

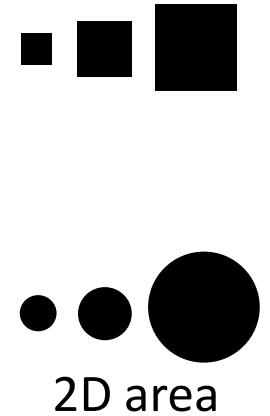
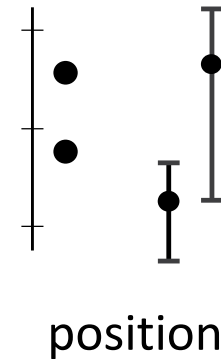
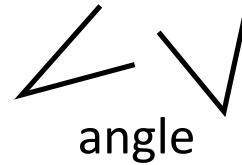
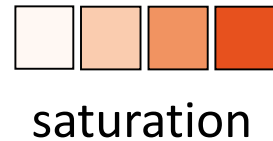
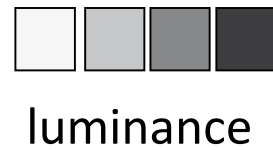
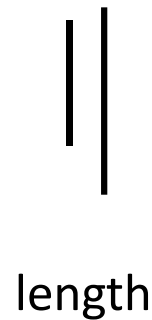
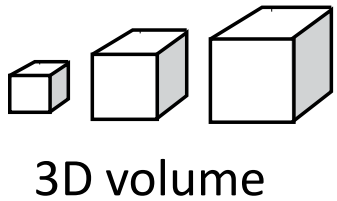
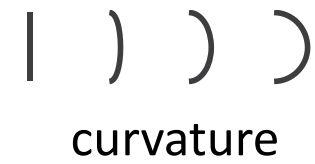
Visualization

– Elementary Methods (Questions)

J.-Prof. Dr. habil. Kai Lawonn

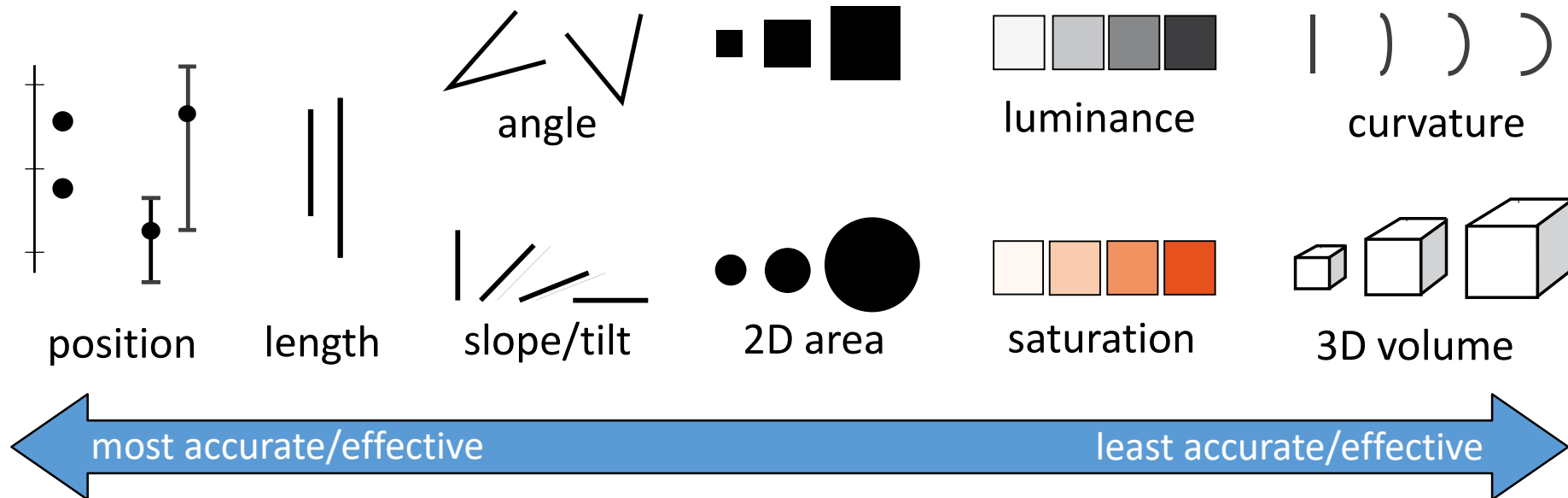
Possible Questions

- Order the mapping techniques according to most accurate/effective to least accurate/effective



