

Pregunta 2

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R Markdown

Inciso a)

```
b0 <- NULL
b1 <- NULL

b0 <- 1
b1 <- 1
func1a <- function(x){1 + b0 - b1 + b1*x}

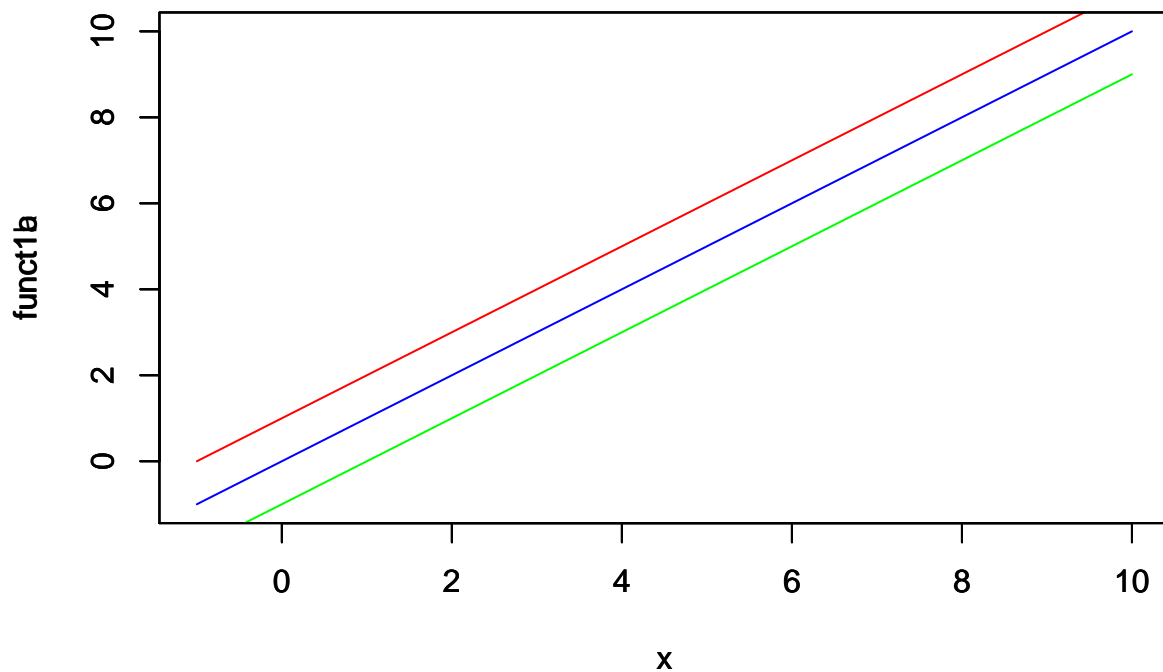
plot(func1a,from=-1,to=10,ylim=c(-1,10),col="red")
par(new=TRUE)

b0 <- 0
b1 <- 1
func1b <- function(x){1+b0-b1 + b1*x}

plot(func1b,from=-1,to=10,ylim=c(-1,10),col="blue")
par(new=TRUE)

b0 <- -1
b1 <- 1
func1c <- function(x){1+b0-b1 + b1*x}

plot(func1c,from=-1,to=10,ylim=c(-1,10),col="green")
```



```
par(new=TRUE)
```

