

An Sweave Demo

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This is a demo for using the **Sweave** command in R. To get started make a regular **L^AT_EX** file (like this one) but give it the suffix **.Rnw** instead of **.tex** and then turn it into a **L^AT_EX** file (**foo.tex**) with the (unix) command

```
R CMD Sweave foo.Rnw
```

Well, we can now include R in our document. Here's a simple example

```
> 2 + 2
```

```
[1] 4
```

Plots get a little more complicated. First we make something to plot (simulate regression data).

```
> n <- 50
> x <- seq(1, n)
> a.true <- 3
> b.true <- 1.5
> y.true <- a.true + b.true * x
> s.true <- 17.3
> y <- y.true + s.true * rnorm(n)
> out1 <- lm(y ~ x)
```

(for once we won't show the code chunk itself, look at **foo.Rnw** if you want to see what the actual code chunk was).

Figure 1 (p. 2) is produced by the following code

```
> plot(x, y)
> abline(out1)
```

Note that **x**, **y**, and **out1** are remembered from the preceding code chunk. We don't have to regenerate them. All code chunks are part of one R "session".

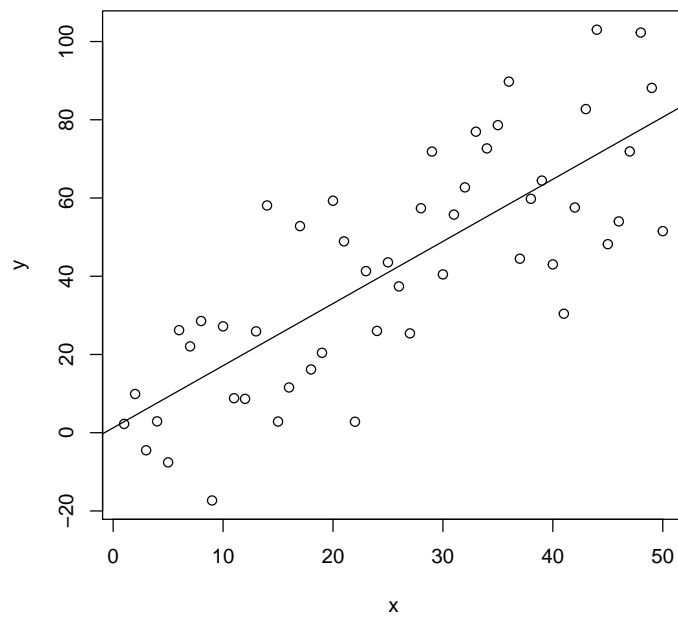


Figure 1: Scatter Plot with Regression Line