

Collaboration1

Brett Burk

Sunday, February 22, 2015

```
wd <- "C:\\Users\\Brett\\Dropbox\\CUNY\\606\\Week2\\"
sales <- read.csv(paste0(wd, 'sales.csv'))
head(sales)
```

```
##      date demand.ham demand.turkey demand.veggie available.ham
## 1 2014-03-03         13           21           16           14
## 2 2014-03-04         20           14           11           14
## 3 2014-03-05          9           26           16           14
## 4 2014-03-06         16           20           15           14
## 5 2014-03-07         22           26           10           14
## 6 2014-03-10         17           17           16           14
## available.turkey available.veggie
## 1             14             8
## 2             14             8
## 3             14             8
## 4             14             8
## 5             14             8
## 6             14             8
```

```
details <- read.csv(paste0(wd, 'details.csv'))
details
```

```
##      type price cost
## 1    ham   6.5  3.5
## 2 turkey   6.5  4.0
## 3 veggie   5.0  2.5
```

```
summary(sales)
```

```
##      date      demand.ham demand.turkey demand.veggie
## 2014-03-03: 1  Min.   : 6.00  Min.   :13.00  Min.   : 4.00
## 2014-03-04: 1  1st Qu.:13.25  1st Qu.:18.25  1st Qu.:10.25
## 2014-03-05: 1  Median :16.00  Median :21.00  Median :13.00
## 2014-03-06: 1  Mean    :15.95  Mean    :22.05  Mean    :13.06
## 2014-03-07: 1  3rd Qu.:18.75  3rd Qu.:26.00  3rd Qu.:15.00
## 2014-03-10: 1  Max.     :25.00  Max.     :37.00  Max.     :24.00
## (Other)      :124
## available.ham available.turkey available.veggie
## Min.      :14.00  Min.      :14.00  Min.      : 8.000
## 1st Qu.:14.00  1st Qu.:14.00  1st Qu.: 8.000
## Median :15.00  Median :18.00  Median :10.000
## Mean     :15.77  Mean     :17.23  Mean      : 9.462
## 3rd Qu.:18.00  3rd Qu.:20.00  3rd Qu.:10.000
## Max.      :18.00  Max.      :20.00  Max.      :11.000
##
```

```
dem <- sales[c('demand.veggie', 'demand.ham', 'demand.turkey')]
```

Veggie:

```
v <- dem$demand.veggie  
print('veggie')
```

```
## [1] "veggie"
```