Ahora variamos valores de β_1 y dejamos fijo a β_0

```
b0 <- NULL
b1 <- NULL

b0 <- 1
b1 <- 1
func1a <- function(x){1 + b0 - b1 + b1*x}

plot(func1a,from=-1,to=10,ylim=c(-6,10),col="red")
par(new=TRUE)

b0 <- 1
b1 <- 0
func1b <- function(x){1+b0-b1 + b1*x}

plot(func1b,from=-1,to=10,ylim=c(-6,10),col="blue")
par(new=TRUE)

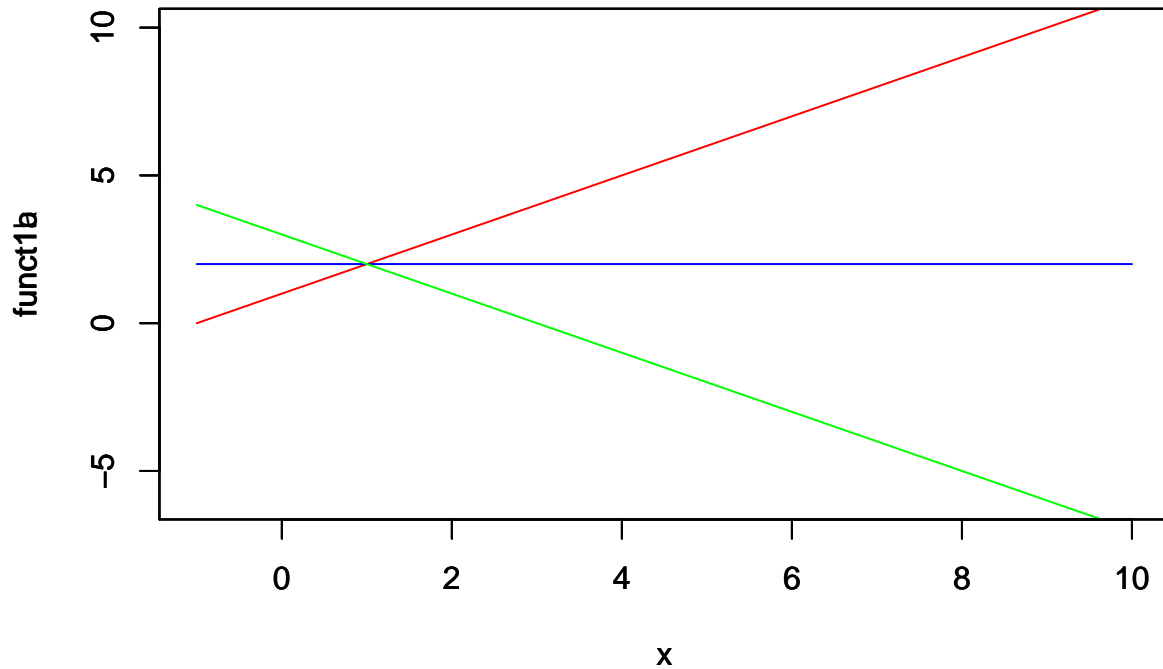
b0 <- 1
b1 <- -1
```

```

funct1c <- function(x){1+b0-b1 + b1*x}

plot(funct1c,from=-1,to=10,ylim=c(-6,10),col="green")

```



```

par(new=TRUE)

```

Inciso b)

```

b0 <- 1
b1 <- 1
funct2a <- function(x) {exp(b0) * x^(b1)}
plot(funct2a, from = 0, to = 2, ylim=c(0,8), col="red")
par(new=TRUE)

b0 <- -1
b1 <- 1
funct2b <- function(x){exp(b0)*x^{b1}}
plot(funct2b, from = 0, to = 2, ylim=c(0,8), col = "blue")
par(new=TRUE)

b0 <- 1
b1 <- 2
funct2c <- function(x){exp(b0)*x^{b1}}
plot(funct2c, from = 0, to = 2, ylim=c(0,8), col = "green")

```

```

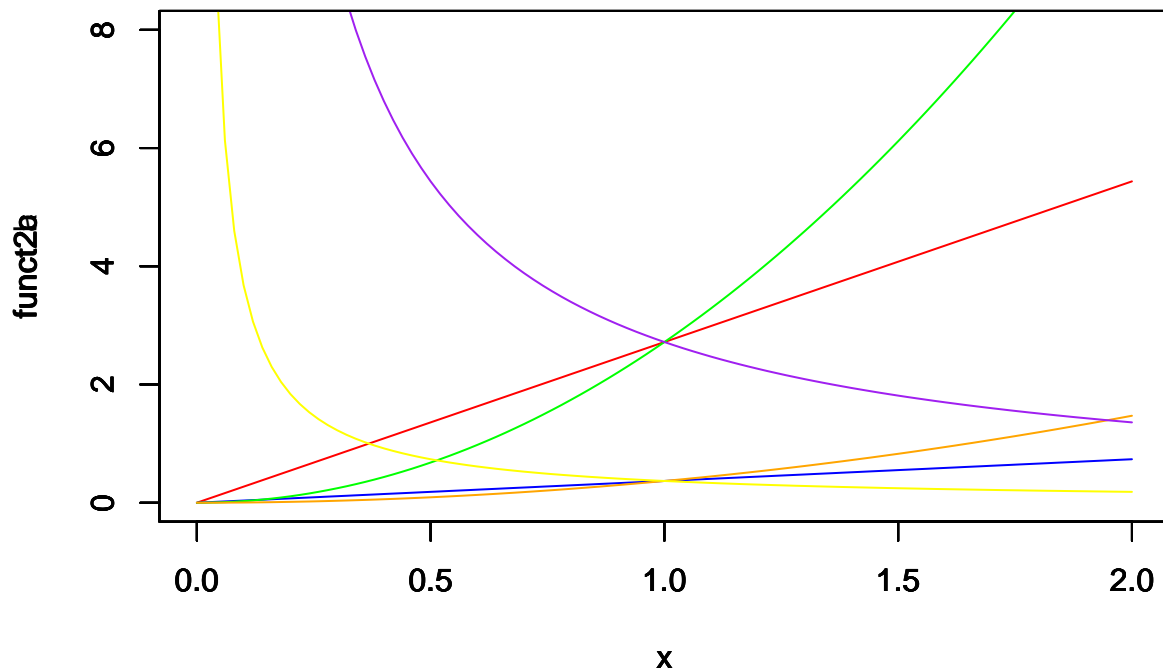
par(new=TRUE)

b0 <- -1
b1 <- 2
funct2d <- function(x){exp(b0)*x^{b1}}
plot(funct2c, from = 0, to = 2, ylim=c(0,8), col = "orange")
par(new=TRUE)

b0 <- 1
b1 <- -1
funct2e <- function(x){exp(b0)*x^{b1}}
plot(funct2c, from = 0, to = 2, ylim=c(0,8), col = "purple")
par(new=TRUE)

b0 <- -1
b1 <- -1
funct2f <- function(x){exp(b0)*x^{b1}}
plot(funct2c, from = 0, to = 2, ylim=c(0,8), col = "yellow")

