

Solutions to Exercises from Chapter 7

1.1- The `windows()` command is used to open a graphical device. The `dev.off()` command closes the window specified by *device-number* (if no device number is given, the active window is closed).

1.2- `savePlot(filename="myplot", type="pdf", device=dev.cur())`

1.3- The instruction `par(mfrow=c(3,2))` opens a graphical window where plots are successively displayed in a “matrix” with 3 rows and 2 columns (filled by rows).

1.4- Function `layout()` enables one to obtain a more evolved splitting of the graphical window than using function `par()`.

1.5- `points()`

1.6- `type="l"`

1.7- `abline()`

1.8- Function `curve()` enables one to draw any function of x .

1.9- The argument `col`.

1.10- Function `image()`. The instruction

```
image(as.matrix(rev(as.data.frame(t(X)))))
```

enables one to display coherently the image whose values are given in matrix X .

1.11- Function `text()`.

1.12- Function `identify()` or `locator()`.

1.13- The instruction `par(ask=TRUE)` outputs a message asking the user to press the Enter key before each new plot is drawn.

1.14- `lty`

1.15- `pch`

```
1.16. curve(cos(x),xlim=c(-10,10),xlab="X axis",col="blue",
  main="Sinus and cosinus curves",ylim=c(-2,2),ylab="sin(x)")
  curve(sin(x),add=TRUE)
  abline(h=0,col="red")
  abline(v=0,col="red")
  arrows(3*pi/2,1,pi/2,1)
  text((3*pi)/2,1,expression(hat(beta)[1]))
```