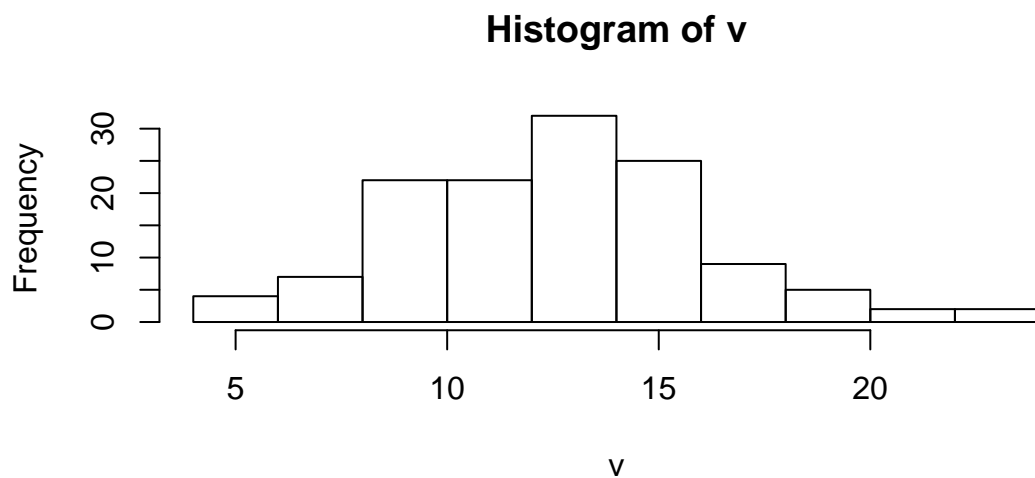
```
IQR(v)
```

```
## [1] 4.75
```

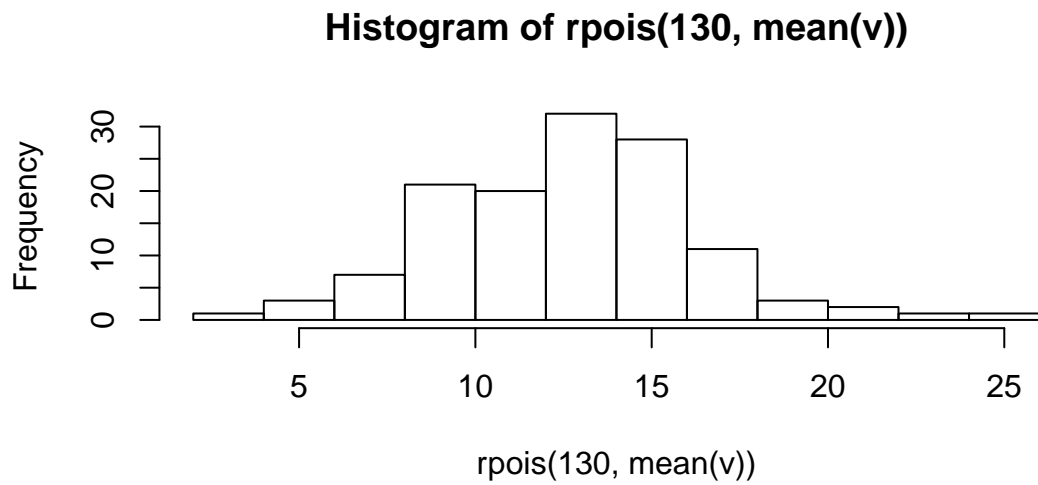
```
sd(v)
```

```
## [1] 3.582373
```

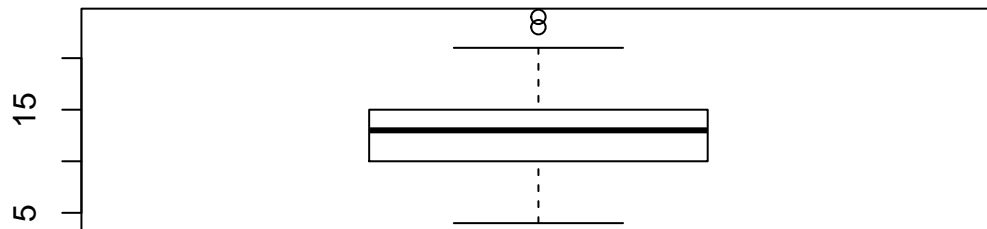
```
hist(v)
```



```
hist(rpois(130, mean(v)))
```



```
boxplot(v)
```



Turkey:

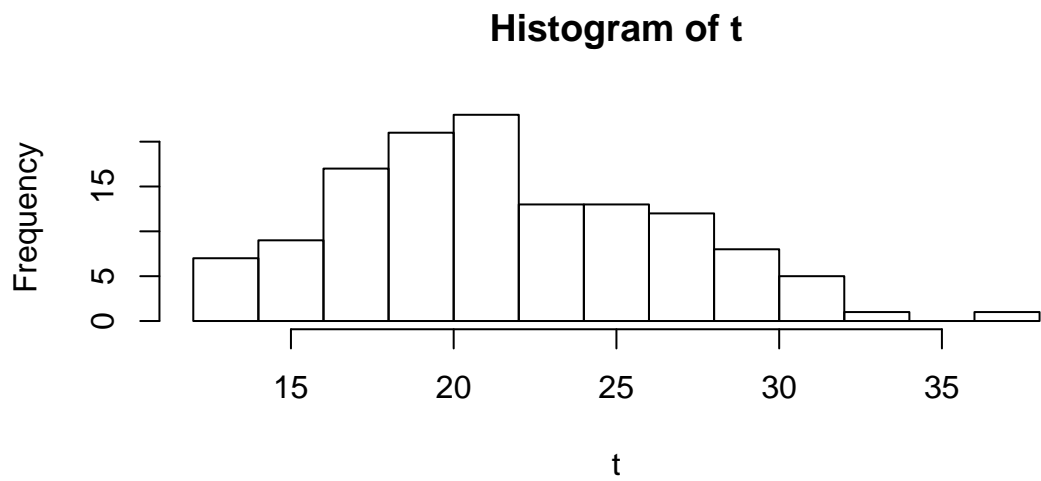
```
t <- dem$demand.turkey
IQR(t)
```

```
## [1] 7.75
```