```



```

par(new=TRUE)

Inciso c)
b0 <- 1
b1 <- 1
funct3a <- function(x) {1+b0+b1 *log(x)}
plot(funct3a, from = 0, to = 2, ylim=c(-4,4), col="red")

```

```

par(new=TRUE)

b0 <- -1
b1 <- 1
funct3b <- function(x){1+b0+b1 *log(x)}
plot(funct3b, from = 0, to = 2, ylim=c(-4,4), col = "blue")
par(new=TRUE)

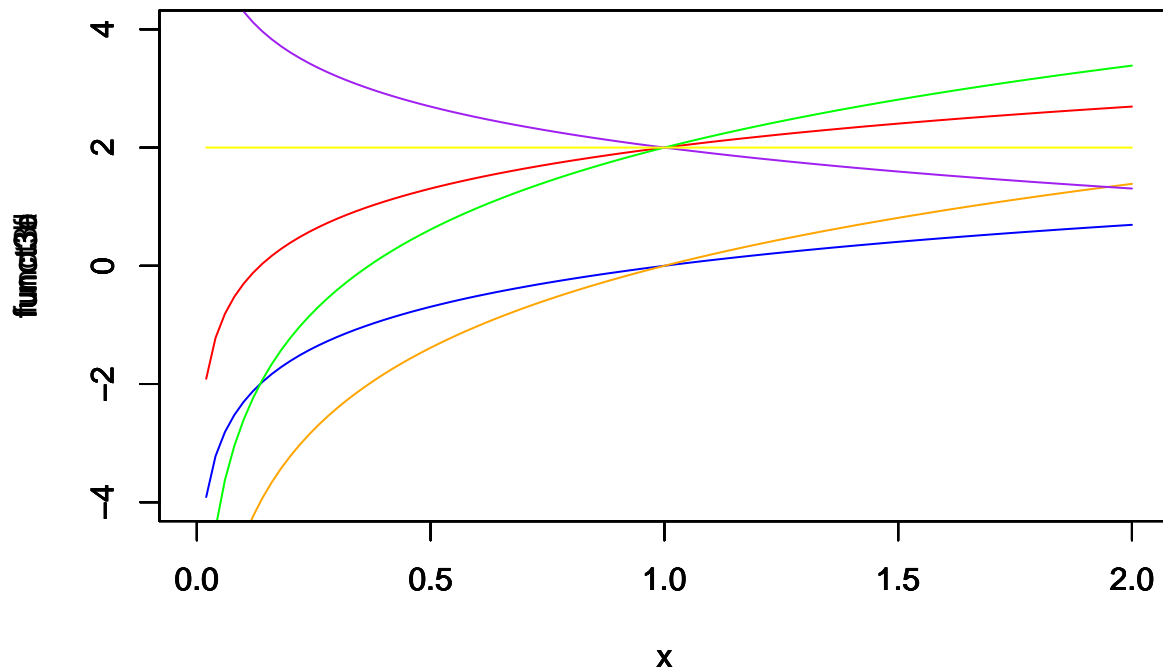
b0 <- 1
b1 <- 2
funct3c <- function(x){1+b0+b1 *log(x)}
plot(funct3c, from = 0, to = 2, ylim=c(-4,4), col = "green")
par(new=TRUE)

b0 <- -1
b1 <- 2
funct3d <- function(x){1+b0+b1 *log(x)}
plot(funct3d, from = 0, to = 2, ylim=c(-4,4), col = "orange")
par(new=TRUE)

b0 <- 1
b1 <- -1
funct3e <- function(x){1+b0+b1 *log(x)}
plot(funct3e, from = 0, to = 2, ylim=c(-4,4), col = "purple")
par(new=TRUE)

b0 <- 1
b1 <- 0
funct3f <- function(x){1+b0+b1 *log(x)}
plot(funct3f, from = 0, to = 2, ylim=c(-4,4), col = "yellow")

