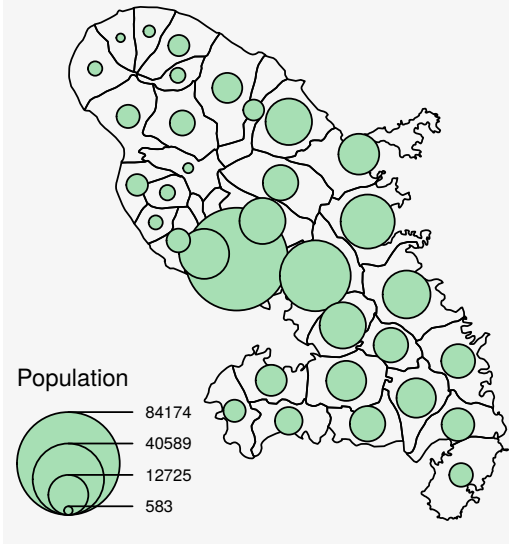


# Thematic maps with cartography : : CHEAT SHEET

Use cartography with spatial objects from sf or sp packages to create thematic maps.

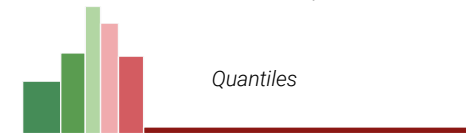
```
library(cartography)
library(sf)
mtq <- st_read("martinique.shp")
plot(st_geometry(mtg))
propSymbolsLayer(x = mtq, var = "P13_POP",
  legend.title.txt = "Population",
  col = "#a7dfb4")
```



## Classification

Available methods are: quantile, equal, q6, fisher-jenks, mean-sd, sd, geometric progression...

```
bks1 <- getBreaks(v = var, nclass = 6,
  method = "quantile")
bks2 <- getBreaks(v = var, nclass = 6,
  method = "fisher-jenks")
pal <- carto.pal("green.pal", 3, "wine.pal", 3)
hist(var, breaks = bks1, col = pal)
```

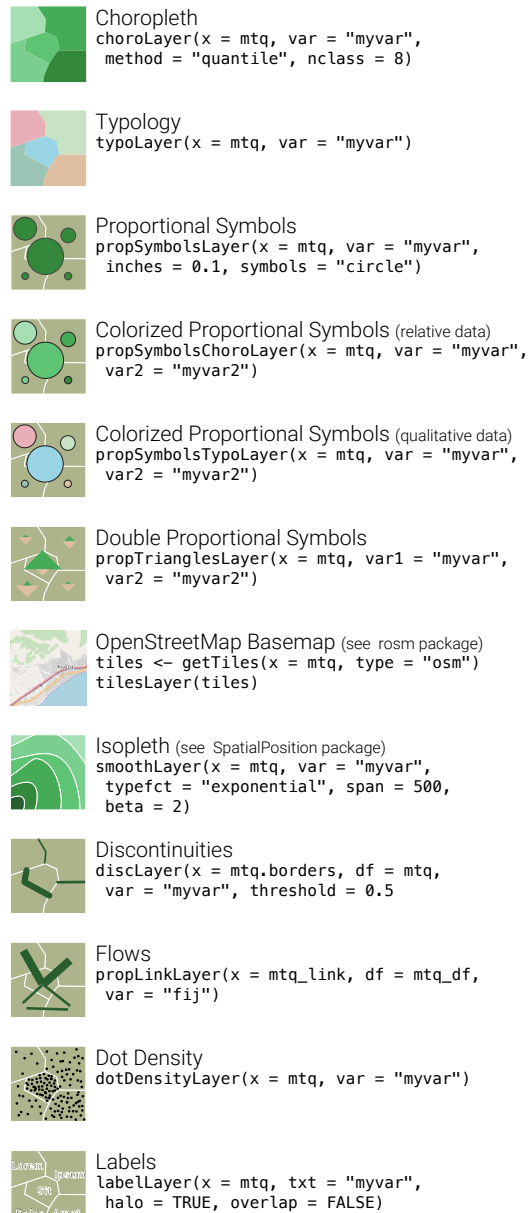


```
hist(var, breaks = bks2, col = pal)
```



## Symbology

In most functions the x argument should be an sf object. sp objects are handled through spdf and df arguments.



