HW#3

9/2

Pg. 49

16. Same scale

min	max	Classes #
2	47	8
.5	48.5	

Start → $\frac{45}{8} = 5.63$

$\frac{48}{8} = 6$ → C.W.

(in months) **Researcher A:**

Survival Length	Frequency	Relative Frequency	Comulative R.F.
0.5-6.5	2 → $\frac{2}{40}$	→ 0.05	→ .05 → 0.05
6.5-12.5	5	0.13	→ .05+.13 → 0.18
12.5-18.5	9	0.23	→ .18+.23 → 0.41
18.5-24.5	5	0.13	→ .41+.13 → 0.54
24.5-30.5	7	0.18	→ .54+.18 → 0.72
30.5-36.5	7	0.18	→ .72+.18 → 0.90
36.5-42.5	2	0.05	→ .90+.05 → 0.95
42.5-48.5	3	0.08	→ .95+.08 → 1.03

Researcher B:

Same Scale as A

Frequency	R.F.	C.R.F.
3	0.08	0.08
2	0.05	0.13
11	0.28	0.41
8	0.20	0.61
6	0.15	0.76
6	0.15	0.91
3	0.08	0.99
1	0.03	1.02

17. The term data is refering to the survival length of each patient in months.

18. The first that I think the data may defer →

→ is that each patient may have noticed their symptoms at different lengths of time from when they contracted the disease.

Another reason that the data may differ is due to the fact that some patients may have started healthier than others.

19.) I suppose one way to tell if one researcher is correct while the other is incorrect would be if one researcher entered to ~~two~~ many or to litte sets of data.

20.) I would not expect the data to be identicle, because each patient is different.

21.) One method would be to search out patients of different ages. Another would be to search out patients who started out healthier/less healthy than others.

pg. 57

3.

Largest Value	Smallest Value	Classes #
630	2	8

630 − 2 = 628 ← Range

$\frac{628}{8} = 78.5 \rightarrow 79 \leftarrow$ C.W.

1 round up 2 3 4

Class limits = 2 + 79 = 81, 81 + 79 = 160, 160 + 79 = 239, 239 + 79 = 318,

lower → 318 + 79 = 397, 397 + 79 = 476, 476 + 79 = 555, 555 + 79 = 634

upper → 80, ~~159~~, 159, 238, 317, 396, 475, 554, 633

Class boundries → Upper → 80.5, 159.5, 238.5, 317.5, 396.5, 475.5, 554.5, 633.5

Lower → 1.5, 80.5, 159.5, 238.5, 317.5, 396.5, 475.5, 554.5,

Class midpoints → $\frac{2+80}{2} = 41$, $\frac{81+159}{2} = 120.5$, $\frac{160+238}{2} = 199$,

$\frac{239+317}{2} = 278$, $\frac{318+396}{2} = 357$, $\frac{397+475}{2} = 436$,

$\frac{476+554}{2} = 515$, $\frac{555+633}{2} = 594$

Class Limits	Class boundries	Class Midpoint	Tally	Freq.
2-80	1.5-80.5	41	|||| |||| |||| |||| |||| |||| |||| |||| |||| 39
81-159	80.5-159.5	120	|||| |||| |||| 14
160-238	159.5-238.5	199	III	3
239-317	238.5-317.5	278		0
318-396	317.5-396.5	357	III	3
397-475	396.5-475.5	436	I	1
476-554	475.5-554.5	515		0
555-633	554.5-633.5	594	II	2
				= 56 total

Relative Freq.	Comulative Freq
.7	39
.14	47
.05	50
0	50
.05	53
.02	54
0	54
.04	56

4.)

largest value	Smallest Value	Classes #
286	114	5

Range = 172
C.W = 35

Class limits	Class Boundries	Class MidPoint	Tally	Freq.
114-148	113.5-148.5	131	𝍸	10
149-183	148.5-183.5	166	𝍸 ||	13
184-218	183.5-218.5	201	𝍸	10
219-253	218.5-253.5	236	|	1
254-288	253.5-288.5	271	||	2

R.F.	C.F.
.28	10
.36	23
.28	33
.03	34
.06	36