

Quiz 1

Quiz 1

1. 1-11
2. 2
3. 8
4. 4, 15
5. 1-5
6. 2-11
7. 3-2, 5
8. 4-9

Quiz 2

1. Dollars squared
2. 1-13, 55
3. 3, 68

Quiz 3

1. The variance for dl2 larger than dl1
- The STD for dl2 larger than dl1
2. All the data points must be the same
3. If two data sets have the same variance, they will have the same STD

Quiz 4

1. 1-5
2. 5
3. The risk associated with invest 1 is lower than in invest. 2
- The STD in invest 1 is smaller than invest 2
4. investment 2

Quiz 5

1. $n = 13$
med = 7
 $Q_1 = 3$
 $Q_3 = 13, 5$
mean = 8, 4
mode = 3

2. IQR = 10, 5
Range = 20
Var = 33, 9
STD = 5, 8
min = 2
max = 22

Quiz 6

1. Right skewed
 \hookrightarrow mean $>$ median
- left skew
 \hookrightarrow mean $<$ median
- symmetric
 \hookrightarrow mean = median
2. Normally distributed data must have mean = median
- Histograms and box plots are both used to plot quantitative data
They can't be used to plot categorical data
- A box plot relates directly to the 5 number summary

Quiz 7

1. largest range \rightarrow virginica
- smallest range \rightarrow setosa
- median is 5 \rightarrow setosa
- $Q_3 = 6, 3 \rightarrow$ versicolour
symmetric \rightarrow All
largest sepal on Ave \rightarrow virginica
2. more than 75% of the virginica flowers have larger sepal length than the largest setosa flower
- more than 50% setosa flowers have larger sepal length than the smallest versicolour flower

Quiz 8

1. Histogram
2. Bimodal
3. Box Plot
4. left-skewed
5. The mean is less than the median

Quiz 9

- mean $>$ median \rightarrow Histogram 1
- Data has higher variance \rightarrow 1
- Bin width # 0, 5 \rightarrow 2
- Range = 5, 5 \rightarrow 2
- Distrib is leftskew \rightarrow neither
- mean = median \rightarrow 2

Quiz 10

- on avg, accounts are shorter than IT staff
- there is more variability in the heights of the accountants than heights of the IT staff

Quiz II

① 5, 5 inch \rightarrow Parameters

6 inch \rightarrow Statistics

All the base \rightarrow Population

— — \rightarrow Population

The 100 barrels \rightarrow Sample

② mnemonic of sample \rightarrow statistic

— — — Population \rightarrow Parameter

— Draw in Populatio
using sample \rightarrow Inference

— Drawing sample \rightarrow Nonp
using Popula.

— subset of Popul \rightarrow Sample

— our entire group \rightarrow Population

— Frequently we do
not know \rightarrow Parameter ✓

Quiz 12

- Population \rightarrow All university student
- Parameter \rightarrow we can't know for sure
- Sample \rightarrow 5,000 university students
- Statistic \rightarrow 6.8 hours of sleep