

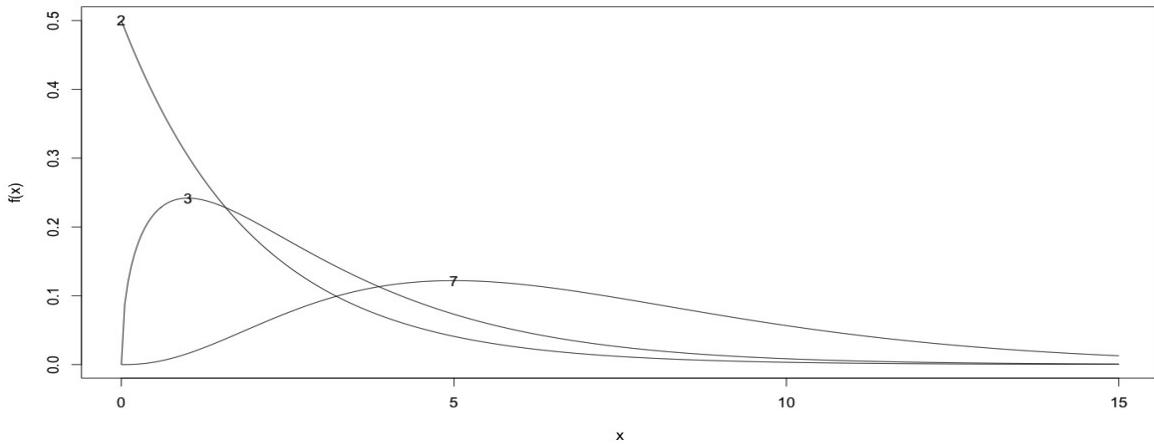
## Função densidade – distribuições $\chi^2$ e $t$ de Student

```

## Distribuição qui-quadrado
# Graus de liberdade
gl <- c(2, 3, 7)

curve(dchisq(x, df = gl[1]), 0, 15, xlab = "x", ylab = "f(x)", n = 301)
for (i in gl[-1]) {
  curve(dchisq(x, df = i), add = TRUE, n = 301)
}
text(gl - 2, dchisq(gl - 2, df = gl), gl) # moda (gl >= 2)

```

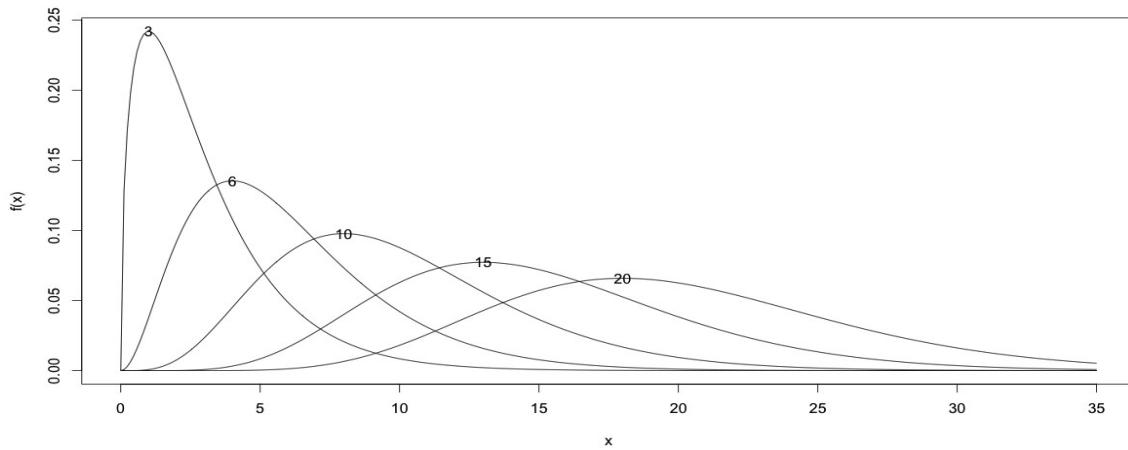


```

# Graus de liberdade
gl <- c(3, 6, 10, 15, 20)

curve(dchisq(x, df = gl[1]), 0, 35, xlab = "x", ylab = "f(x)", n = 301)
for (i in gl[-1]) {
  curve(dchisq(x, df = i), add = TRUE, n = 301)
}
text(gl - 2, dchisq(gl - 2, df = gl), gl) # moda (gl >= 2)

```



```

# Distribuição t de Student
# Graus de liberdade
gl <- c(1, 2, 5, 30, 50)
cores <- rainbow(length(gl))

curve(dnorm(x), -6, 6, xlab = "x", ylab = "f(x)", n = 301, lty = 2)
for (i in gl) {
  curve(dt(x, df = i), add = TRUE, n = 301, col = cores[which(gl == i)])
}
legend("topleft", as.character(gl), lty = 1, col = cores, bty = "n",
       ncol = 2)

```

