

Mappeoppgave 3

```
# Mappeoppgave 3
```

```
library(httr)
library(readr)
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.1 --
```

```
## v ggplot2 3.3.5    v dplyr   1.0.7
## v tibble  3.1.6    v stringr 1.4.0
## v tidyr   1.1.4    v forcats 0.5.1
## v purrr   0.3.4
```

```
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
```

```
library(rvest)
```

```
##
## Attaching package: 'rvest'
```

```
## The following object is masked from 'package:readr':
##
##   guess_encoding
```

```
### Oppgave 1
```

```
# Laster ned dataen
```

```
url <- read_html("https://www.motor.no/aktuelt/motors-store-vintertest-av-Kjørelengde-pa-elbiler/217132")
Kjørelengde <- html_table(html_nodes(url, "table")[[1]], header = TRUE)
```

```
# Endrer navnet i tabellen for å lettere holde orden, samtidig som at vi rydder i tabellen
Motor <- subset(Kjørelengde, !STOPP == "x")
```

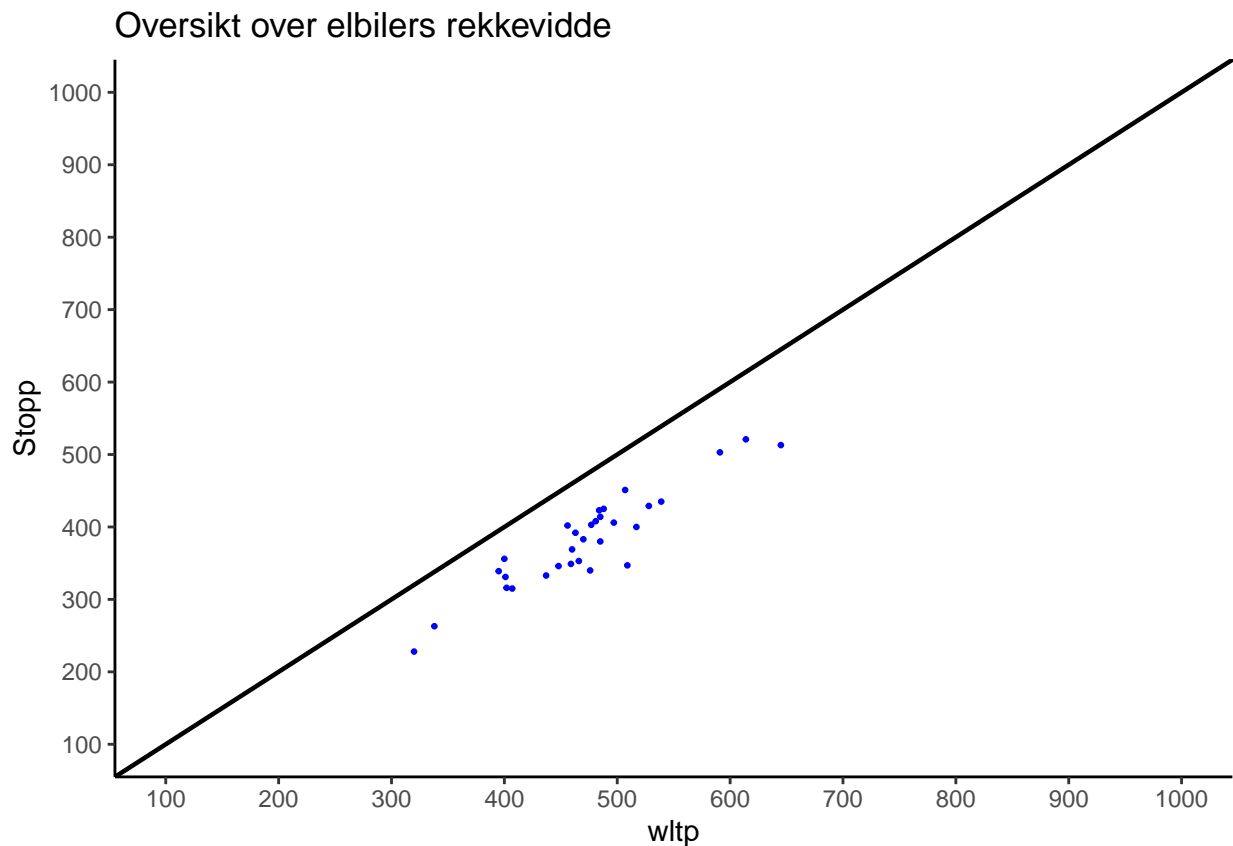
```
Motor <-
  Motor %>%
  rename(wltp = `WLTP-tall`, stopp = STOPP)
```

```
Motor$stopp <- gsub("km", "", as.character(Motor$stopp))
Motor$Avvik <- gsub("%", "", as.character(Motor$Avvik))
```

```
Motor$wltp <- substr(Motor$wltp, 1, 3)
```

```
Motor$wltp <- as.numeric(as.character(Motor$wltp))
Motor$stopp <- as.numeric(as.character(Motor$stopp))

Rekkevidde<- Motor %>%
  ggplot(aes(x=wltp, y=stopp)) +
  geom_point(size=0.5, alpha=1, color = "blue") +
  theme_classic() +
  scale_x_continuous(breaks = seq(100, 1000, 100), limits=c(100, 1000)) +
  scale_y_continuous(breaks = seq(100, 1000, 100), limits=c(100, 1000)) +
  geom_abline(intercept = 0, slope = 1, size = 0.8, color="black") +
  labs(title = "Oversikt over elbilers rekkevidde", x = "wltp", y = "Stopp")
Rekkevidde
```



Oppgave 2

```
lm(stopp ~ wltp, data = Motor)
```

```
##
## Call:
## lm(formula = stopp ~ wltp, data = Motor)
##
## Coefficients:
## (Intercept)      wltp
##    -26.6450     0.8671
```

Her kan man se at oppgitt kjørelengde ikke er det samme som faktisk kjørelengde.

```
Rekkevidde + geom_smooth(method='lm', col="blue", size=0.8)
```

```
## 'geom_smooth()' using formula 'y ~ x'
```

