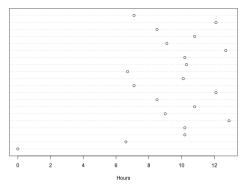
## **Graphics for Qualitative/Categorical DATA (MOL4)**

- 1. Make a Dotplot of the DATA Battery\_Life.xlsx:
  - a. The title "Distribution of Battery Life for 26 Movies Before Color"
  - b. X Label to units in hours
  - c. Copy and paste your code (1 pt) and the resultant Dotplot here (1 pt):

    Results:
  - > library(readxl)
  - > Battery\_Life <- read\_excel("Battery\_Life.xlsx")</pre>
  - > View(Battery\_Life)
  - > dotchart(Battery\_Life\$life\_hr,main="Distribution of Battery Life for 26 Movies Befo
    re Color", xlab="Hours")

Distribution of Battery Life for 26 Movies Before Color



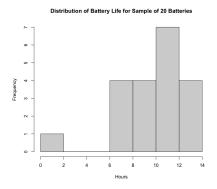
- 2. Make a Stem-and\_Leaf plot using the file Battery\_Life.xlsx:
  - a. Make a stem-and-leaf plot
  - b. Copy and paste your code (1 pt) and the resultant Stem-and-Leaf plot here (1 pt) : Results:
- > stem(Battery\_Life\$life\_hr)

The decimal point is 1 digit(s) to the right of the I

- 0 1 0
- 0 | 77779999
- 1 | 00000112233

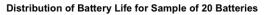
- 3. Make a histogram of the DATA Battery\_Life.xlsx that is standard (including left endpoint) with about 5 bars:
  - a. The title "Distribution of Battery Life for Sample of 20 Batteries"
  - b. X Label hours
  - c. Copy and paste your code (1 pt) and the resultant histogram here (1 pt):

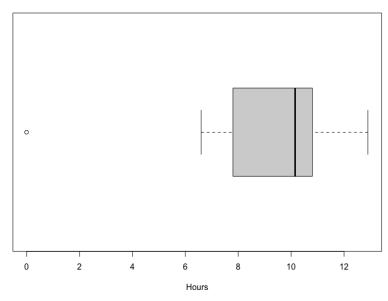
    Results:
  - > hist(Battery\_Life\$life\_hr,breaks=5,right=FALSE,main="Distribution of Battery Life for Sample of 20 Batteries",xlab="Hours")



- 4. Make a boxplot (horizontal) of the DATA Battery\_Life.xlsx:
  - a. The title "Distribution of Battery Life for Sample of 20 Batteries"
  - b. X Label hours
  - c. Copy and paste your code (1 pt) and the resultant boxplot here (1 pt) :

    Results:
  - >boxplot(Battery\_Life\$life\_hr,horizantal=TRUE,xlab="Hours",main="Distrib ution of Battery Life for Sample of 20 Batteries")





- 5. Make a probability plot of the DATA Battery\_Life.xlsx with line:
  - a. The title "Probability Plot of Battery Life for Sample of 20 Batteries"
  - b. Copy and paste your code (1 pt) and the resultant probability plot here (1 pt) : Results:
  - > qqnorm(Battery\_Life\$life\_hr,main="Probability Plot of Battery Life for Sample of 20 Battery")
  - > qqline(Battery\_Life\$life\_hr)

## Probability Plot of Battery Life for Sample of 20 Battery

