

# Homework 1

## Problem 2

**(a) Time in terms of AM or PM.**

Binary, qualitative, nominal (most people consider binary attributes to be nominal)

**(b) Brightness as measured by a light meter.**

Continuous, quantitative, ratio

**(c) Brightness as measured by people's judgments.**

Discrete, qualitative, ordinal (assuming we make them choose from a discrete set of ratings)

**(d) Angles as measured in degrees between  $0^\circ$  and  $360^\circ$ .**

Continuous, quantitative, ratio

**(e) Bronze, Silver, and Gold medals as awarded at the Olympics.**

Discrete, qualitative, ordinal

**(f) Height above sea level.**

Continuous, quantitative, interval/ratio (depends on whether sea level is regarded as an arbitrary origin)

**(g) Number of patients in a hospital.**

Discrete, quantitative, ratio

**(h) ISBN numbers for books. (Look up the format on the Web.)**

Discrete, qualitative, nominal (but ISBN numbers do have some order information so it could be ordinal if you use that information)

**(i) Ability to pass light in terms of the following values: opaque, translucent, transparent.**

Discrete, qualitative, ordinal

**(j) Military rank.**

Discrete, qualitative, ordinal

**(k) Distance from the center of campus.**

Continuous, quantitative, interval/ratio (depends)

**(l) Density of a substance in grams per cubic centimeter.**

Continuous, quantitative, ratio

**(m) Coat check number. (When you attend an event, you can often give your coat to someone who, in turn, gives you a number that you can use to claim your coat when you leave.)**

Discrete, qualitative, nominal (or ordinal if you are using the order information)

## Problem 3

**(a) After reading the data, I used the R commands *is.factor* and *is.numeric* to determine that both columns are quantitative**

```
# First setwd() to the folder containing myfirstdata.csv
data <- read.csv("myfirstdata.csv", header = F)

# Look at the first few rows
head(data)
```