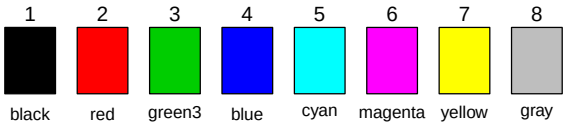
Plotting

```
## Basic plots
plot(x,y); hist(x); barplot(table(x))
boxplot(x); stem(x); pie(x)
pairs(matrix) #Scatterplots
coplot()# conditional plot
stripplot()# strip plot
qqplot() # quantile-quantile plot
qqnorm(); qqline()# fit normal distribution
## Standard plotting arguments
xlab = "x-axis label" #See also ylab
xlim = c(0, 10)#x axis range
main = "Main title"
sub = "sub title"
```

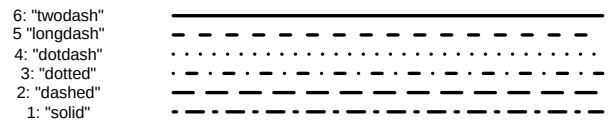
Graphical parameters

These are set globally with `par(...)`; many can be passed as parameters to plotting commands.

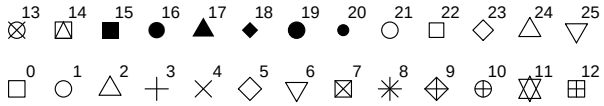
- `adj` controls text justification: 0 left-justified, 0.5 centred, 1 right-justified.
- `bg` specifies the background colour, e.g. `bg="red"` or `bg="blue"`. See `colors()` for a list of the 657 available colours.
- `bty` controls the type of box drawn around the plot, allowed values are: `"o"`, `"l"`, `"7"`, `"c"`, `"u"` or `"]"` (the box looks like the corresponding character). If `bty="n"` the box is not drawn
- `cex` a value controlling the size of texts and symbols with respect to the default. Related options are: `cex.axis`, `cex.lab`, `cex.main` and `cex.sub`.
- `col` controls the color of symbols and lines. Use color names: `"red"`, `"blue"` (see `colors()` or numbers.



  See also `rgb()`, `hsv()`, `gray()`, and `rainbow()`; as for `cex` there are: `col.axis`, `col.lab`, `col.main` and `col.sub`
- `font`: an integer which controls the style of text (1: normal, 2: italics, 3:bold, 4: bold italics); as for `cex` there are: `font.axis`, `font.lab`, `font.main` and `font.sub`
- `las`: an integer which controls the orientation of the axis labels (0: parallel to the axes, 1: horizontal, 2: perpendicular to the axes, 3: vertical)
- `lty` controls the type of lines. The value can be an integer or string



  Alternatively, a string of up to eight characters (between "0" and "9") which specifies alternatively the length, in points or pixels, of the drawn elements and the blanks, for example lty="44" will have the same effect than `lty=2`
- `lwd` a numeric which controls the width of lines, default 1 mar a vector of 4 numeric values which control the space between the axes and the border of the graph of the form c(bottom, left, top, right), the default values are c(5.1, 4.1, 4.1, 2.1)
- `mfcol` a vector of the form c(nr,nc) which partitions the graphic window as a matrix of nr lines and nc columns, the plots are then drawn in columns
- `mfrow` as `mfcol`, but the plots are drawn by row
- `pch` controls the type of symbol, either an integer between 1 and 25, or any single character within ""



- `ps` an integer which controls the size in points of texts and symbols
- pty a character which specifies the type of the plotting region, "s": square, "m": maximal
- `tck` a value which specifies the length of tick-marks on the axes as a fraction of the smallest of the width or height of the plot; if tck=1 a grid is drawn
- `tcl` a value which specifies the length of tick-marks on the axes as a fraction of the height of a line of text (by default tcl=-0.5)
- `xaxt` if `xaxt="n"` the x-axis is set but not drawn (useful in conjonction with axis(side=1, ...))
- `yaxt` if yaxt="n" the y-axis is set but not drawn (useful in conjonction with axis(side=2, ...))