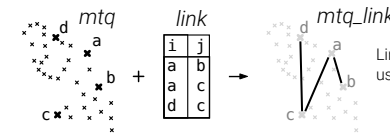
## Transformations

**Polygons to Grid**  
mtq\_grid <- getGridLayer(x = mtq, cellsize = 3.6e+07, type = "hexagonal", var = "myvar")



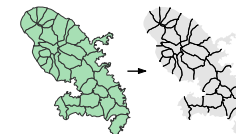
Grids layers can be used by choroLayer() or propSymbolsLayer().

**Points to Links**  
mtq\_link <- getLinkLayer(x = mtq, df = link)



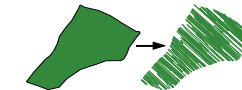
Links layers can be used by \*LinkLayer().

**Polygons to Borders**  
mtq\_border <- getBorders(x = mtq)



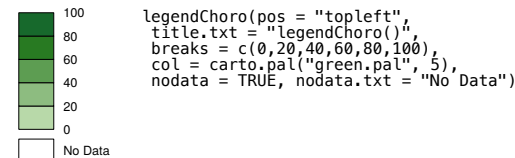
Borders layers can be used by disclayer() function

**Polygons to Pencil Lines**  
mtq\_pen <- getPencilLayer(x = mtq)

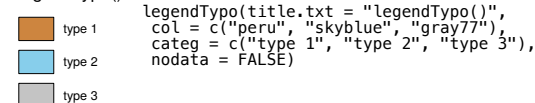


## Legends

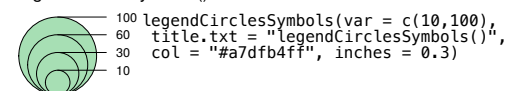
legendChoro()



legendTypo()



legendCirclesSymbols()



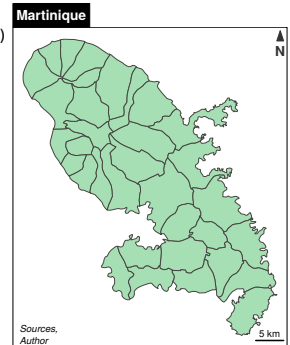
See also legendSquaresSymbols(), legendBarsSymbols(), legendGradLines(), legendPropLines() and legendPropTriangles().

## Map Layout

**North Arrow:**  
north(pos = "topright")

**Scale Bar:**  
barscale(size = 5)

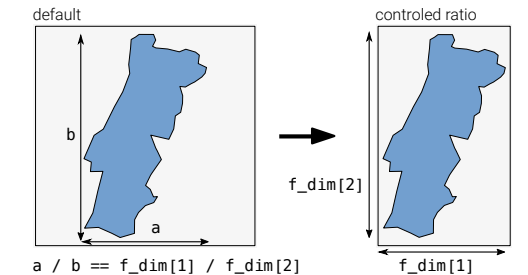
**Full Layout:**  
layoutLayer(title = "Martinique", tabtitle = TRUE, frame = TRUE, author = "Author", sources = "Sources", north = TRUE, scale = 5)



**Figure Dimensions**

Get figure dimensions based on the dimension ratio of a spatial object, figure margins and output resolution.

```
f_dim <- getFigDim(x = sf_obj, width = 500,
  mar = c(0,0,0,0))
png("fig.png", width = 500, height = f_dim[2])
par(mar = c(0,0,0,0))
plot(sf_obj, col = "#729fcf")
dev.off()
```



## Color Palettes

carto.pal(pal1 = "blue.pal", n1 = 5, pal2 = sand.pal, n2 = 3)

