Exercises Session 1: Introduction

Exercise 2.1

For the exercise, see the book p. 34.

Hint: Get the file 'MathHmwk.txt' from github and read it into R:

```
Math.data <- read.table("MathHmwk.txt", header = TRUE)</pre>
```

Exercise 2.2 (Book p. 34)

You can copy this to get the correlation matrix for the Highschool data into R

```
HighSchool.cor <- lavaan::lav_matrix_lower2full(c(
    1.000,
    0.178, 1.000,
    0.230, 0.327, 1.000,
    0.106, 0.245, 0.183, 1.000,
    0.195, 0.356, 0.721, 0.178, 1.000
))
rownames(HighSchool.cor) <- colnames(HighSchool.cor) <-
    c("Race", "SES", "CognAb", "SchoolTy", "AcAch")</pre>
```

Exercise 2.3 (Book p. 34)

Covariance matrix for the MacKinnon data:

```
MacKinnon.cov <- lavaan::lav_matrix_lower2full(c(
    84.85,
    71.28, 140.34,
    18.83, -6.25, 72.92,
    60.05, 84.54, 37.18, 139.48
))
rownames(MacKinnon.cov) <- colnames(MacKinnon.cov) <-
    c("TeachExp", "SocCli", "MatCov", "StudAch")</pre>
```