

MTH 214 Statistics

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office 7S-222 office hours M 2:30-4:25
W 3:35-4:25

- math tutoring 7S-214
- students w/ disabilities

~~text~~ Descriptions

§1.1 Distributions as graphs

- gather data: # of children your mother has. (gather M/F too?)

as list

as histogram table:

1	2	3	...
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← average should be about 3.
actually # children per woman is 2 } why?

Data: individual/cases/objects/things. ← have variables/characteristics.

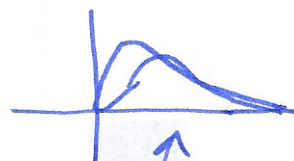
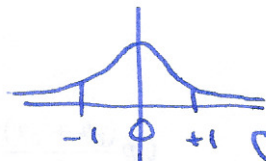
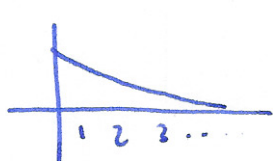
e.g. individual: person variables: quantitative # of siblings.
categorical M/F.

pictures for single variable:

categorical: pie chart, bar graph
quantitative: histogram, stemplot, time plot.

↳ warning ← columns don't need to have equal width

Examples



useful attributes: shape, center, spread, symmetric (opp skew), outliers.

§1.2 Describing distributions with numbers

center: mean, median, mode

mode: most common number.

median: half way point.

$$\text{mean } \bar{x} = \frac{x_1 + x_2 + \dots + x_n}{n} = \frac{1}{n} \sum_{i=1}^n x_i$$