hw2 sol

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```
#HW2 solution
#1
#1.1
pnorm(16, mean = 15, sd =3)
```

```
## [1] 0.6305587
```

```
#0.6305587
#1.2
pchisq(8, df = 10)
```

```
## [1] 0.3711631
```

```
#0.3711631
#1.3
dbinom(5, size = 10, prob = 0.4)
```

```
## [1] 0.2006581
```

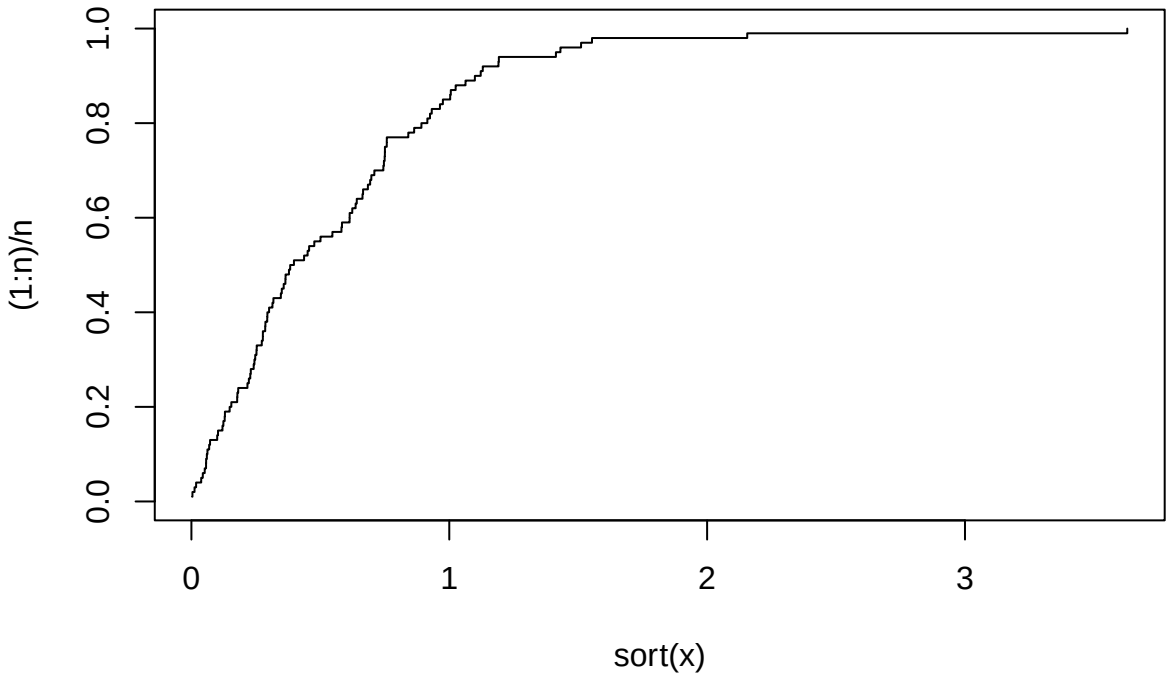
```
#0.2006581
#1.4
dpois(5, lambda = 3)
```

```
## [1] 0.1008188
```

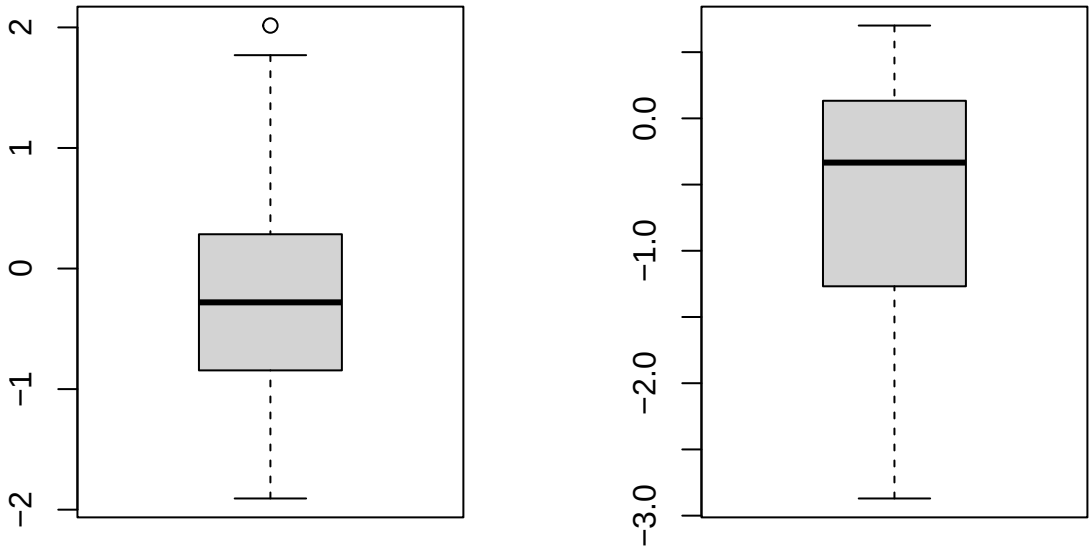
```
#0.1008188

#2
accid.age <- matrix(c(25, 18, 13, 6, 121, 92, 130, 87), nrow = 4)
rownames(accid.age) <- c("18-20", "21-23", "24-25", ">25")
colnames(accid.age) <- c("Yes", "No")
names(dimnames(accid.age)) <- c("Age", "Accidents")
accid.age
```

```
##        Accidents
## Age     Yes  No
##   18-20  25 121
##   21-23  18  92
##   24-25  13 130
##   >25     6  87
```

```r
#3
x <- rexp(100, rate =2)
n <- length(x)
plot(sort(x), (1:n)/n, type = "s", ylim = c(0,1))
```




```r
#4
x <- rnorm(50)
par(mfrow = c(1,2))
boxplot(x)
boxplot(log(abs(x)))
```



```r
#5
#5.1
library(ISwR)
data(react)
hist(react)
#5.2
#install.pacages("MASS")
library(MASS)
truehist(react)
```