

Problem 1:

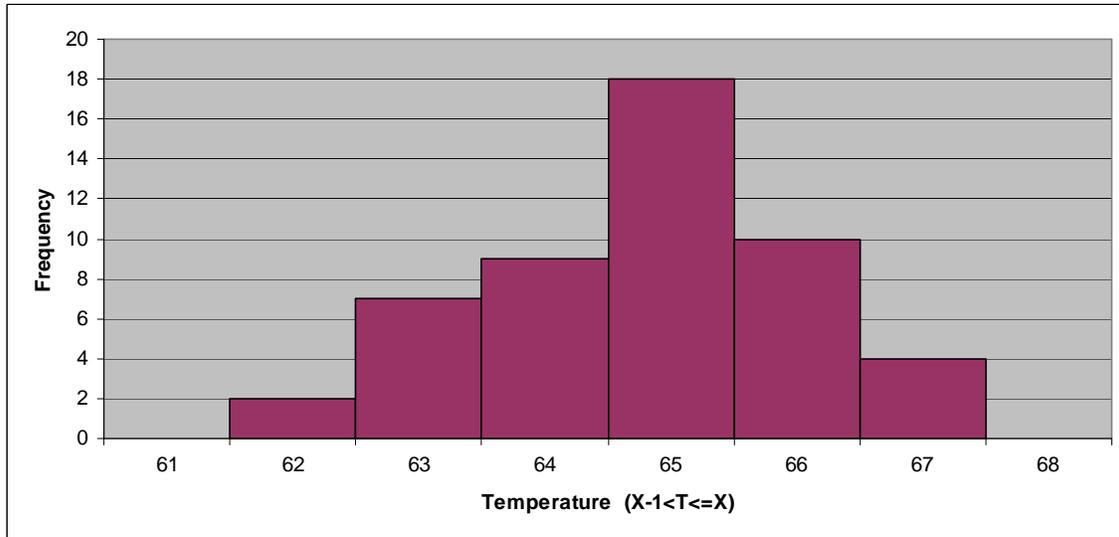
Categorical Variables:
Gender, Race, Smoker

Quantities Variables:

Age, Blood Pressure, Level of Calcium in Blood

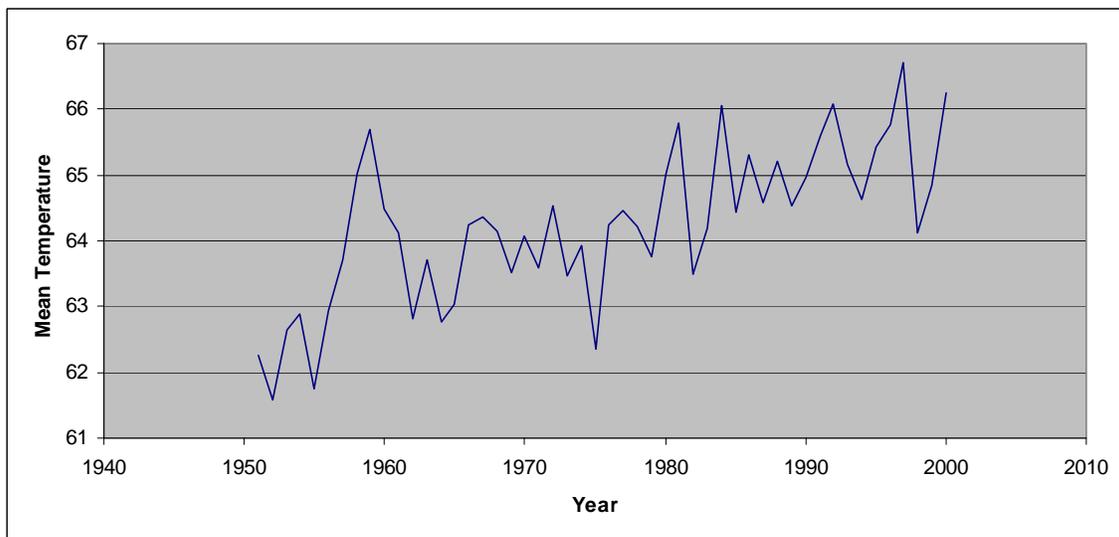
Problem 2:

Part a



The distribution is centered around 65 degrees implying that temperatures greater than 64 but less than or equal to 65 were the most common temperatures for the time period under analysis

Part b



The critical observation which the histogram missed is that the mean temperature have been generally rising over time. That is the distribution of the mean temperatures is changing over time

Problem 3:

Part (a)

Employee Type	Frequency	Salary	Total Paid
Clerks	5	35000	175000
Junior Accountants	2	68000	136000
Owner	1	200000	200000
Totals	8		511000

$$\text{Average/Mean Salary} = \frac{511000}{8} = \$63875$$

Median = Middle Value = Average of the 3rd and 4th smallest values = \$35000

Part (b)

After increase we get the following chart:

Employee Type	Frequency	Salary	Total Paid
Clerks	5	35000	175000
Junior Accountants	2	68000	136000
Owner	1	355000	355000
Totals	8		666000

Note that the 3rd and 4th values have not changed therefore the median is unchanged

However there is an increase in the mean which is now $\frac{666000}{8} = \$83250$

Problem 4:

Solutions derived from extended Chart

Part A: 120 minutes or 2 hours

Part B: Average = 120/20 = 6 minutes

Part C

Number of people	Weekly browsing time per person(hours)	Browsing Time in Category	Deviation	Deviation ²
1	2	2	4	16
2	3	6	3	9
4	5	20	1	1
6	6	36	0	0
5	7	35	-1	1
1	9	9	-3	9
1	12	12	-6	36
Totals	20	44		120