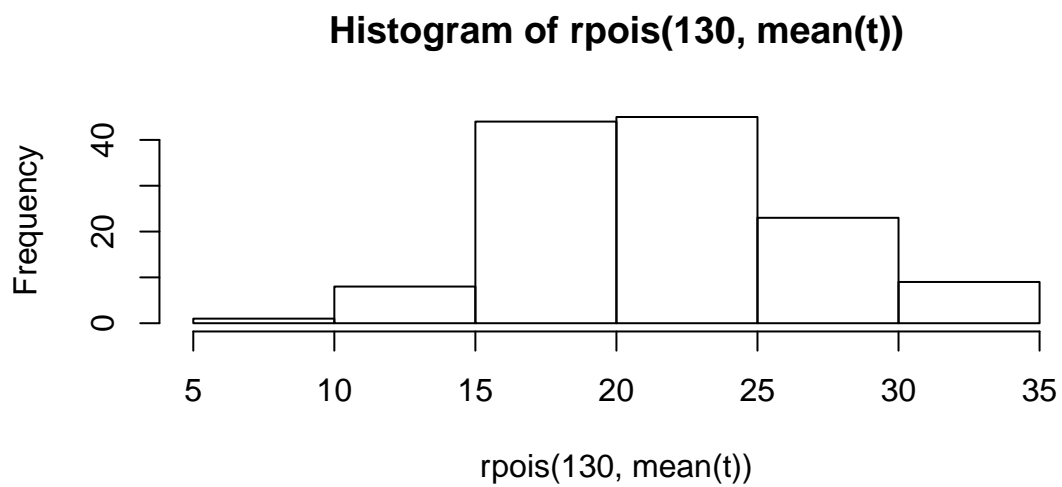
```
sd(t)
```

```
## [1] 4.943575
```

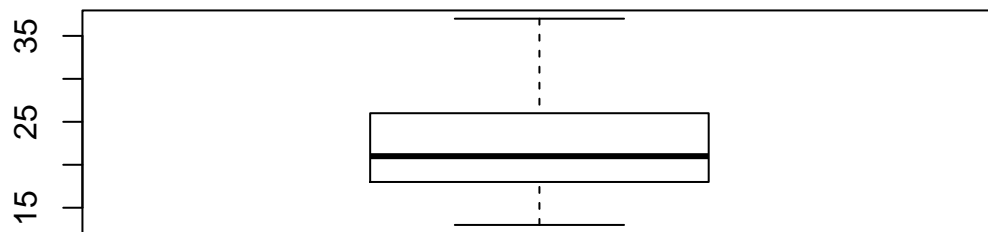
```
hist(t)
```



```
hist(rpois(130, mean(t)))
```



```
boxplot(t)
```



Ham:

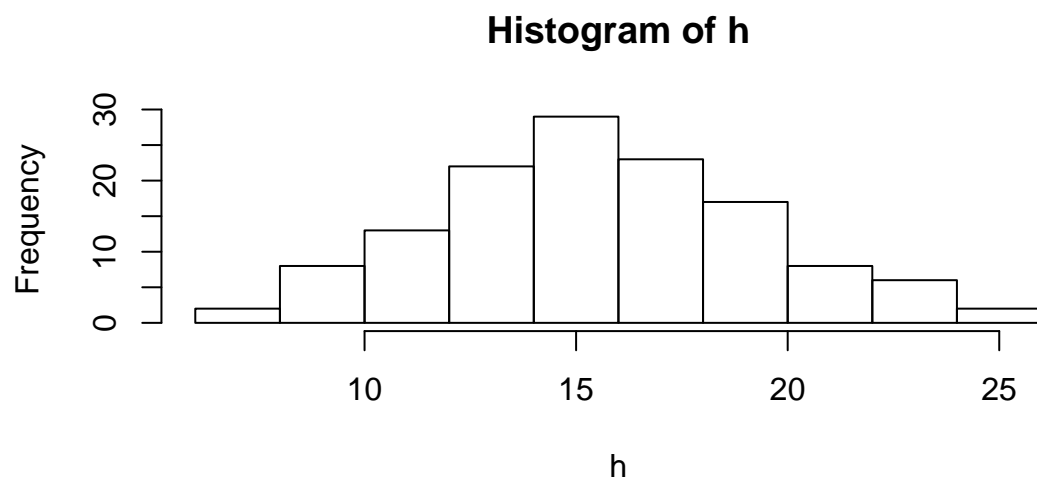
```
h <- dem$demand.ham
IQR(h)
```

```
## [1] 5.5
```

