Multilevel pooled radon model

Names: (signatures only please, printed names will not be counted)

1.) 4.)

2.) 5.)

3.) 6.)

Overview

In this exercise we will examine the Radon data using a completely pooled model, that is, we lump all of the counties together and pretend they all behave the same with respect to radon concentrations

The pooled model is:

$$y = \beta_0 + \beta_1 \cdot x + e$$

Where:

- y is the measured radon concentration
- β_0 is the intercept of the regression line
- β_1 is the coefficient of the floor (0=basement, 1=first)
- e is the noise term, assumed to be independent normal $(0, \sigma_e)$

The data elements are:

- `county` County number
- `floor_measure` Floor - 0 or 1
- `log_radon` natural log of radon concentration

The .Rnw file is:

`Multilevel_pooled.Rnw`