Tarea 5-Introducción a la Representación Gráfica

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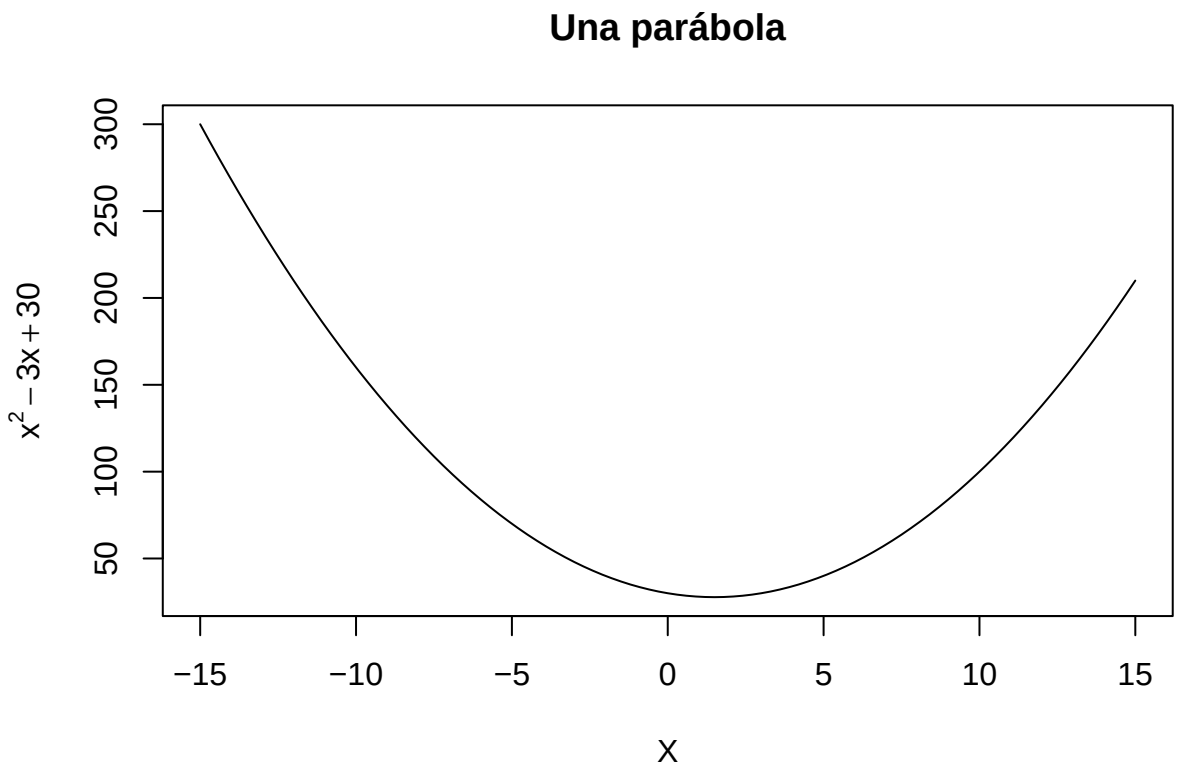
Pregunta 1

