Mean   :4.365
##  3rd Qu.:6.000   3rd Qu.:6.000
##  Max.   :6.000   Max.   :6.000
```

```
## Pemo
summary(KAIpemofirst[,8:9])
```

```
##        N1              N2
##  Min.   :2.000   Min.   :2.000
##  1st Qu.:4.000   1st Qu.:4.000
##  Median :5.000   Median :4.000
##  Mean   :4.524   Mean   :4.333
```

```
## 3rd Qu.:6.000   3rd Qu.:5.000
## Max.   :6.000   Max.   :6.000
```

```
## Pomo
summary(KAIpomofirst[,8:9])
```

```
##       N1               N2
## Min.   :2.000   Min.   :2.000
## 1st Qu.:5.000   1st Qu.:5.000
## Median :6.000   Median :6.000
## Mean   :5.476   Mean   :5.302
## 3rd Qu.:6.000   3rd Qu.:6.000
## Max.   :6.000   Max.   :6.000
```

```
qplot(KAIpeoldfirst$N1, type = "h")
```

```
## Warning: Ignoring unknown parameters: type
```

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```