Possible Questions

- Order the mapping techniques according to most accurate/effective to least accurate/effective



Possible Questions

- What is Steven's psychophysical power law?

Possible Questions

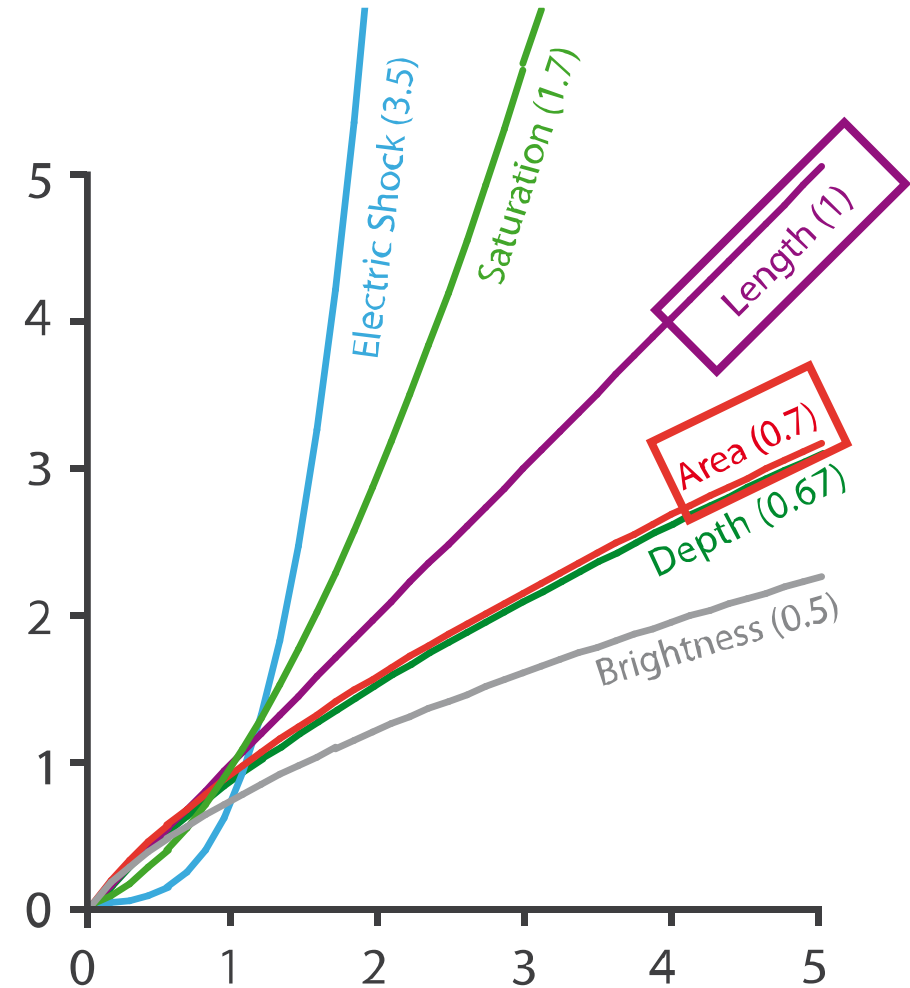
- What is Steven's psychophysical power law?
- $S = I^\gamma$
- Empirical relationship between an increased intensity in a stimulus and the perceived increase

Possible Questions

- Steven's psychophysical power law:
- What is γ for area and length?

Possible Questions

- Steven's psychophysical power law:
- What is γ for area and length?