```



```
par(new=TRUE)
```

Inciso d)

```
b0 <- 1
b1 <- 1
funct4a <- function(x) {1+b0-b1 - (b1/x)}
plot(funct4a, from = 0, to = 2, ylim=c(-20,10), col="red")
par(new=TRUE)
```

```
b0 <- -1
b1 <- 1
funct4b <- function(x){1+b0-b1 - (b1/x)}
plot(funct4b, from = 0, to = 2, ylim=c(-20,10), col = "blue")
par(new=TRUE)
```

```
b0 <- 1
b1 <- 2
funct4c <- function(x){1+b0-b1 - (b1/x)}
plot(funct4c, from = 0, to = 2, ylim=c(-20,10), col = "green")
par(new=TRUE)
```

```
b0 <- -1
```

```

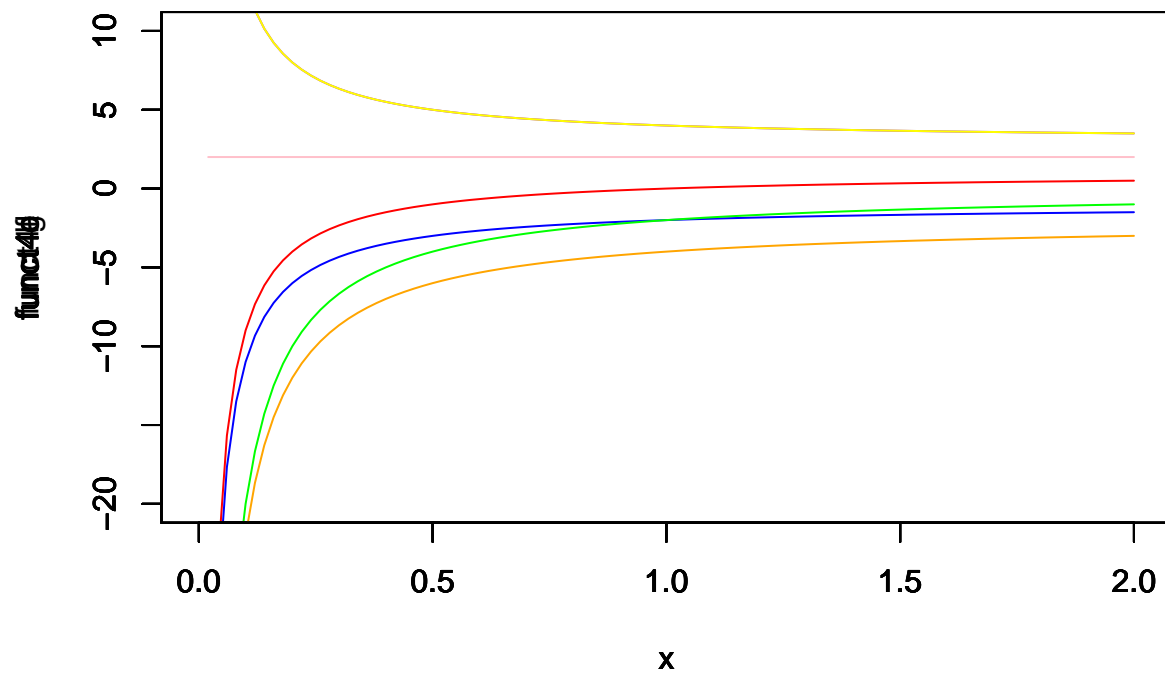
b1 <- 2
funct4d <- function(x){1+b0-b1 - (b1/x)}
plot(funct4d, from = 0, to = 2, ylim=c(-20,10), col = "orange")
par(new=TRUE)

b0 <- 1
b1 <- -1
funct4e <- function(x){1+b0-b1 - (b1/x)}
plot(funct4e, from = 0, to = 2, ylim=c(-20,10), col = "purple")
par(new=TRUE)

b0 <- 1
b1 <- -1
funct4f <- function(x){1+b0-b1 - (b1/x)}
plot(funct4f, from = 0, to = 2, ylim=c(-20,10), col = "yellow")
par(new=TRUE)

b0 <- 1
b1 <- 0
funct4g <- function(x){1+b0-b1 - (b1/x)}
plot(funct4g, from = 0, to = 2, ylim=c(-20,10), col = "pink")