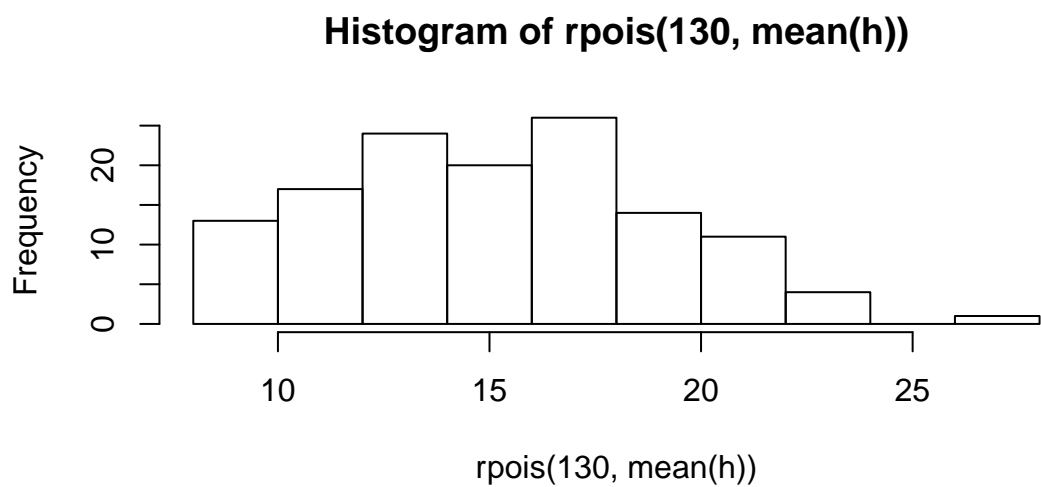
```
sd(h)
```

```
## [1] 3.874607
```

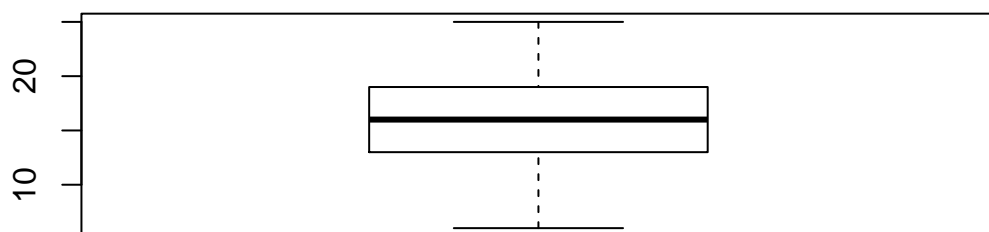
```
hist(h)
```



```
hist(rpois(130, mean(h)))
```

