

Q1: What is $1 + 1$?

$$1 + 1 = 2$$

Or in R...

```
## R code to compute 1+1 (the complicated way...)
x = 1
y = 1
addtogether = function(a, b) {
  return(a + b)
}
addtogether(x, y)

## [1] 2

1 + 1 # just to check ;-)

## [1] 2
```

Q2:

a. How about $1 + 2$?

$$1 + 2 = \mathbf{3}$$

b. How about $1 * 2$?

$$1 * 2 = \mathbf{2} \quad \leftarrow \text{This is obvious!}$$

Q3: Use standard, and robust regression methods to fit a linear model to the data:

x	17	6	5	3	9	10	20	14	1	2	11	15	8	4
y	13.10	6.30	2.74	5.13	4.99	7.86	19.20	18.30	1.59	2.11	9.83	16.30	2.20	5.02

```
## R code to do the regression
library(robustbase) # load for lmrob(),
library(ggplot2)    # for qplot()
x=c(17, 6, 5, 3, 9, 10, 20, 14, 1, 2, 11, 15, 8, 4)
y=c(4.9, 6.3, 2.74, 5.13, 4.99, 7.86, 19.2, 18.3, 1.59, 2.11, 9.83, 16.3, 2.2, 5.02)
mydata=data.frame(x,y)
fit=lm(y~x,data=mydata)
fitrob=lmrob(y~x,data=mydata)
plot(mydata,pch=19)
abline(fit,lty=1)
abline(fitrob,lty=2)
qplot(x,y,data=mydata) + geom_smooth(method="loess")
```