Possible Questions

- State three diagram techniques for quantitative data

Possible Questions

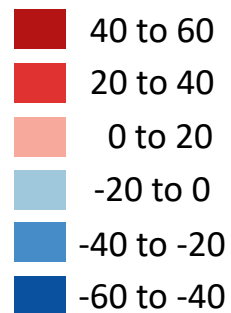
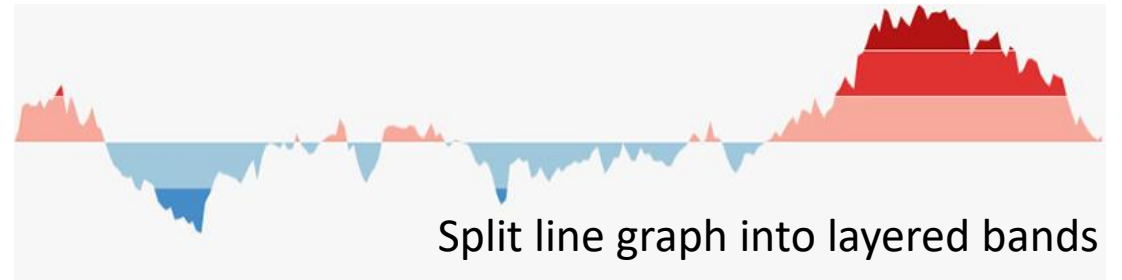
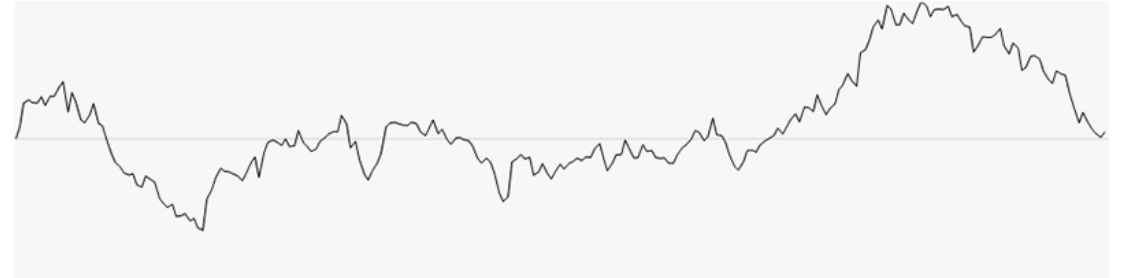
- State three diagram techniques for quantitative data
 - Bar charts
 - Pie charts
 - Stacked bar charts
 - ...

Possible Questions

- Explain how the horizon graphs are constructed

Possible Questions

- Explain how the horizon graphs are constructed



Possible Questions

- Name the advantages and disadvantages of stacked graphs and small multiples

Possible Questions

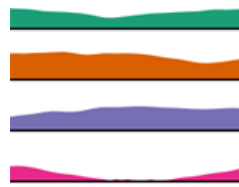
- Name the advantages and disadvantages of stacked graphs and small multiples

Stacked graphs



- + easy to distinguish time series
- less vertical resolution
- difficult to compare time series due to distortion

Small multiples



- + easy to distinguish time series
- less vertical resolution per time series
- difficult to compare time series that are far apart

Possible Questions

- Determine q_1, q_2, q_3 of the values:
2,3,4,1,5,2,6,4,7,4,7,9,2,3,4,3,5,6,5,2,3,5

Possible Questions

- Determine q_1, q_2, q_3 of the values:
2,3,4,1,5,2,6,4,7,4,7,9,2,3,4,3,5,6,5,2,3,5