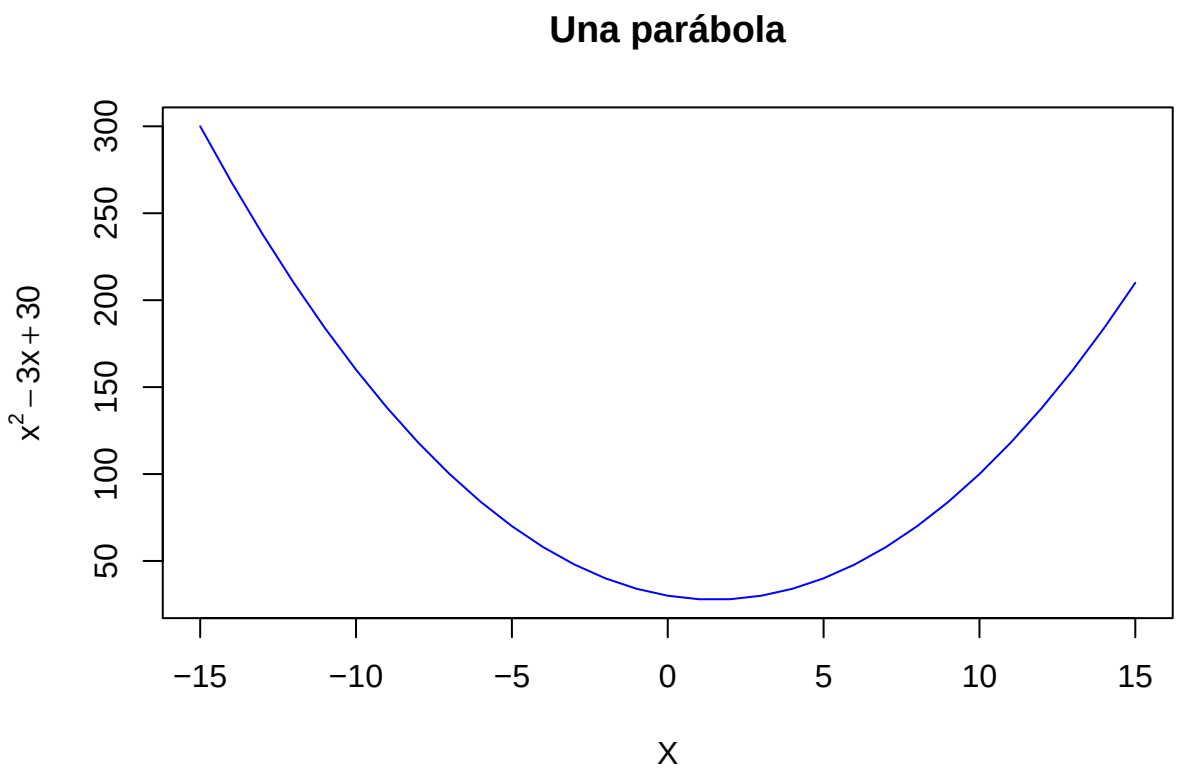
```
f <- function(x){x^2-3*x+30}
curve(f, -15, 15,
      main = "Una parábola",
      xlab = expression(X),
      ylab = expression(y = x^2-3*x+30)
      )
```



Pregunta 2

Incorrecto, para que la variable $x \in [-15, 15]$ se debe definir de la siguiente forma:

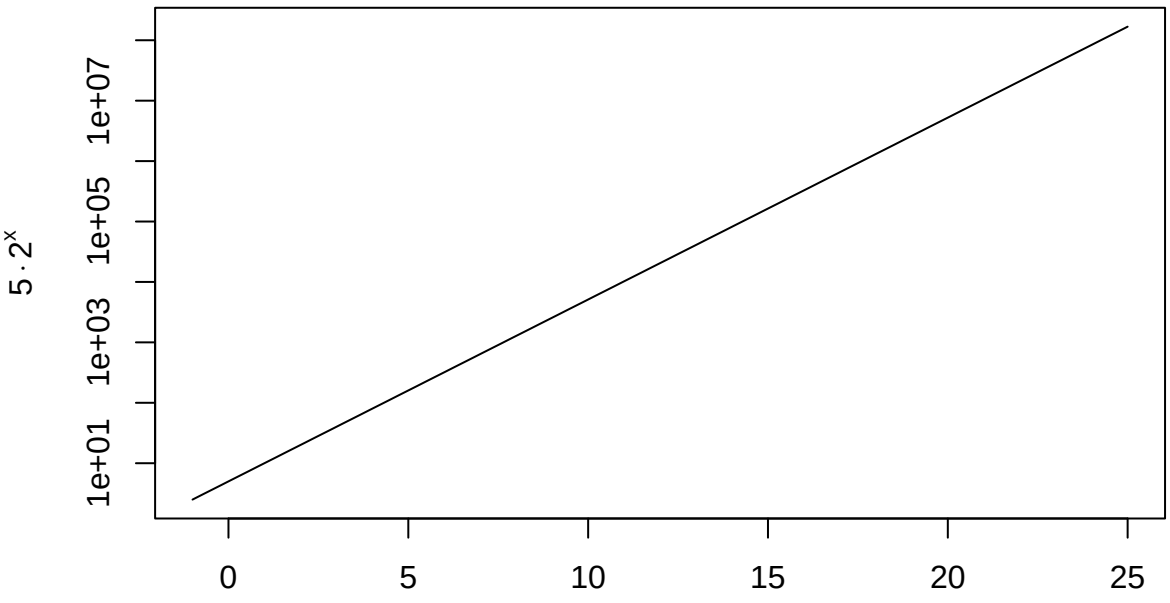
```r
I <- c(-15:15)
plot(I, f(I), col = "blue", type = "l",
      main = "Una parábola",
      xlab = expression(X),
      ylab = expression(y = x^2-3*x+30))
```