```



```

par(new=TRUE)

```

Inciso e)

```

b0 <- 1
b1 <- 1
funct5a <- function(x) {exp(b0-b1) * exp(b1*x)}
plot(funct5a, from = 0, to = 2, ylim=c(0,8), col="red")
par(new=TRUE)

b0 <- -1
b1 <- 1
funct5b <- function(x){exp(b0-b1) * exp(b1*x)}
plot(funct5b, from = 0, to = 2, ylim=c(0,8), col = "blue")
par(new=TRUE)

b0 <- 1
b1 <- 2
funct5c <- function(x){exp(b0-b1) * exp(b1*x)}
plot(funct5c, from = 0, to = 2, ylim=c(0,8), col = "green")
par(new=TRUE)

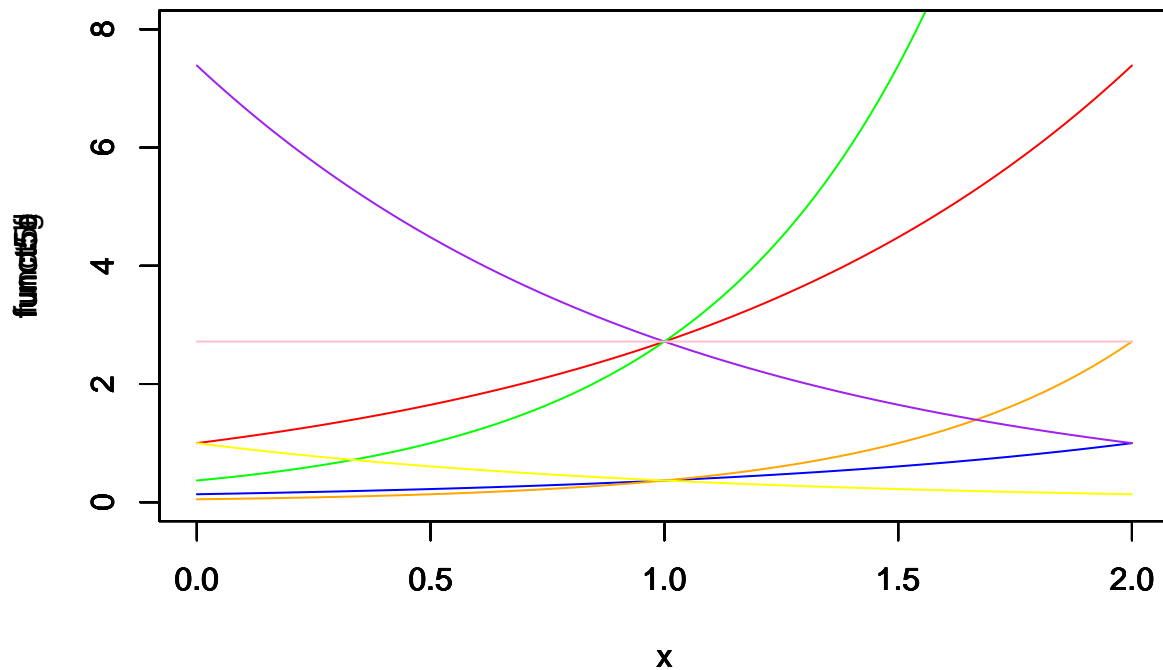
b0 <- -1
b1 <- 2
funct5d <- function(x){exp(b0-b1) * exp(b1*x)}
plot(funct5d, from = 0, to = 2, ylim=c(0,8), col = "orange")
par(new=TRUE)

b0 <- 1
b1 <- -1
funct5e <- function(x){exp(b0-b1) * exp(b1*x)}
plot(funct5e, from = 0, to = 2, ylim=c(0,8), col = "purple")
par(new=TRUE)

b0 <- -1
b1 <- -1
funct5f <- function(x){exp(b0-b1) * exp(b1*x)}
plot(funct5f, from = 0, to = 2, ylim=c(0,8), col = "yellow")
par(new=TRUE)

b0 <- 1
b1 <- 0
funct5g <- function(x){exp(b0-b1) * exp(b1*x)}
plot(funct5g, from = 0, to = 2, ylim=c(0,8), col = "pink")

