

Assignment 1

Note: Please **DO NOT** hand in your assignments in the format of including all details of R outputs. You should present your results in summary format only with R outputs that are required to support your answers.

1. The data for this question comes from a study of teenage gambling in Britain. The variables are:

```
sex: 0=male, 1=female
socio-economic status: a score based on parents' occupation
income: in pounds per week
verbal score: words out of 12 correctly defined
expenditure on gambling: pounds per year
```

- a. Make a numerical and graphical summary of the data, commenting on any features that you find interesting. Limit the output you present to a quantity that a busy reader would find sufficient to get a basic understanding of the data.
- b. Is this observational or experimental data? Explain your reasoning.

2. The data for this question comes from some research into the production of textiles. This data contains the following variables:

```
press: durable press rating
HCHO: formaldehyde concentration
catalyst: catalyst ration
temp: curing temperature
time: curing time
```

When you read the data in, note that the first line of labels is the same length as the other row. To ensure that R recognizes the first line as column labels and not data, use

```
> read.table(..., header=TRUE)
```

- a. Do some short numerical and graphical summaries of the data, commenting on any features that you find interesting.
- b. Is this observational or experimental data? Explain your reasoning.