Pregunta 3

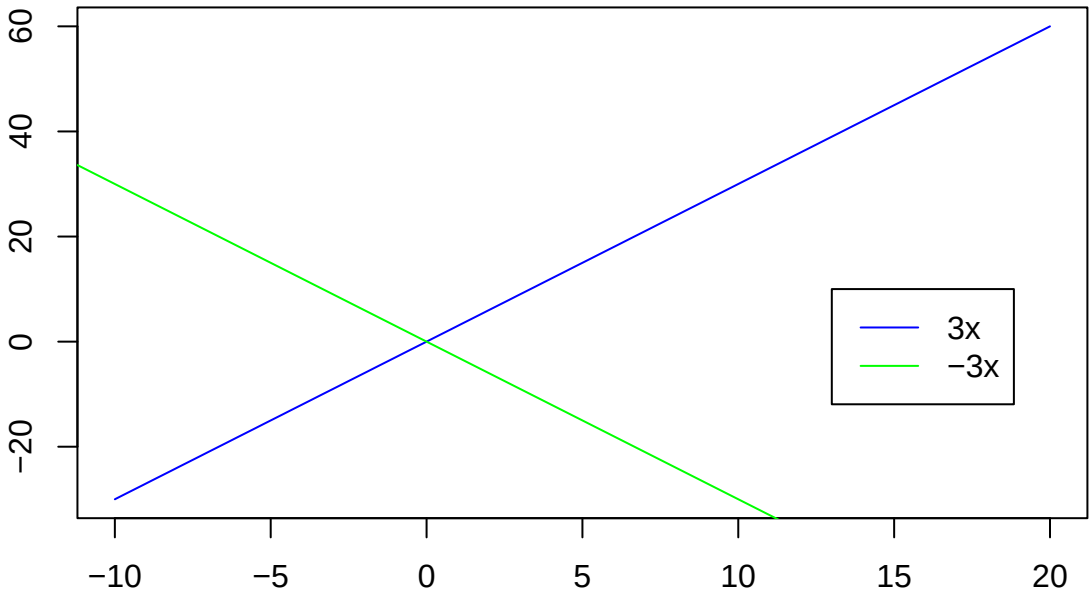
```r
g <- function(x){5 * 2^x}

curve(g,-1,25, log = "y", xlab = "", ylab = expression(y = 5 %.% 2^x))
```



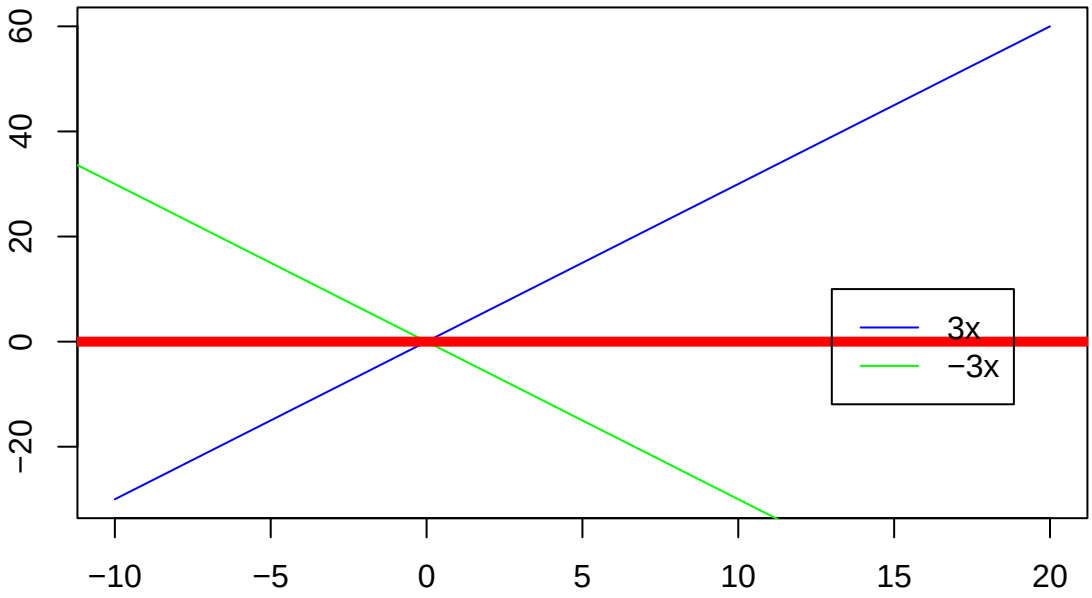
Pregunta 4

```
curve(3*x,-10,20,
      xlab = "",
      ylab = "",
      col = "blue",
      main = "Dos rectas",
      sub = "Dos rectas con pendiente opuesto"
      )
abline(0,-3, col = "green")
legend(13, 10,
       legend =c("3x","-3x"),
       lty =c(1, 1),
       col =c("blue", "green"))
```



