

1. I recently collected the following data on the heights (in inches) of 14 male students and their families.

Mother	63	64	64	65	66	63	64	66	70	66	68	71	66	72
Father	74	66	72	68	75	69	69	71	74	72	72	75	73	72
Son	67	68	70	70	71	72	72	72	72	73	74	74	75	77

- Enter the heights of the mothers into R using the `c()` command: for example `> mom <- c(63, 64, ..., 72)`.
- Explore this data using the commands `summary`, `hist`, and `boxplot`.
- Enter the heights of the fathers using `scan()`.
- Enter the heights of the children using `data.entry()`.
- Create side-by-side boxplots comparing the three groups.
- Test the hypothesis that sons and fathers have the same height against the alternative that sons are taller.
- Fit a linear regression model to the heights of mothers and fathers. Are the heights of mothers and fathers independent?
- Fit a multiple linear regression model of sons' heights against their parents' heights to the data.

2. The data set `UKDriverDeaths` records the number of UK drivers killed in car accidents each month from 1969 to 1984. This data is structured as a time series, rather than a simple list.

- Enter `> UKDriverDeaths` to see the data.
- Enter `> plot(UKDriverDeaths)` to plot the data. What conclusions can you draw from this plot?
- Starting in February of 1983 UK drivers were required by law to wear seat belts. Did this significantly reduce driver deaths?

Bonus. Explore the data set `faithful` (data on eruptions of the Old Faithful geyser in Yellowstone National Park). Can it tell you anything about how Old Faithful works?