```

```
par(new=TRUE)
```

Inciso f)

```
b0 <- 0.5
b1 <- 1
funct6a <- function(x) {exp(b0-b1) * exp(-b1/x)}
plot(funct6a, from = 0, to = 2, ylim=c(0,10), col="red")
par(new=TRUE)
```

```
b0 <- -0.5
b1 <- 1
funct6b <- function(x){exp(b0-b1) * exp(-b1/x)}
plot(funct6b, from = 0, to = 2, ylim=c(0,10), col = "blue")
par(new=TRUE)
```

```
b0 <- 0.5
b1 <- -1
funct6c <- function(x){exp(b0-b1) * exp(-b1/x)}
plot(funct6c, from = 0, to = 2, ylim=c(0,10), col = "green")
par(new=TRUE)
```

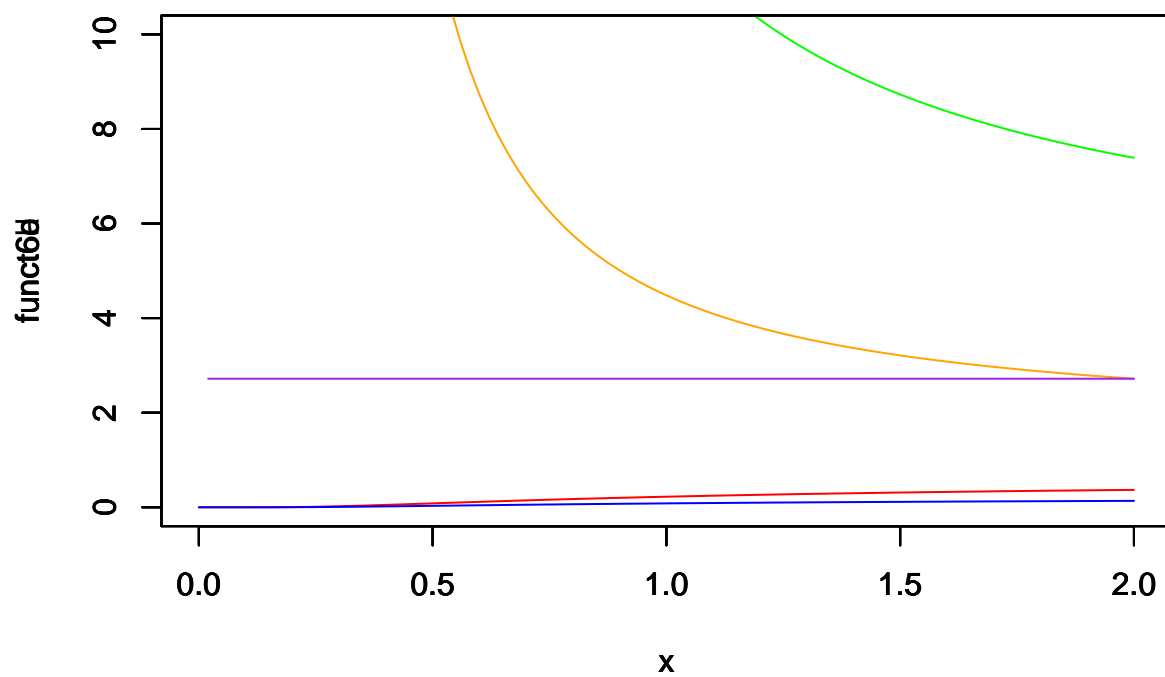
```
b0 <- -0.5
```

```

b1 <- -1
funct6d <- function(x){exp(b0-b1) * exp(-b1/x)}
plot(funct6d, from = 0, to = 2, ylim=c(0,10), col = "orange")
par(new=TRUE)

b0 <- 1
b1 <- 0
funct6e <- function(x){exp(b0-b1) * exp(-b1/x)}
plot(funct6e, from = 0, to = 2, ylim=c(0,10), col = "purple")

```



```

par(new=TRUE)

```