

STAT F300

Statistics

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Lecture 1

(§1.2) Descriptive statistics; (§1.3) Measures of location

Common naming conventions:

- Population size: N
- Sample size: n
- Sample from two different populations: n, m , or n_1, n_2
- Data: $x_1, x_2, x_3, \dots, x_n$

Stem-and-leaf displays using R:

```
> x = sample(1:50, size=20, replace=TRUE)
> sort(x)
[1]: 2 2 2 3 9 14 18 19 20 21 21 22 22 29 30 32 32
[18]: 33 44 47
> stem(x)
```

The sample function generates numbers in the range provided as the first argument, with a size equal to the second argument. sort(x) sorts the values stored in x, and stem(x) does the following:

Each “stem” refers to the highest digits and each “leaf” is the latter digits. This is the stem-and-leaf display for the dataset stored in x:

Stem	Leaves
0	2 2 2 3 9
1	4 8 9
2	0 1 1 2 2 9
3	0 2 2 3
4	4 7

Endpoint: 8:44.