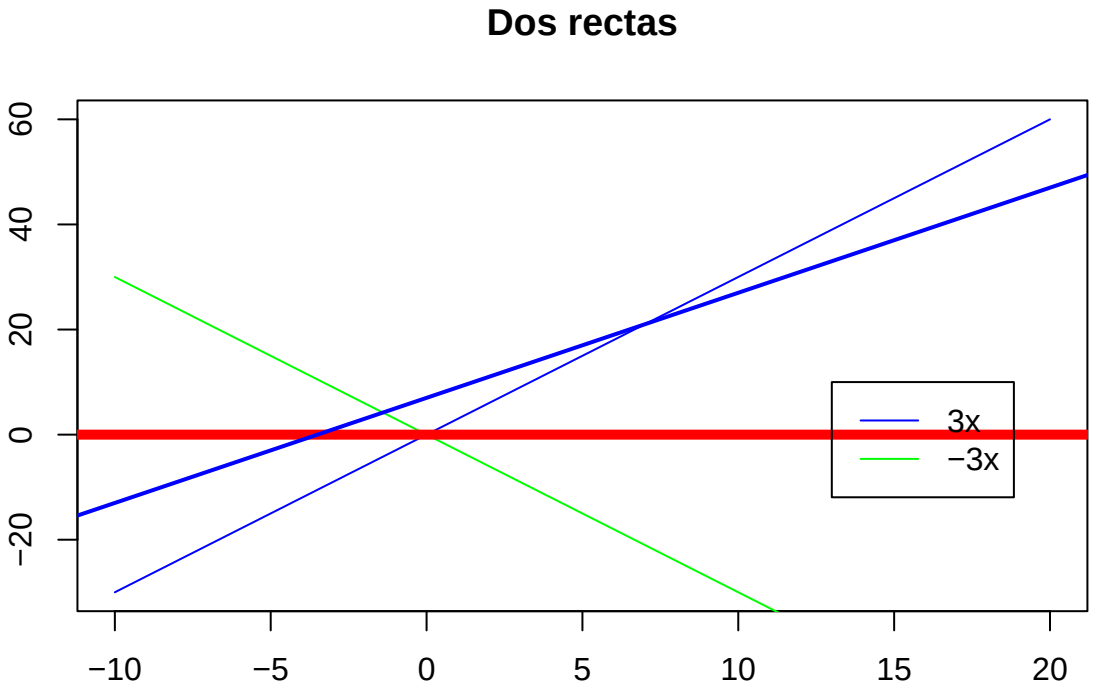
Pregunta 5

```
curve(3*x,-10,20,
      xlab = "",
      ylab = "",
      col = "blue",
      main = "Dos rectas",
      sub = "Dos rectas con pendiente opuesto",
      )
abline(0,-3, col = "green")
abline(h = 0, col = "red", lwd = 5)
legend(13, 10,
       legend =c("3x","-3x"),
       lty =c(1, 1),
       col =c("blue", "green"))
```



Pregunta 6

```
curve(3*x,-10,20,
      xlab = "",
      ylab = "",
      col = "blue",
      main = "Dos rectas",
      sub = "Dos rectas con pendiente opuesto",
      )
curve(-3*x, col = "green", add = T)
abline(h = 0, col = "red", lwd = 5)
abline(7,2, col = "blue", lwd = 2)
legend(13, 10,
       legend =c("3x","-3x"),
       lty =c(1, 1),
       col =c("blue", "green"))
```



Dos rectas con pendiente opuesto