# Example Document to Recreate with `beamer` in LaTeX

Week **3** *Exercise*

---

Ihnwhi Heo
i.heo@uu.nl

Fall 2020

Markup Languages and Reproducible Programming in Statistics

Department of Methodology and Statistics
Faculty of Social and Behavioural Sciences
Utrecht University, The Netherlands

# Outline

# Working with equations

# Working with equations

We define a set of equations as

$$a = b + c^2, \tag{1}$$

$$a - c^2 = b, \tag{2}$$

$$\text{left side} = \text{right side}, \tag{3}$$

$$\text{left side} + \text{something} \geq \text{right side}, \tag{4}$$

for all something $> 0$.

# Aligning the same equations

Aligning the equations by the equal sign gives a much better view into the placements of the separate equation components.

$$a = b + c^2, \tag{5}$$

$$a - c^2 = b, \tag{6}$$

$$\text{left side} = \text{right side}, \tag{7}$$

$$\text{left side} + \text{something} \geq \text{right side}, \tag{8}$$

# Omit equation numbering

Alternatively, the equation numbering can be omitted.

$$a = b + c^2$$
$$a - c^2 = b$$
$$\text{left side} = \text{right side}$$
$$\text{left side} + \text{something} \geq \text{right side}$$

# Ugly alignment

Some components do not look well, when aligned. Especially equations with different heights and spacing. For example,

$$E = mc^2, \tag{9}$$

$$m = \frac{E}{c^2}, \tag{10}$$

$$c = \sqrt{\frac{E}{m}}. \tag{11}$$

Take that into account.

# Discussion

# Discussion

So far, we have discussed the benefits of Bayesian inference in performing statistical modeling. From now on, let's discuss the following points:

- Advantages and disadvantages of the Bayesian approach compared to the frequentist approach
- Bayesian hypothesis testing with BF and PMP
- Setting prior distributions sensibly as well as wisely
- Practice Bayesian statistics with JASP (Jeffrey's Amazing Statistics Program)