STA442S08 Solutions to Quiz 1

1. In an experimental study, treatments are randomly assigned to the experimental units.

Many of you assigned gender, immigration status, nationality to a person. Note that this is not possible. You can't force someone to be a male, an immigrant or a Canadian.

Both independent and dependent variables must be unordered categorical. Some of you missed the 'unordered'. A variable taking values poor or good is considered ordered.

If you got this question wrong, think of an original example to prepare yourself for the final exam. Feel free to check with me (your TA) for correctness.

2. An observational study with two quantitative (interval or ratio level) variables would be reasonable to calculate a correlation coefficient.

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- 3. List the two variables with some *reasonable* possible values.
- 4. Correlation does not imply causation. Give an example of a confounding variable. However, don't say that the relationship is wrong or not significant.
- 5. (a) False
 - (b) True
 - (c) True
 - (d) False
 - (e) False
 - (f) False