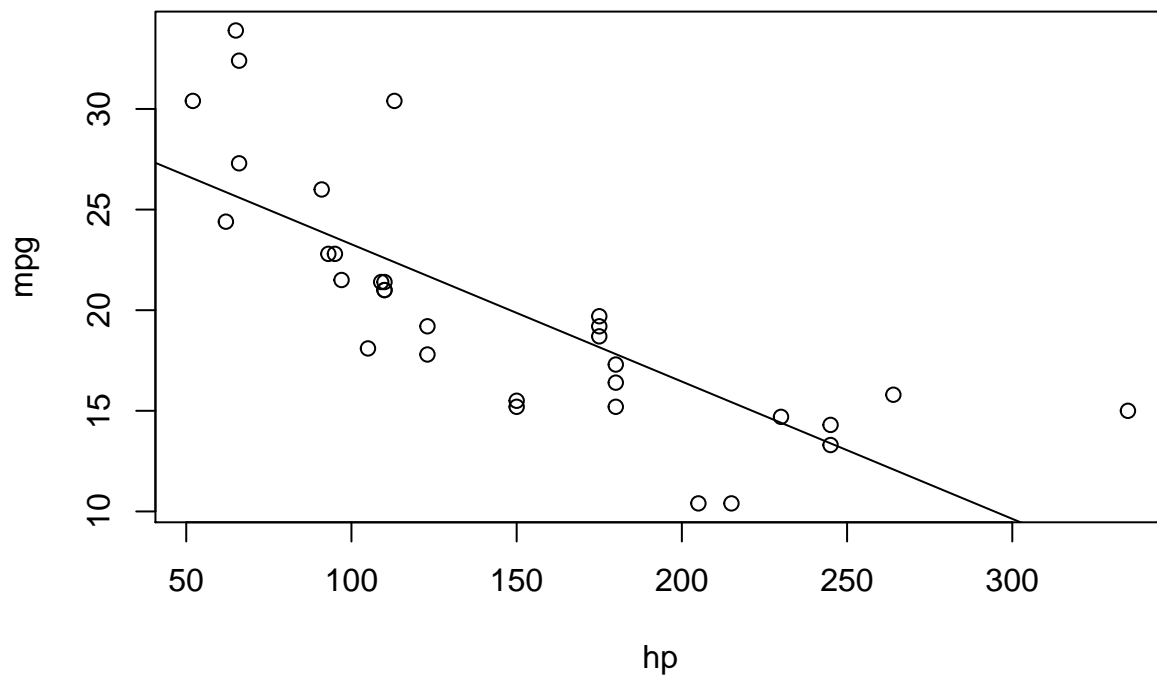# Example

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Here is some cool R stuff:

```r
mod1 <- lm(mpg~hp, data = mtcars)
with(mtcars, plot(mpg~hp))
abline(mod1)
```



```r
summary(mod1)
```

```
##
## Call:
## lm(formula = mpg ~ hp, data = mtcars)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -5.7121 -2.1122 -0.8854  1.5819  8.2360
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
```

```
## (Intercept) 30.09886     1.63392  18.421  < 2e-16 ***
## hp           -0.06823     0.01012  -6.742 1.79e-07 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 3.863 on 30 degrees of freedom
## Multiple R-squared:  0.6024, Adjusted R-squared:  0.5892
## F-statistic: 45.46 on 1 and 30 DF,  p-value: 1.788e-07
```

We can do equations too:

$$\sum_{i=1}^{k-1} a_{ij} a_{jk}$$

.

$$\frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$$