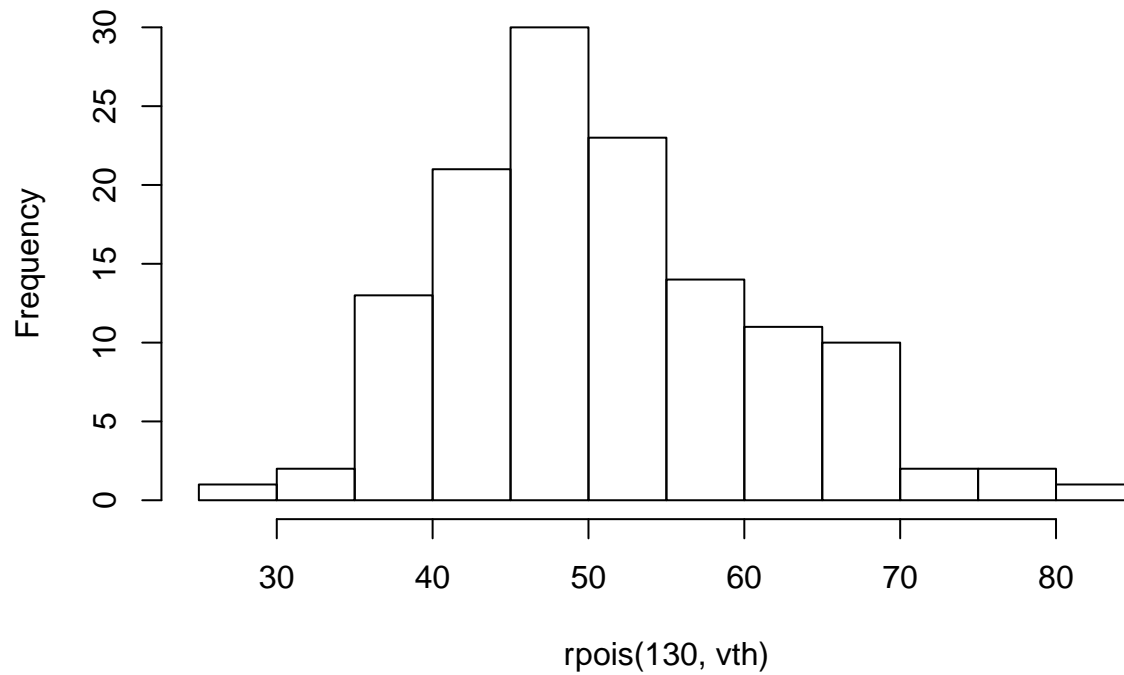


```
boxplot(h)
```



```
vth <- v+t+h  
hist(rpois(130, vth))
```

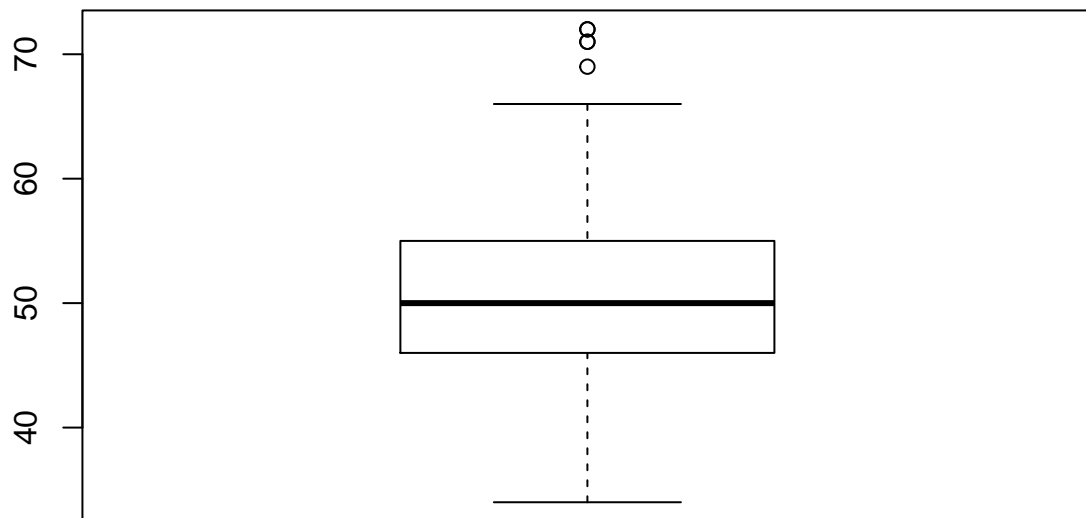
Histogram of rpois(130, vth)



```
summary(vth)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   34.00  46.00   50.00   51.06  55.00   72.00
```

```
boxplot(vth)
```



```
rpois(130, vth)
```

```
##    [1] 41 53 45 61 46 54 50 48 51 62 58 41 47 71 38 71 36 48 39 40 37 44 44
##   [24] 53 47 48 50 56 46 48 37 40 53 36 43 78 61 58 54 53 47 56 49 51 45 51
##   [47] 53 52 71 44 59 40 35 30 64 44 46 57 63 42 64 47 45 43 35 59 38 56 44
##   [70] 53 60 66 48 41 45 50 37 49 47 40 78 53 48 73 38 52 37 51 59 70 49 57
##   [93] 42 60 45 48 58 46 51 38 43 55 38 38 48 31 58 60 67 51 59 57 62 54 44
##  [116] 54 57 88 54 39 43 55 58 34 45 69 51 48 47 36
```