

Quiz 1 - Answers

Statistics for Social Science

Instructor: Emilie Richer

January 25, 2017

[QUESTION 1]

Version A

$$\bar{x} = 2.63$$

$$s = 5.52$$

Version B

$$\bar{x} = 2.53$$

$$s = 5.49$$

Version C

$$\bar{x} = 2.43$$

$$s = 5.51$$

Version D

$$\bar{x} = 2.33$$

$$s = 5.58$$

Version E

$$\bar{x} = 2.13$$

$$s = 5.88$$

Version F

$$\bar{x} = 2.23$$

$$s = 5.70$$

Version G

$$\bar{x} = 2.73$$

$$s = 5.61$$

Version H

$$\bar{x} = 2.83$$

$$s = 5.75$$

[QUESTION 2]

$$s^2 = \frac{\sum (x_i - \bar{x})^2}{n-1}$$

$$s = \sqrt{s^2}$$

[QUESTION 3]

Advantages of using the mean:

- easy to calculate
- common and well understood

Disadvantages of using the mean:

- Strongly affected by outliers
- Household income is an example