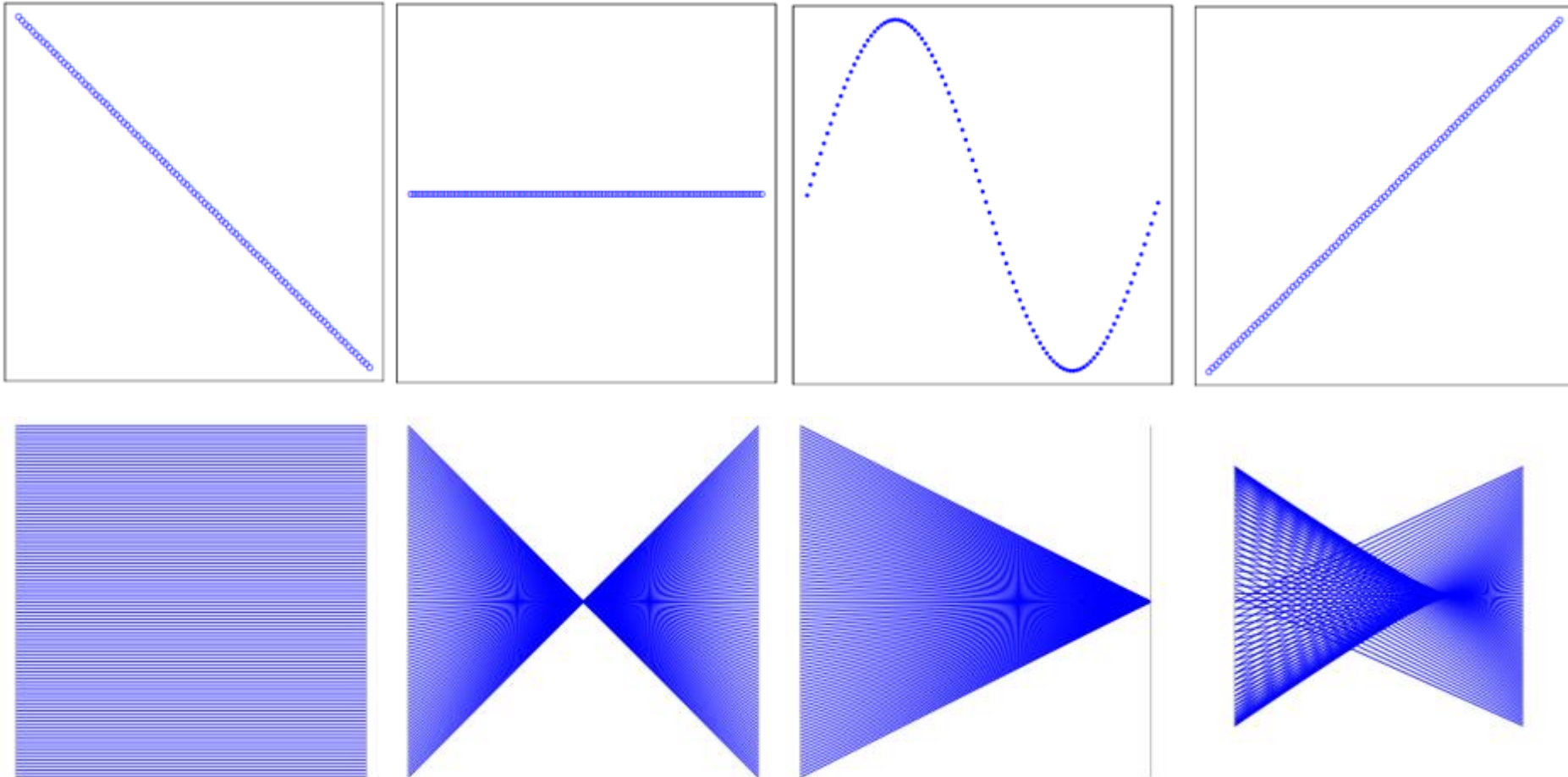
$$q_1 = 3$$

$$q_2 = 4$$

$$q_3 = 5$$

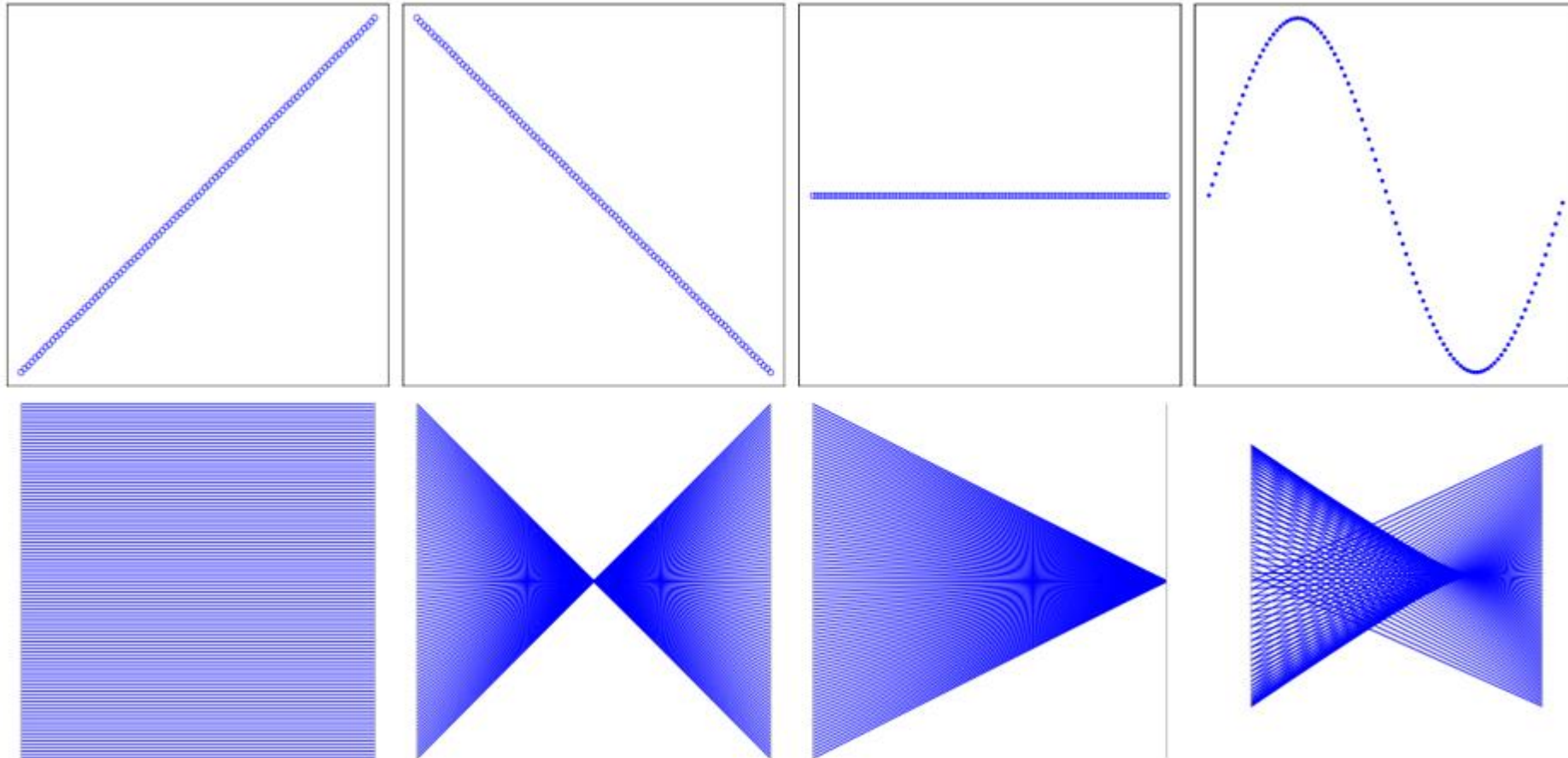
Possible Questions

- Assign the scatter diagrams to the corresponding parallel coordinates



Possible Questions

- Assign the scatter diagrams to the corresponding parallel coordinates



Possible Questions

- Explain star glyphs

Possible Questions

- Explain star glyphs
 - Star is composed of equally spaced spikes, originating from center
 - Length of spikes represents value of respective attribute
 - End of rays connected by line

