



The screenshot shows an RStudio interface with a script editor and a console. The script editor contains R code for three probability questions. The console shows the output of the first two questions.

```
1 #Question 1
2
3 # 1)
4 #P(8.10<x<8.25)= P(x<=8.15)-P(x<=8.10)
5 punif(8.15,min = 0,max = 40,lower.tail = TRUE)-punif(8.10,min = 0,max = 40,lower
6
7 # 2)
8 #p(x<=2)
9 pexp(2,rate = 1/3,lower.tail = TRUE)
10
11 # 3)
12 #mean=100 standard deviation=15
13 #1.
14 #P(x>130)
15 pnorm(130,mean = 100,sd=15,lower.tail = FALSE)
16
17 #2.
18 qnorm(0.95, mean = 100, sd = 15)
```

Console output:

```
> punif(8.15,min = 0,max = 40,lower.tail = TRUE)-punif(8.10,min = 0,max = 40,lower.tai
1 = TRUE)
[1] 0.00125
> pexp(2,rate = 1/3,lower.tail = TRUE)
[1] 0.4865829
> pnorm(130,mean = 100,sd=15,lower.tail = FALSE)
[1] 0.02275013
> qnorm(0.95, mean = 100, sd = 15)
[1] 124.6728
>
```