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Stat 203

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Chapter 1 Worksheet

①

ⓐ It is not an existing population because there is a control group (non-SI) and an experiment group (SI group).
- The population is theoretical.
- If there were multiple such courses w/ the same instructors for the SI, that could be a population

ⓑ - Randomly dividing students prevents bias by removing student choices.
- Removes individual bias from students due to their motivation vs lack there of

ⓒ - Allows for a control group so as to compare performances against it by the SI scores

② - Variation in the environment, human error, & measurement error can result in variations of answers

③ -

Stem	Leaf
6 L	4 3
6 H	7 6
7 L	4 2 0 1 4 2 0 2
7 H	•
8 L	0 1 1 2 1 1 1 0 3 4
8 H	9 5 9 5 7 7 5
9 L	3 0
9 H	5 8

ordered →

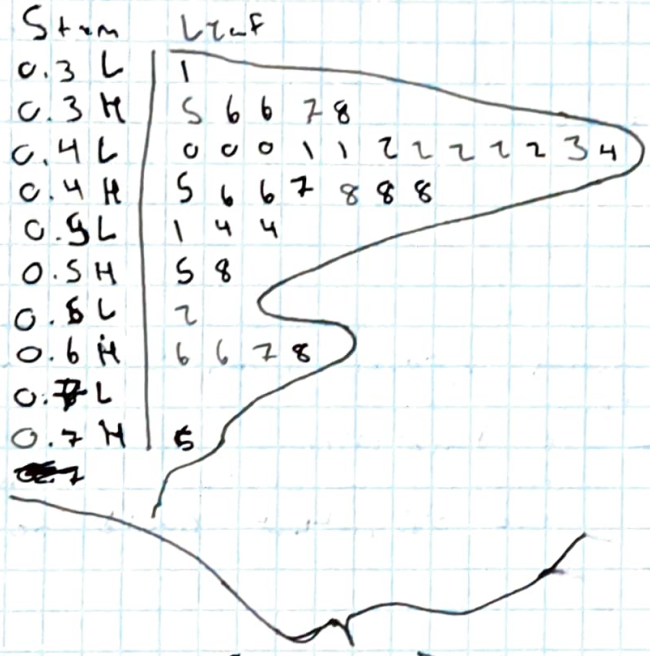
Stem	Leaf
6 L	3 4
6 H	6 7
7 L	0 0 1 2 2 2 4 4
7 H	
8 L	0 0 1 1 1 1 1 2 3 4
8 H	5 5 5 7 9 9
9 L	0 3
9 H	5 8

roughly symmetric

④

Stem	Leaf
0.3 L	1
0.3 H	5 6 6 7 8
0.4 L	0 0 0 1 1 2 2 2 2 2 3 4
0.4 H	5 6 6 7 8 8 8
0.5 L	1 4 4
0.5 H	5 8
0.6 L	2
0.6 H	6 6 7 8
0.~~7~~ L	
0.7 H	5
~~0.7~~	

0.75 is possibly an outlier



Skewed Right

⑤ Histogram problems

● Sample size is 100 → $n = 100$ where n is total frequency

ⓒ $99/100$, $\frac{100 - (1+2+3+12+11)}{100} = \frac{71}{100}$

ⓑ $\frac{15+16+10+n+4+5}{100} = \frac{64}{100}$