

# Basic Data Analysis

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Business Administration and Public Policy

Homework 9: Due July 7, 2011

## Requirements

Homework assignment about multivariate models, including regression and factor analysis.

## Homework 9

**Due Thursday, July 7, 2011, 11:45 am.** Submit by email to `data-hw@turnbull.sk.tsukuba.ac.jp`. Your header should look like this:

From: `a-student@sk.tsukuba.ac.jp`  
To: `data-hw@turnbull.sk.tsukuba.ac.jp`  
Subject: `Basic Data Analysis HW#9`

The subject should be all half-width Roman letters (ASCII).

## Factor analysis of artificial data

1. Reproduce the factor analysis of six artificial variables done in class using your preferred statistical package.

## Factor analysis of real data

2. Using the same data as in the regression problems, conduct a factor analysis on one factor, two factors, *etc.*, until you have “enough” factors.
3. Explain how you know when you have enough. Be quantitative!