

# Untitled

```
x <- rnorm(10)
y <- x + rnorm(5, sd = 0.25)
model <- lm(y ~ x)
rsq <- summary(model)$r.squared
rsq <- signif(rsq, 4)
plot(x, y, main = "Hello \\LaTeX!", xlab = "$x$", ylab = "$y$",
      sub = "$\\mathcal{N}(\\mathbf{x}; \\mu, \\Sigma)$")
abline(model, col = "red")
mtext(paste("Linear model: $R^2=$", rsq, "$"), line = 0.5)
legend("bottomright", legend = paste0("$y = ",
                                       round(coef(model)[2], 3),
                                       "x +",
                                       round(coef(model)[1], 3),
                                       "$"
                                       ),
      bty = "n")
```

```
\begin{tikzpicture}[scale=.7]
\draw [fill=gray!30,very thick] (0,-1) rectangle (5,1);
\draw [very thick] (5, 0) -- (13,0);
\node [below] at (2,-1) {\large Hello};
\node [below, align=center] at (0,-1) {\large Two\\ lines};
\end{tikzpicture}
```

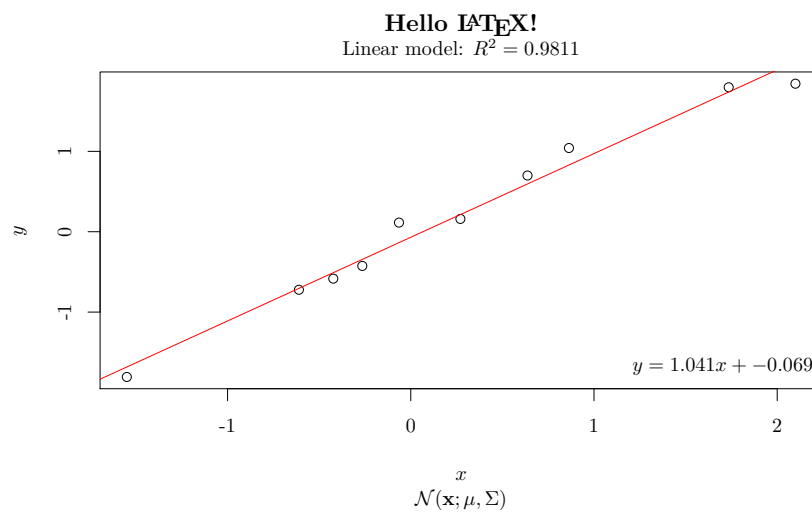


Figure 1: Linear

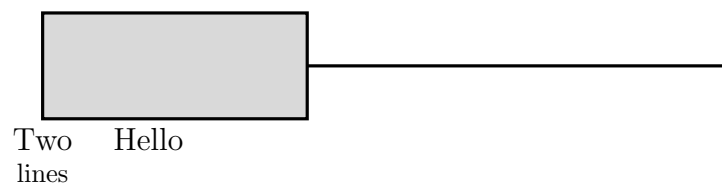


Figure 2: tikz